



GOVERNMENT OF PUDUCHERRY

PUBLIC WORKS DEPARTMENT



KAMARAJAR MANIMANDAPAM, PUDUCHERRY

PUDUCHERRY SCHEDULE OF RATES

MAHE REGION

2024 - 2025



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PUBLIC WORKS DEPARTMENT

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Dr. JAYANTA KUMAR RAY, I.A.S.

SECRETARY TO GOVERNMENT

(Public Works, Information Technology, Tourism, Forest,
CEO, Puducherry Smart City Development Limited)



**GOVERNMENT OF PUDUCHERRY
CHIEF SECRETARIAT**

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28.08.2024

FOREWORD

Date :

The Puducherry Schedule of Rates 2021-22 (Civil works) for Public Works Department, Government of Puducherry which was prepared for the year 2018-19 was published on 04/01/2019 (Puducherry Region and Mahe Region), 06/02/2019 (Karaikal Region and Yanam Region) and the same has been updated for the year 2024-25 for all regions of UT of Puducherry by considering the basic rates issued by Department of Economics & Statistics in the month of March 2024. The analysis and specifications of the prevailing SOR of CPWD for Puducherry region in respect of Building works and Schedule of Rates of Ministry of Road Transport and Highways (MORTH) in respect of Road works have been adopted.

The Puducherry Schedule of Rate 2024-25 recommended by the PSR Standing Committee has been placed before the Committee constituted under the Chairmanship of Development Commissioner cum Secretary to Government (Finance), Chief Secretariat vide G.O.Ms.No.18 dated 19/06/2024 (Annexure I). Based on the recommendation of the said Committee, the PSR 2024-25 (including GST 18%) has been approved by the Government as per G.O.Ms.No.23 dt: 14/08/2024. The PSR 2024-25 is with effect from 14th August 2024 onwards.

This Schedule of Rates is being used by many Departments, Institutions, Public Sector Undertakings, Private Sector Organizations, Builders, Contractors and Architects within UT of Puducherry.

The encouragement and guidance given by Dr. Sharat Chauhan, I.A.S., Chief Secretary, Shri. Ashish Madhaorao More, I.A.S., Development Commissioner cum Secretary to Government (Finance), Shri. R. Kesavan, I.A.S., Secretary to Government (DP&AR) in bringing out the Puducherry Schedule of Rates 2024-25 is highly acknowledged.

I would like to commend the untiring efforts of Dr. M. Dhinadhayan, Chief Engineer, PWD, Puducherry and Chairman of PSR Standing Committee and the Members of the PSR Standing Committee and support extended by all Superintending Engineers, Executive Engineers & other staffs of PWD associated with the task of accomplishment of the Puducherry Schedule of Rates 2024-25.

I am sure that the Schedule of Rates 2024-25 will be quite useful in preparation of projects in all four regions of Puducherry.


(JAYANTA KUMAR RAY)



PREFACE

The Public Works Department is responsible for planning, implementations and operations and maintenance of the water supply, underground sewerage, storm water drainage, irrigation, water resource management, Government buildings, roads and coastal management systems in all four regions of UT of Puducherry. Introducing with immense pleasure the updated Puducherry Schedule of Rates 2024-25 (including GST 18%) which comprises of analysis and specifications of works in preparation of projects by Public Works Department, Puducherry.

This updation exercise is carried out mainly to arrive at current rates in lieu of PSR 2021-22 which was based on the rates for the year 2018-19. No revision and updation of PSR had been done ever since 2021-22. Since the prices of construction materials have escalated, it is imperative to revise and update the PSR once in a year.

The PSR is updated by the PSR Standing Committee constituted under the Chairmanship of the Chief Engineer, PWD, Puducherry (Annexure - II).

The PSR Standing Committee has decided to adopt the analysis and specifications of CPWD Rates 2023 for building works and MoRTH rates for road works. The basic rates issued by the Department of Economics & Statistics in March, 2024 and local market rates have been considered while updating the PSR 2024-25. The basic rates for some of the major items adopted in the PSR 2024-25 have been compared with the basic rates of schedule of rates of PWD, Government of Tamil Nadu and Tamil Nadu Water Supply & Sewerage Board and it was observed that the finished rates of PSR 2024-25(including GST 18%) are well within the rates of neighbouring States of TamilNadu and also prevailing CPWD Scheduled of Rates for Puducherry region.



: 2 :

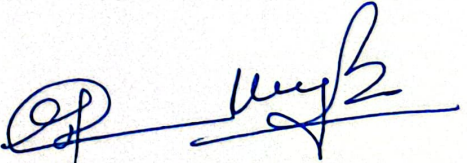
I express my profound gratitude to the Government of Puducherry for extending all support and encouragement in the updation of PSR 2024-25.

I would like to express my deep gratitude to Dr. Sharat Chauhan, I.A.S., Chief Secretary, Government of Puducherry for his encouragement and support in the journey of PSR updation.

I would also like to extend my sincere thanks to Shri Ashish Madhaorao More, I.A.S., Development Commissioner cum Secretary to Government(Finance) cum Chairman of the Committee, Shri Jayanta Kumar Ray, I.A.S., Secretary to Government (Works) and Shri R. Kesavan I.A.S., Secretary to Government (DP&AR), Chief Secretariat who are Members of the Committee for recommending the PSR 2024-25 to the Government for approval.

I would like to extend my special thanks to the Members of the PSR Standing Committee and Superintending Engineers and Executive Engineers and Shri R. Sundaramoorthy, Executive Engineer, Member Secretary, PSR Standing Committee and his team of officials for their untiring efforts in accomplishing the task of finalization of PSR 2024-25.

I would also like to express my thanks to all those who directly or indirectly contributed in finalizing the PSR 2024-25.


(Dr. M. DHINADHAYALAN)

Puducherry
28-08-2024

GOVERNMENT OF PUDUCHERRY

ABSTRACT

Public Works - Puducherry - Implementing Puducherry Schedule of Rates 2024-25 for Civil Works in Union Territory of Puducherry for the four regions - Orders issued.

CHIEF SECRETARIAT (PUBLIC WORKS)

G.O.MS. No.23

Puducherry, the 14.08.2024

Read: 1.E.Comp.No.11074/F.No.M/2727/2024; dated 16/07/2024 from the Chief Engineer, PWD, Puducherry.

2.G.O.MS.No.01,dt.28.01.2021 of Chief Secretariat (Works),Puducherry.

3.G.O.MS.No.18,dt.19.06.2024 of Chief Secretariat (Works),Puducherry.

ORDER

The Chief Engineer, Public Works Department, Puducherry has stated in the I.D. note first read above that the PSR Standing Committee constituted by the Government of Puducherry, vide Order No.4000/669/06-PW(B1), dated 12/01/2007 convened during June 2022 and December 2022 has recommended the basic rate to be adopted to revise the PSR for all four regions of UT of Puducherry, viz; Pondicherry, Karaikal, Mahe and Yanam. Accordingly, approval has been issued for implementing the PSR 2020-21 for Civil works in Union Territory of Puducherry for the four Regions vide reference second read above. The existing PSR 2020-21 has been prepared during the year 2018-19 and it was approved and adopted by the Government during the year 2020-21. As on date the PWD, is adopting schedule of rates of 2020-21 for preparation of projects /DPR / Estimates. Now the basic rates for materials, labour, machinery have been increased drastically and therefore the PWD has proposed to revise the PSR for all the four regions due to increase in basic rates of material, labour and machinery. Therefore, the committee constituted under the Chairmanship of Development Commissioner - Cum - Secretary to Govt.(Finance) vide reference third cited to sortout the issues pertaining to the PWD, Puducherry, has examined and approved the recommendations of the PSR Standing Committee to revise / upgrade the PSR. Hence, the Chief Engineer, PWD, Puducherry has requested necessary approval for implementing the revised / upgraded rates for the items (inclusive of GST @ 18%) in the PSR 2024-25 worked out respectively for Pondicherry, Karaikal, Mahe and Yanam regions of U.T. of Puducherry.

2. Accordingly, approval of Hon'ble Lt. Governor, Puducherry is hereby conveyed for implementing PSR 2024-25 for all four regions, viz; Pondicherry, Karaikal, Mahe and Yanam of U.T. of Puducherry, with immediate effect.

3. This issues with the concurrence of Finance Department vide their I.D.No.e-11074/FD/F3/FC/2024-25, dt.30.7.2024.

//BY ORDER OF HON'BLE THE LT. GOVERNOR//

4/17

(P. EJOUMALE)

UNDER SECRETARY TO GOVT.(WORKS)

To

The Chief Engineer,
Public Works Department, Puducherry.

with a request to upload the approved PSR 2024-25 for all the four regions in the official website of PWD - "pwd.py.gov.in".

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BASIC RATE

MAHE REGION				
BASIC RATES FOR BUILDING WORKS				
Sl.No.	Code.No.	Description	Unit	Rate in Rs.
HIRE CHARGES OF PLANTS				
1	0002	H/C of concrete mixer 0.25 to 0.40 cum with hopper	day	4125.00
2	0003	H/C of diesel road roller - 8 to 10 tonne	day	6050.00
3	0004	Production cost of concrete by batch mix plant	cum	360.00
4	0005	H/C of diesel truck - 9 tonne	day	4620.00
5	0006	H/C of spraying machine including electric charges	day	450.00
6	0009	Pumping of concrete-H/C of pump, piping work, & accessories etc	cum	130.00
7	0010	H/C of Derrick monkey rope	day	1200.00
8	0011	H/C of pump set of capacity 4000 litre/hour	day	900.00
9	0012	Vibrator (Needle type - 40mm)	day	1300.00
10	0013	Machine for rubbing of floors	day	550.00
11	0015	Excavator 120	day	16500.00
12	0017	Hire and running charges of tipper	day	4200.00
13	0018	Hire and running charges of loader	day	8200.00
14	0019	Hand grinder for mirror polish	day	140.00
15	0020	Hydraulic Excavator (3D) with driver and fuel	day	10450.00
16	0020A	Crane hire charges including all operation upto 8tonne	Per MT	70.00
17	0020B	Creane hire charges including all operation upto 8T	Perhour	1100.00
18	0024	H/C hydraulic piling rig with power unit etc.,complete accessories and shifiting	day	35200.00
19	0025	H/C of light Crane	day	5000.00
20	0026	H/C of bentonite pump	day	5940.00
21	0027	H/C vibrating pile driving hammer complete with power unit and accessories	day	39600.00
22	0028	H/C Crane 20 tonne capacity	day	13200.00
23	0029	Concrete transit by transit mixer	Km/Cum	570.00
24	0029A	H/C for transit mixer (beyond 10 Km lead)	cum	50.00
25	0037	Mobile crane	day	4950.00
26	0038	Tractor with ripper attachment	day	2300.00
27	0039	Tractor with trolley	day	2500.00
28	0040	Air compressor 250 cfm with two leads for pneumatic cutters/hammers	day	3300.00
29	0041	Joint cutting machine with 2-3 blades	day	1650.00
30	0052	Front end loader 1 cum bucket capacity (incl POL)	hour	1100.00
31	0066	Batching and Mixing plant @ 75 cum per hour	hour	4100.00
32	0081	Pile integrity testing equipment	day	5100.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
33	0082	Excavation of diaphragm wall by Mechanical grab	sqm	2500.00
34	1399	Hire charges for pipe cutting machine	day	330.00
35	1400AA	Hire charges for pipe grinding machine	day	330.00
36	0085	Using cost of Ultra Violet Radiation tube	hour	280.00
37	0086	Compressor, gun, rubber pipes and other accessories - H/C of plant & machinery with fuel	day	7425.00
38	0087	H/C of Suction Jetting machine 2200 PSI machine i/c POL and operator	day	60500.00
39	0088	H/C of Drill machine upto 30mm dia	day	275.00
40	0089	H/C of sand blasting equipment	day	770.00
41	0090	H/C of compressor	day	4400.00
42	0091	Welding charges of shear key to existing reinforcement	each	385.00
43	0092	H/C of plant and machinery that can inject 350 kg per day	day	200.00
		Note: (1) Above hire - charges include cost of services of operating staff, Cost of lubricating oil, diesel / petrol/ kerosene oil, other consumables for running the plant and machinery . (2) The hire - charges of plant machinery on per day basis are for single shift of eight working hours.		
LABOUR				
44	0100	Bandhani	day	970.00
45	0101	Bhisti	day	970.00
46	0102	Blacksmith 1 st class	day	1100.00
47	0103	Blacksmith 2nd class	day	1050.00
48	0111	Carpenter 1 st class	day	1100.00
49	0112	Carpenter 2nd class	day	1050.00
50	0113	Chowkidar	day	970.00
51	0114	Belder	day	870.00
52	0114A	Survey Assistant	each	970.00
53	0114B	Wooder I class	each	970.00
54	0115	Coolie	day	870.00
55	0116	Fitter grade 1	day	1100.00
56	0117	Assistant Fitter or 2nd class Fitter	day	970.00
57	0119	Glazier	day	970.00
58	0122	Mason (for plaster of paris work) 1st class	day	1100.00
59	0123	Mason (brick layer) 1st class	day	1000.00
60	0124	Mason (brick layer) 2 nd class	day	970.00
61	0125	Mason (for plain stone work) 2nd class	day	970.00
62	0126	Mason (for ornamental stone work) 1st class	day	1200.00
63	0127	Driver(for Road roller,concrete mixer,Truck etc.)	day	1000.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
64	0128	Mate	day	970.00
65	0129	Sewer man	day	970.00
66	0130	Mistry	day	1050.00
67	0131	Painter	day	970.00
68	0132	Rock excavator	day	1100.00
69	0133	Rock breaker	day	1100.00
70	0134	Rock hole driller	day	1100.00
71	0135	Stone chiseller	day	1100.00
72	0139	Skilled beldar (for floor rubbing etc.)	day	970.00
73	0141	White washer	day	970.00
74	0155	Mason (average)	day	1000.00
75	0156	Carpenter (average)	day	1000.00
76	0157	Operator (Pile/Special machine)	day	1200.00
77	0159	Skilled torch operator for laying tack	day	1000.00
78	0160	Technician	day	1100.00
79	0161	Helper (Technician)	day	970.00
80	0163A	Mechanic helper	each	970.00
81	0193A	Electrician	day	1000.00
82	0193	Electrician class I (ITI passed with wireman licence from competent authority)	day	1050.00
83	0193B	Electrician helper	day	970.00
84	0191	Mazdoor category III	day	870.00
85	0192	Painter class II	day	970.00
86	0158	Mechanic (Pile)	day	970.00
87		Electrician Class II (ITI passed with wireman licence from competent authority)	day	1000.00
88		Mechanic Grade -I	day	1100.00
89		Mechanic Grade -II	day	970.00
90		Pump driver Grade -I (ITI Passed)	day	970.00
91		Sweeper	day	870.00
92		Thatcher	day	870.00
93		Welder Class -I (ITI Passed)	day	1100.00
94		Welder Class -II	day	970.00
95		Well sinker Class -I	day	1150.00
96		Well sinker Class - II	day	1050.00
97		Technical Assistant Grade -I (B.E - Passed)	day	1400.00
98		Technical Assistant Grade -II (Diploma passed or B.E.failed)	day	1200.00
99		Technical Assistant Grade - III (ITI passed or Diploma failed)	day	1100.00
100		Technical Assistant Grade - IV (ITI failed or having certificate issued by Govt.of Puducherry)	day	1000.00
101		Data Entry operator Gr-I (Degree with computer / PGDCA or equivalent)	day	1300.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
102		Laboratory Assistant Grade - I (PG in science)	day	1400.00
103		Laboratory Assistant Grade - II (UG in science)	day	1200.00
104		Laboratory Assistant Grade - III (Degree other than engg. / science to work as work inspector, graduate Jr.Clerk & work clerk)	day	1200.00
105		Raker	day	1000.00
106		Driver - Light Vehicle	day	1200.00
107		Driver - Earth moving equipments	day	1500.00
108		Cleaner (Heavy vehicles / roller)	day	1100.00
109		Watchman Grade I (Kurkha)	day	1100.00
110		Watchman Grade II (Others)	day	1000.00
111		Drum mixer (Rotary for hot process)	day	1200.00
112		Helper for Rig	day	1100.00
113		Driller Grade - I (Pile)	day	1300.00
114		Driller Grade - II (Pile)	day	1200.00
115		Mazdoor (Heavy for pile work)	day	1200.00
116		Genset Operator	day	1200.00
117		Site supervisor for pile operation	day	1200.00
118	0162	Labour for fabrication of uPVC extruded casement / sliding windows / doors i/c machineries & hardware fittings	sqm	600.00
119	0163	Labour for installation of uPVC extruded casement / sliding windows & doors including scaffolding	sqm	550.00
MATERIALS FOR BUILDING WORK				
		Note: These rates are at site of work and are exclusive of GST & Contractors profit		
120	0222	Seam bolts and nuts 6 mm dia and 25mm long	10 Nos	55.00
121	0223	Fibre (high impact poly propylene reinforced) cement corrugated sheet 6mm thick	sqm	440.00
122	0224	Fibre(high impact poly propylene reinforced)cement close fitting adjustable ridge	metre	358.00
123	0225	Fibre (high impact poly propylene reinforced) cement corrugate serrated adjustable ridge	metre	308.00
124	0226	Fibre (high impact poly propylene reinforced) cement plain wing adjustable ridge	metre	308.00
125	0227	Fibre (high impact poly propylene reinforced) cement unserrated adjustable ridge-hips	metre	319.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
126	0228	Fibre (high impact poly propylene reinforced) cement corrugated apron piece	metre	215.00
127	0229	Fibre(high impact poly propylene reinforced) cement eaves filler piece	each	138.00
128	0230	Fibre(high impact poly propylene reinforced) cement north light curves	metre	275.00
129	0231	Fibre (high impact poly propylene reinforced) cement ventilator curves	each	407.00
130	0232	Fibre (high impact poly propylene reinforced) cement barge boards 6mm thick	metre	407.00
131	0233	Fibre (high impact poly propylene reinforced) cement ridge finial	pair	154.00
132	0234	Fibre (high impact poly propylene reinforced) cement special north light curves	each	319.00
133	0235	Fibre (high impact poly propylene reinforced) cement S type louvers	each	253.00
134	0236	Multi purpose fibre (high impact poly propylene reinforced) cement board 6mm thick	sqm	286.00
135	0237	Multi purpose fibre (high impact poly propylene reinforced) cement board 8mm thick	sqm	396.00
136	0238	6 mm thick heavy duty fibre cement board	sqm	792.00
137	0239	8 mm thick heavy duty fibre cement board	sqm	1056.00
138	0240	9 mm thick heavy duty fibre cement board	sqm	1155.00
139	0241	12.5 mm thick gypsum plaster board	sqm	286.00
140	0242	6 mm thick multipurpose cement bonded wood particle board conforming to IS: 14276	sqm	363.00
141	0243	8 mm thick multipurpose cement bonded wood particle board conforming to IS: 14276	sqm	374.00
142	0285	Brick aggregate (single size): 63mm nominal size	cum	891.00
143	0286	Brick aggregate (single size):50mm nominal size	cum	891.00
144	0287	Brick aggregate (single size):40mm nominal size	cum	908.00
145	0288	Brick aggregate (Single size) : 20 mm nominal size	cum	880.00
146	0289	Brick aggregate (Single size): 25 mm nominal size	cum	880.00
147	0291	Stone aggregate (single size):63mm nominal size	cum	1150.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
148	0292	Stone aggregate (single size):50mm nominal size	cum	1400.00
149	0293	Stone aggregate (single size):40mm nominal size	cum	1660.00
150	0294	Stone aggregate (single size):25mm nominal size	cum	1690.00
151	0295	Stone aggregate (single size):20mm nominal size	cum	1690.00
152	0296	Stone aggregate (single size):12.5mm nominal size	cum	1660.00
153	0297	Stone aggregate (single size):10mm nominal size	cum	1660.00
154	0298	Stone aggregate (single size):6mm nominal size	cum	1550.00
155	0302	Safeda ballies 125mm diameter	metre	75.00
156	0302A	Casurina posts 100 to 130mm dia	metre	61.00
157	0302B	Casurina posts 150mm dia	metre	110.00
158	0303	Cowdung	cum	90.00
159	0304	Bajri	cum	1100.00
160	0305	Bamboo 25 mm dia 2.5 metre long	score	275.00
161	0309	Paving bitumen of grade VG-10 of approved quality	tonne	42507.59
162	0313	Blown type petroleum bitumen of penetration 85/25 of approved quality	tonne	42507.59
163	0314	Bitumen hot sealing compound : grade A	Kilogram	47.00
164	0316	Bitumen solution primer of approved quality	litre	55.00
165	0317	Premoulded joint filler 12mm thick	sqm	475.00
166	0318	Bitumen felt fibre base (vegetable or animal):As per IS 7193 grade I	sqm	65.00
167	0319	Bitumen felt as per IS -7193 grade II	sqm	135.00
168	0322	Bitumen felt : Type 3 grade I	sqm	66.00
169	0323	Separation Membrane of impermeable plastic sheeting 125 micron thick	sqm	22.00
170	0324	Coal tar	litre	52.00
171	0325	Blasting powder	Kilogram	61.00
172	0326	Blasting fuse (fuse wire)	each	17.00
173	0328	White face insulating board : 12mm thick	sqm	347.00
174	0332	Natural colour insulating board : 12 mm thick	sqm	253.00
175	0336	Flame retardant face insulating board: 12mm thick	sqm	264.00
176	0339	Flame retardant face insulating , Impregnated fibre board 12mm thick	sqm	462.00
177	0341	Flat pressed 3 layer particle board (medium density) Grade I , 12mm thick	sqm	550.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
178	0346	Extra veneered particle board teak veneering one side, commercial veneering other	sqm	484.00
179	0347	Extra veneered particle board commercial veneering on both side	sqm	132.00
180	0348	Extra veneered particle board teak veneering both sides	sqm	924.00
181	0349	Curing compound	litre	88.00
182	0357	Polymer modified adhesive mortar	kg	28.00
183	0362	Brick bats	cum	924.00
184	0367	Portland cement (OPC / PPC - average)	tonne	6015.63
185	0367A	Cement (SRPC)	tonne	7600.00
186	0367B	Portland Slag Cement	tonne	7600.00
187	0368	White cement	tonne	20350.00
188	0369	Plastic sheat 1.25mm thick for dowel bars	sqm	55.00
189	0370	Coal (steam)	quintal	715.00
190	0371	Sealant primer	kg	209.00
191	0373	Cramp Gun metal 25x6x300mm	each	88.00
192	0378	Brass butt hinges (light/ordinary type): 125x70x4mm	10 nos	1760.00
193	0379	Brass butt hinges (light/ordinary type): 100x70x4mm	10 nos	1650.00
194	0380	Brass butt hinges (light/ordinary type): 75x40x2.5mm	10 nos	864.00
195	0381	Brass butt hinges (light/ordinary type):50x40x2.5mm	10 nos	325.00
196	0382	Brass butt hinges (heavy type) :125x85x5.5mm(0.70kg)	10 nos	3795.00
197	0383	Brass butt hinges (heavy type) :100x85x5.5mm(0.56kg)	10 nos	2695.00
198	0384	Brass butt hinges (heavy type) :75x65x4.0mm (0.20kg) (weighing not less than 0.20kg)	10 nos	1705.00
199	0385	Brass parlimentary hinges 150x125x27x5mm	10 nos	4015.00
200	0386	Brass parlimentary hinges 125X125x27x5mm	10 nos	3575.00
201	0387	Brass parlimentary hinges 100X125x27x5mm	10 nos	3025.00
202	0388	Brass parlimentary hinges 75X100x20x3.2mm	10 nos	2145.00
203	0389	Brass single acting spring hinges 150 mm	each	363.00
204	0390	Brass single acting spring hinges 125 mm	each	341.00
205	0391	Brass single acting spring hinges 100 mm	each	231.00
206	0392	Brass double acting spring hinges 150 mm	each	616.00
207	0393	Brass double acting spring hinges 125 mm	each	385.00
208	0394	Brass double acting spring hinges 100 mm	each	330.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
209	0400	Brass tower bolt (barrel type) 250x10mm	each	374.00
210	0401	Brass tower bolt (barrel type) 200x10mm	each	341.00
211	0402	Brass tower bolt (barrel type)150x10mm	each	242.00
212	0403	Brass tower bolt (barrel type)100x10mm	each	168.00
213	0404	Brass flush bolt 250 mm	each	215.00
214	0405	Brass flush bolt 150 mm	each	176.00
215	0406	Brass flush bolt 100 mm	each	121.00
216	0408	Brass handles 125 mm with plate 175x32mm	each	226.00
217	0409	Brass handles 100 mm with plate 150x32mm	each	187.00
218	0410	Brass handles 75mm with plate 125x32mm	each	132.00
219	0411	Brass door latch 300x16x5mm weighing not less than 0.380kg	each	286.00
220	0412	Brass door latch 250x16x5mm weighing not less than 0.350kg	each	253.00
221	0413	Brass mortice latch and lock100x65mm- 6 levers and a pair of brass lever handles	each	660.00
222	0414	Brass mortice latch 100x65mm with a pair of brass lever handles	each	572.00
223	0415	65 mm Navatal lock of - 6 levers	each	484.00
224	0416	65 mm Navatal lock of - 7 levers with 3 keys	each	693.00
225	0417	Brass 150mm floor door stopper weighing not less than 0.357kg	each	264.00
226	0418	Brass hard drawn hooks & eyes 300mm	10 nos	902.00
227	0419	Brass hard drawn hooks & eyes 250mm	10 nos	770.00
228	0420	Brass hard drawn hooks & eyes 200mm	10 nos	732.00
229	0421	Brass hard drawn hooks & eyes 150mm	10 nos	605.00
230	0422	Brass hard drawn hooks & eyes 100mm	10 nos	517.00
231	0423	Brass casement window fastener	each	77.00
232	0424	Brass casement stays (straight peg type) 300 mm weighing not less than 0.33kg	each	187.00
233	0425	Brass casement stays (straight peg type) 250 mm weighing not less than 0.28kg	each	176.00
234	0426	Brass casement stays (straight peg type) 200 mm weighing not less than 0.24kg	each	160.00
235	0427	Brass quadrant stays 300 mm	each	143.00
236	0428	Brass fanlight catch	10 nos	319.00
237	0429	Brass fanlight pivot	10 nos	347.00
238	0430	Brass chain with hook for fan light catch	each	55.00
239	0431	Brass hasps and staples (safety type) 150mm	10 nos	1375.00
240	0432	Brass hasps and staples (safety type) 115 mm	10 nos	957.00
241	0433	Brass hasps and staples (safety type) 90 mm	10 nos	660.00
242	0438	Brass night latch	each	891.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
243	0442	Brass helical spring 150mm	each	314.00
244	0444	Brass curtain rod 20mm dia 1.25mm thick	metre	187.00
245	0445	Brass curtain rod 25mm dia 1.25mm thick	metre	242.00
246	0446	Brass brackets (curtain rods) 20mm	each	72.00
247	0447	Brass cupboard knob or wardrobe knob 50mm	each	61.00
248	0449	Brass screws 50mm	100 nos	374.00
249	0450	Brass screws 40mm	100 nos	308.00
250	0451	Brass screws 30mm	100 nos	242.00
251	0452	Brass screws 25mm	100 nos	171.00
252	0453	Brass screws 20mm	100 nos	165.00
253	0524	Chromium plated brass butt hinges (heavy) type 75x65x4mm weighing not less than 0.2kg	10 nos	1265.00
254	0525	Chromium plated brass butt hinges (light / ordinary) type 125x70x4mm	10 nos	1320.00
255	0526	Chromium plated brass butt hinges (light / ordinary) type 100x70x4mm	10 nos	1045.00
256	0527	Chromium plated brass butt hinges (light / ordinary) type 75x40x2.5mm	10 nos	495.00
257	0528	Chromium plated brass butt hinges (light / ordinary) type 50x40x2.5mm	10 nos	369.00
258	0552	75mm SS fancy handles for kitchen cabinet	10 nos	550.00
259	0553	100mm SS fancy handles for kitchen cabinet	10 nos	913.00
260	0554	125mm SS fancy handles for kitchen cabinet	10 nos	1320.00
261	0555	Chromium plated brass handles 125mm with plate 175x32mm	each	297.00
262	0556	Chromium plated brass handles 100mm with plate 150x32mm	each	253.00
263	0557	Chromium plated brass handles 75mm with plate 125x32mm	each	198.00
264	0558	Chromium plated brass mortice latch& lock 100x65mm -6 lever& pair of brass lever handles	each	946.00
265	0568	Chromium plated brass casement window fastener	each	119.00
266	0569	Chromium plated brass casement stay (straight peg) 300mm weighing not less than 0.33kg	each	212.00
267	0570	Chromium plated brass casement stay (straight peg) 250mm weighing not less than 0.28kg	each	167.00
268	0571	Chromium plated brass casement stay (straight peg) 200mm weighing not less than 0.24kg	each	140.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
269	0583	Chromium plated brass night latch	each	891.00
270	0584	Chromium plated brass wardrobe knob 50mm	each	62.00
271	0585	Chromium plated brass screws 50 mm	100 nos	418.00
272	0586	Chromium plated brass screws 40mm	100 nos	358.00
273	0587	Chromium plated brass screws 30mm	100 nos	286.00
274	0588	Chromium plated brass screws 25mm	100 nos	198.00
275	0589	Chromium plated brass screws 20mm	100 nos	160.00
276	0590	Chromium plated brass curtain rod 12mm dia 1.25mm thick	metre	242.00
277	0591	Chromium plated brass curtain rod 20mm dia 1.25mm thick	metre	352.00
278	0592	Chromium plated brass curtain rod 25mm dia 1.25mm thick	metre	429.00
279	0594	Bright finished or black enameled mild steel butt hinges 125x65x2.12mm	10 nos	211.00
280	0595	Bright finished or black enameled mild steel butt hinges 100x58x1.90mm	10 nos	154.00
281	0596	Bright finished or black enameled mild steel butt hinges 75x47x1.70mm	10 nos	110.00
282	0597	Bright finished or black enameled mild steel butt hinges 50x37x1.50mm	10 nos	88.00
283	0608	Nickel plated bright finished mild steel piano hinges 1mm thick 25mm wide	metre	44.00
284	0635	Bright finished or black enameled mild steel screws 50mm	100 nos	99.00
285	0637	Bright finished or black enameled mild steel screws 40mm	100 nos	72.00
286	0638	Bright finished or black enameled mild steel screws 30mm	100 nos	66.00
287	0639	Bright finished or black enameled mild steel screws 25mm	100 nos	55.00
288	0640	Bright finished or black enameled mild steel screws 20mm	100 nos	44.00
289	0641	Bright finished or black enameled mild steel bolts & nuts 50x6mm	each	11.00
290	0641R	Bright finished or black enamelled powder coating bolts and nuts 50 x 6 mm	each	11.00
291	0642	Oxidised mild steel butt hinges 125x65x2.12mm	10 nos	264.00
292	0642R	Powder coating butt hinges 125 x 65 x 2.12 mm	10 nos	319.00
293	0643	Oxidised mild steel butt hinges 100x58x1.90mm	10 nos	180.00
294	0643R	Powder coating butt hinges 100 x 58 x 1.9 mm	10 nos	209.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
295	0644	Oxidised mild steel butt hinges 75x47x1.70mm	10 nos	121.00
296	0645	Oxidised mild steel butt hinges 50x37x1.50mm	10 nos	99.00
297	0645R	Powder coating butt hinges 50 x 37 x 1.50mm	10 nos	105.00
298	0646	Oxidised mild steel parliamentary hinges 150x125x27x2.8mm	10 nos	605.00
299	0646R	Powder coating parliamentary hinges 150 x 125 x 27 x 2.8 mm	10 nos	756.00
300	0647	Oxidised mild steel parliamentary hinges 125x125x27x2.8mm	10 nos	561.00
301	0647R	Powder coating parliamentary hinges 125 x 125x 27 x 2.8mm	10 nos	701.00
302	0648	Oxidised mild steel parliamentary hinges 100x125x27x2.8mm	10 nos	418.00
303	0648R	Powder coating parliamentary hinges 100 x 125 x 27 x 2.8mm	10 nos	522.00
304	0649	Oxidised mild steel parliamentary hinges 75x100x20x2.24mm	10 nos	363.00
305	0649R	Powder coating parliamentary hinges 75 x 100 x 20 x 2.24mm	10 nos	453.00
306	0650	oxidised mild steel single acting spring hinges 150mm	each	135.00
307	0650R	Powder coating single spring hinges 150mm	each	170.00
308	0651	oxidised mild steel single acting spring hinges 125mm	each	121.00
309	0651R	Powder coating single spring hinges 125mm	each	150.00
310	0652	oxidised mild steel single acting spring hinges 100mm	each	88.00
311	0652R	Powder coating single acting spring hinges 100mm	each	110.00
312	0653	oxidised mild steel double acting spring hinges 150mm	each	127.00
313	0653R	Powder coating double acting spring hinges 150mm	each	160.00
314	0654	oxidised mild steel double acting spring hinges 125mm	each	121.00
315	0654R	Powder coating double acting spring hinges 125mm	each	155.00
316	0655	oxidised mild steel double acting spring hinges 100mm	each	83.00
317	0655R	Powder coating double acting spring hinges 100mm	each	105.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
318	0656	Nickel plated mild steel piano hinges 1mm thick 35mm wide	metre	83.00
319	0660	Oxidised mild steel sliding door bolt 300x16mm	each	110.00
320	0660R	Powder coating sliding door bolt 300 x 16 mm	each	140.00
321	0661	Oxidised mild steel sliding door bolt 250x16mm	each	83.00
322	0661R	Powder coating sliding door bolt 250x16mm	each	165.00
323	0662	Oxidised mild steel door latch 300x20x6mm	each	72.00
324	0662R	Powder coating door latch 300x 20x6mm	each	132.00
325	0663	Oxidised mild steel door latch 250x20x6mm	each	55.00
326	0663R	Powder coating latch 250x20x6mm	each	132.00
327	0664	Oxidised mild steel tower bolt (barrel type) 250x10mm	each	83.00
328	0664R	Powder coating tower bolt (barrel type) 250x10mm	each	72.00
329	0665	Oxidised mild steel tower bolt (barrel type) 200x10mm	each	55.00
330	0665R	Powder coating tower bolt (barrel type) 200 x 10mm	each	61.00
331	0666	Oxidised mild steel tower bolt (barrel type) 150x10mm	each	50.00
332	0666R	Powder coating tower bolt (barrel type) 150x10mm	each	60.00
333	0667	Oxidised mild steel tower bolt (barrel type) 100x10mm	each	44.00
334	0667R	Powder coating tower bolt (barrel type) 100x10mm	each	55.00
335	0668	Oxidised mild steel handles 125 mm	each	39.00
336	0668R	Powder coating handles 125mm	each	99.00
337	0669	Oxidised mild steel handles 100 mm	each	31.00
338	0669R	Powder coating handles 100mm	each	77.00
339	0670	Oxidised mild steel handles 75 mm	each	28.00
340	0670R	Powder coating handles 75mm	each	57.00
341	0679	Oxidised mild steel hasps and staples (safety type) 150mm	10 nos	200.00
342	0679R	Powder coating hasps and staples (safety type) 150mm	10 nos	220.00
343	0680	Oxidised mild steel hasps and staples (safety type) 115mm	10 nos	176.00
344	0680R	Powder coating hasps and staples (safety type) 115mm	10 nos	200.00
345	0681	Oxidised mild steel hasps and staples (safety type) 90mm	10 nos	138.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
346	0681R	Powder coating hasps and staples (safety type) 90mm	10 nos	170.00
347	0682	Oxidised mild steel screws 50 mm	100 nos	110.00
348	0682R	Powder coating screws 50 mm	100 nos	175.00
349	0683	Oxidisd mild steel screws 40 mm	100 nos	97.00
350	0683R	Powder coating screws 40mm	100 nos	125.00
351	0684	Oxidised mild steelscrews 30 mm	100 nos	69.00
352	0684R	Powder coating screws 30mm	100 nos	100.00
353	0685	Oxidised mild steel screws 25 mm	100 nos	55.00
354	0685R	Powder coating screws 25mm	100 nos	90.00
355	0686	Oxidised mild steel screws 20 mm	100 nos	55.00
356	0686R	Powder coating screws 20mm	100 nos	90.00
357	0687	Anodised aluminium butt hinges 125x75x4mm	10 nos	1045.00
358	0688	Anodised aluminium butt hinges 125x63x4mm	10 nos	935.00
359	0689	Anodised aluminium butt hinges 100x75x4 mm	10 nos	869.00
360	0690	Anodised aluminium butt hinges 100x63x3.2mm	10 nos	748.00
361	0691	Anodised aluminium butt hinges 100x63x4mm	10 nos	858.00
362	0692	Anodised aluminium butt hinges 75x63x4mm	10 nos	572.00
363	0693	Anodised aluminium butt hinges 75x63x3.2mm	10 nos	462.00
364	0694	Anodised aluminium butt hinges 75x45x3.2mm	10 nos	363.00
365	0696	Anodised aluminium sliding door bolt 300x16mm	each	286.00
366	0697	Anodised aluminium sliding door bolt 250x16mm	each	242.00
367	0698	Anodised aluminium tower bolt (barrel type) 300x10mm	10 nos	1485.00
368	0699	Anodised aluminium tower bolt (barrel type) 250x10mm	10 nos	1046.00
369	0700	Anodised aluminium tower bolt (barrel type) 200x10mm	10 nos	473.00
370	0701	Anodised aluminium tower bolt (barrel type) 150x10mm	10 nos	677.00
371	0702	Anodised aluminium tower bolt (barrel type) 100x10mm	10 nos	561.00
372	0703	Anodised aluminium handles 125mm with plate 175x32mm	10 nos	638.00
373	0704	Anodised aluminium handles 100mm with plate 150x32mm	10 nos	572.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
374	0705	Anodised aluminium handles 75mm with plate 125x32mm	10 nos	528.00
375	0706	Anodised aluminium kicking plate 50cm long 100x3.15mm	each	198.00
376	0713	Block board construction flush door with teak wood ply on both faces 35mm thick	sqm	3135.00
377	0714	Block board construction flush door with teak wood ply on both faces 30mm thick	sqm	2877.00
378	0715	Block board construction flush door with teak wood ply on both faces 25mm thick	sqm	2602.00
379	0717	Block board construction flush door with commercial ply on both faces 35mm thick	sqm	2052.00
380	0718	Block board construction flush door with commercial ply on both faces 30mm thick	sqm	1815.00
381	0719	Block board construction flush door with commercial ply on both faces 25 mm thick	sqm	1595.00
382	0724	S/F Precast RCC door and window frames	sqm	1221.00
383	0752	Block board construction flush door lipping 25mm thick	sqm.door area	557.00
384	0753	Square vision panel in block board construction flush door not exceeding 0.10 sqm	sqm.door area	154.00
385	0754	Circular vision panel in block board construction flush door	sqm.door area	159.00
386	0755	Decorative type louvers in block board construction flush door	sqm.door area	319.00
387	0757	Rebate cutting in block board construction flush door	sqm.door area	62.00
388	0759	Decorative plywood 4mm	sqm	748.00
389	0761	Fuel wood	quintal	550.00
390	0763	Glue	kilogram	127.00
391	0764	Calcium silicate base compound for jointing calcium silicate tiles	kg	50.00
392	0765	Hessian cloth	sqm	44.00
393	0768	Cement concrete jali 50mm thick	sqm	359.00
394	0769	Cement concrete jali 40mm thick	sqm	341.00
395	0770	Cement concrete jali 25mm thick	sqm	270.00
396	0771	Kerosene oil	litre	55.00
397	0773	Unslaked lime	quintal	468.00
398	0775	Dehradun white lime	quintal	891.00
399	0776	Satna lime	quintal	561.00
400	0777	Dry hydrated lime (factory made)	quintal	429.00
401	0784	Marble dust / powder	cum	1350.00
402	0785	Marble chips up to 4mm and down size white & black	quintal	198.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
403	0788	Marble chips large size above 4mm white & black	quintal	198.00
404	0801	Silicon and acrylic emulsion	litre	369.00
405	0802	Acrylic distemper 1st quality , having VOC content less than 50 grams / litre	kg	72.00
406	0803	Acrylic emulsion , having VOC content less than 50 grams / litre	litre	350.00
407	0804	Premium acrylic emulsion of interior grade- VOC content less than 50grams/litre	litre	420.00
408	0806	Readymixed pink or grey primer wood work (hard & soft VOC content less than 50g/l	litre	200.00
409	0808	Water thinnable cement primer - interior wall surface-VOC content less than 50g/l	litre	121.00
410	0810A	Gravel	cum	729.00
411	0811	Mud(dry)	cum	100.00
412	0816	Oil bound washable distemper/Acrylic distemper	kilogram	72.00
413	0818	Linseed oil (double boiled)	litre	204.00
414	0824	White cement based putty	kg	39.00
415	0826	Aluminium paint	litre	242.00
416	0827	Acid proof paint (chocolate or black)	litre	275.00
417	0828	Anticorrosive bituminous paint (black)	litre	165.00
418	0829	Black japan paint	litre	160.00
419	0833	Synthetic enamel paint in black or chocolate shade	litre	222.00
420	0834	Synthetic enamel paint in all shades except black or chocolate shade	litre	222.00
421	0845	Roofing paint for iron sheets in red colour	litre	231.00
422	0846	Set release of emulsion - mixed with 5 litres of water	litre	293.00
423	0850	White lead	kg	110.00
424	0851	Water proofing cement paint	kilogram	50.00
425	0855	Wax polish (ready made)	kilogram	280.00
426	0856	ordinary varnish	litre	170.00
427	0857	Superior copal varnish	litre	215.00
428	0858	Superior spar varnish	litre	210.00
429	0859	Oil type wood preservative	litre	149.00
430	0863	Putty for wood work	kilogram	53.00
431	0865	Pig lead	kg	221.00
432	0868	Premixed super white gypsum plaster	kg	13.00
433	0869	Plaster of paris	kilogram	9.00
434	0870	Plug	each	19.00
435	0873	Copper pins 6mm dia 7.5cm long	each	19.00
436	0874	Black colour dark shade pigment	kilogram	99.00
437	0875	Red , chocolate,orange,buff or yellow (red oxide of iron) light shade pigment	kilogram	139.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
438	0876	Green or blue medium shade pigment	kilogram	123.00
439	0886	Standard holder bat clamps for sand cast iron or cast iron pipes 150mm dia	each	46.00
440	0966	Sand cast iron plain shoe 150mm dia	each	308.00
441	0967	Copper plate	kilogram	308.00
442	0969	Pulley 25mm dia	each	35.00
443	0973	Rolling shutter made of 80x1.25 mm machine rolled laths	sqm	2321.00
444	0974	Top cover for rolling shutters 1.25mm thick	metre	841.00
445	0975	27.5 cm long wire spring grade No.2 for rolling shutters	each	523.00
446	0976	Ball bearing for rolling shutters	each	616.00
447	0977	Extra mech.devicechain & crankedoper-operating rolling shutter 10.00upto16.80sqm	sqm	968.00
448	0978	Extra mech.devicechain & crankedoper-operating rolling shutter exceed 16.80sqm	sqm	968.00
449	0979	Royalty for good earth	cum	605.00
450	0979A	Quary dust / rubbish	cum	1200.00
451	0979B	Earth for filling (red earth)	cum	605.00
452	0980	Royalty for sludge	cum	55.00
453	0982	Coarse sand (zone III)	cum	1800.00
454	0983	Fine sand (zone IV)	cum	1800.00
455	0992	Galvanised steel plain sheets	quintal	6050.00
456	0992A	P/F colour galvalume sheet of 550 M.P.A	sqm	627.00
457	0993C	P/S/F of netlon mesh using 25 mm anodised aluminium strip	sqm	585.00
458	0994	Standard quality hard board sheet 3mm thick	sqm	281.00
459	0996	Standard quality hard board sheet 4.5mm thick	sqm	281.00
460	0999	Shellac	kilogram	330.00
461	1000	Spirit	litre	105.00
462	1001	Spun yarn	kilogram	88.00
463	1002	Mild steel round bar 12mm dia and below	quintal	6652.54
464	1003	Mild steel round bar above 12mm dia	quintal	6652.54
465	1004	Average rate of Mild steel round bars for reinforcement	quintal	6652.54
466	1005	Twisted steel / deformed TMT bars Fe-500D	quintal	6652.54
467	1005C	Anticorrosive coating for 20 mm to 32 mm dia bar	tonne	10800.00
468	1005D	Anticorrosive coating for 8 mm to 16 mm dia bar	tonne	15600.00
469	1006	Mild steel square bars	quintal	6652.54
470	1007	Structural steel such as tees, angles channels and R.S.joists	quintal	6652.54

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
471	1008	Flats up to 10mm in thickness	quintal	6652.54
472	1009	Flats exceeding 10mm in thickness	quintal	6652.24
473	1010	Mild steel plates	quintal	7100.00
474	1011	Steel glazed door,window / ventilator , all members viz, F7D , F4B,K11 and K12B	kg	100.00
475	1013	Mild steel sheets of 1.00mm thickness for tanks	quintal	7100.00
476	1015	Mild steel expanded metal 20x60mm strands 3.25mm wide 1.60mm thick	sqm	480.00
477	1019	Mild steel hooks	each	17.00
478	1020	Mild steel rivets	quintal	6700.00
479	1021	Hard drawn steel wire fabric 75X25 mm mesh of weight noe less than 7.75kg /sqm	sqm	700.00
480	1022	Galvanised steel bolts & nuts 6mm dia and 25mm long head with slots	10 nos	50.00
481	1023	Galvanised steel J or L hooks 8mm dia	10 nos	150.00
482	1024	Galvanised steel bolts & nuts 10mm dia & 125mm long round head with slots	each	22.00
483	1025	Mild steel bolts 6mm dia & 25mm long - hexagonal head	10 nos	44.00
484	1028	Straining bolts	each	77.00
485	1029	Galvanised steel barbed wire of 9.8kg / 100 metre	quintal	8500.00
486	1030	Galvanised steel turn buckles	each	22.00
487	1031	Galvanised steel bolts & nuts 10mm dia & 27 cm long both sides threaded 4 galvanised steel nut	each	31.00
488	1032	Galvanised steel bolts 10mm dia & 7 cm long with nuts	each	22.00
489	1034	Bolts and nuts upto 300 mm in length	quintal	8000.00
490	1035	Bolts and nuts above 300 mm in length	quintal	8000.00
491	1036	Iron pintels including welded pin	each	77.00
492	1143	Steel beading 10X10X1.6mm (box type)	metre	77.00
493	1145	Aluminium plain strip edging 38x12x3mm	metre	66.00
494	1149	Glass strip 4 mm thick 40 mm deep	metre	13.00
495	1154	Through and bond stone	100 nos	1210.00
496	1157	Stone for masaoonry work	cum	1210.00
497	1157A	Jetty stone / Armour stone / core stone	MT	880.00
498	1158	Stone for pitching 15 cm x 22.5 cm	cum	1210.00
499	1159	Stone dust	cum	770.00
500	1159A	Spalls (5 to 50 kg)	cum	770.00
501	1159B	Charcoal Powder	kg	55.00
502	1160	Red sand stone block	cum	6732.00
503	1161	White sand stone block	cum	7491.00
504	1163	White sand stone slab 75mm thick (Un-dressed)	sqm	495.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
505	1164	Red sand stone slab 40mm thick (Un-dressed)	sqm	264.00
506	1165	White sand stone slab 40mm thick (Un-dressed)	sqm	341.00
507	1166	Red sand stone slab 30mm thick (Un-dressed)	sqm	231.00
508	1168	Kota stone slab 20mm to 25mm thick (semi-polished)	sqm	550.00
509	1169	Kota stone slab 25mm thick (rough chiseled)	sqm	600.00
510	1174	Red sand stone slab 45mm to 50mm thick (Un-dressed)	sqm	319.00
511	1175	White sand stone slab 45 mm to 50 mm thick (Un-dressed)	sqm	418.00
512	1177	Stone grit 6mm and down size or pea sized gravel	cum	729.00
513	1179	Crushed stone 2.36mm to 12.5mm size	cum	1432.00
514	1182	Surkhi	cum	176.00
515	1189M	Teak wood in Scantling 1st class (Malabar) (For Mahe Region)	cum	165000.00
516	1190M	Teak wood in planks 1st class (Malabar) (For Mahe Region)	cum	230000.00
517	1197I	Country wood in scantling (Irul) (For Mahe Region)	cum	121000.00
518	1197J	Country wood in scantling (Jack) (For Mahe Region)	cum	137500.00
519	1198I	Country wood in Planks (Irul) (For Mahe Region)	cum	142000.00
520	1198J	Country wood in Planks (Jack) (For Mahe Region)	cum	148500.00
521	1201	Mango wood in Scantling	cum	18000.00
522	1202	Mango wood in Planks	cum	22000.00
523	1203A	Cement concrete flooring tiles 22mm thick	sqm	550.00
524	1204	Precast heat resistant terrace tiles size 300x300 mm with 20mm thick	sqm	810.00
525	1207	G.I. limpet washer	100 nos	50.00
526	1208	Bitumen washer	100 nos	35.00
527	1209	G.I. plain washer thick	100 nos	45.00
528	1210	G.I. plain washer thin	100 nos	41.00
529	1211	G.I. plain washer for seam bolts	100 nos	50.00
530	1213	Water proofing materials	kilogram	50.00
531	1214	Welding by gas plant	cm	3.00
532	1215	Welding by electric plant	cm	3.00
533	1216	Whiting	quintal	840.00
534	1219	Wire nails	kilogram	60.00
535	1220	Wire mesh (rabbit)	sqm	85.00
536	1221	20mm dia holding down bolts	quintal	6600.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
537	1222	Mild steel sheets with bolts and nuts to rest on pintels	each	220.00
538	1224	Hard drawn steel wire	quintal	6000.00
539	1225	Mild steel flat strap fitting	quintal	6400.00
540	1234	Aluminium plain strip edging 57x12x3mm	metre	145.00
541	1235	Diesel oil	litre	100.00
542	1237	Cutting marble or sand stone slab up to 50mm thick by mechanical device	metre	10.00
543	1239	18mm thick flamed finish granite stone slab	sqm	2288.00
544	1240	18 mm thick Italian marble stone slab,Perlato (slab area upto 0.5sqm)	sqm	4495.00
545	1241	Commercial LPG in cylinder	kg	110.00
546	1242	Glass mosaic tiles (20mm X 20 mm X 4mm)	sqm	1800.00
547	1243	Tile fixing chemical adhesive	kg	26.00
548	1244	Cement Polymer Grout Compound	kg	45.00
549	1245	Acid for cleaning tiles	litre	50.00
550	1246	Silicon based joint sealent for tiles	kg	210.00
551	1247	Rubber base Adhesive	kg	220.00
552	1248	Epoxy based sealing compound	kg	700.00
553	1249	Acrylic based sealing compound	kg	660.00
554	1250	Non woven reinforcement tape	metre	0.30
555	1257C	Thermocole plain sheet - 19 mm thick	sqm	50.00
556	1301	Bleaching powder	quintal	2900.00
557	1304	Surface box for stop cock	each	175.00
558	1305	Surface box for sluice valve	each	300.00
559	1307	Surface box for water meter	each	350.00
560	1309	C.I.bracket for wash basin and sinks	pair	88.00
561	1314	C.P.brass chain with 32 mm dia rubber plug	each	70.00
562	1315	C.P.brass chain with 40 mm dia rubber plug	each	70.00
563	1330	Clamps & M.S.stays including bolts & nuts for 100 mm pipe	each	40.00
564	1331	M.S.holder bat clamp of approved design for 100mm S.C.I.pipe	each	40.00
565	1332	M.S.holder bat clamp of approved design for 75mm S.C.I.pipe	each	20.00
566	1334	Clamps & M.S.stays including bolts & nuts for 50mm pipe	each	35.00
567	1335	Clamps & M.S.stays including bolts & nuts for 75mm pipe	each	35.00
568	1336	Clearing eye with chain & lid 100 mm dia	each	60.00
569	1337	Clearing eye with chain & lid 150 mm dia	each	70.00
570	1339	Brass bib-cock 15mm dia	each	250.00
571	1340	Brass bib-cock 20mm dia	each	350.00
572	1342	Brass stop-cock 15mm dia	each	350.00
573	1343	Brass stop-cock 20mm dia	each	400.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
574	1350	Mosquito proof coupling of approved design	each	50.00
575	1352	C.I.cover and frame 300x300 mm inside	each	500.00
576	1353	C.I.cover without frame 300x300 mm inside i/c cover of 4.50kg	each	384.00
577	1354	Rectangular cover 455x610mm with frame (low duty)	each	1518.00
578	1355	Rectangular cover 455x610mm without frame (low duty)	each	633.00
579	1356	500mm dia cover with frame (medium duty)	each	2277.00
580	1357	500mm dia cover without frame (medium duty)	each	1720.00
581	1358	DI manhole cover - 560 mm dia circular hinged cover with square frame (not less	each	8419.00
582	1360	C.I.mouth,brass ferrule 15mm dia	each	190.00
583	1361	C.I.mouth,brass ferrule 20mm dia	each	216.00
584	1362	C.I.mouth,brass ferrule 25mm dia	each	297.00
585	1363	Vitreous china foot rests 250x130x30mm	pair	127.00
586	1364	C.I.grating 100x100mm	each	25.00
587	1365	C.I.grating 150 x 100 mm	each	30.00
588	1366	C.I.grating 150x150mm	each	38.00
589	1367	C.I.grating 180x180mm	each	42.00
590	1369	S.C.I.gully or nahani grating 100mm dia	each	25.00
591	1373	Rubber insertions for 80mm dia pipe joints	each	25.00
592	1374	Rubber insertions for 100mm dia pipe joints	each	28.00
593	1375	Rubber insertions for 125mm dia pipe joints	each	30.00
594	1376	Rubber insertions for 150mm dia pipe joints	each	34.00
595	1377	Rubber insertions for 200mm dia pipe joints	each	43.00
596	1378	Rubber insertions for 250mm dia pipe joints	each	68.00
597	1379	Rubber insertions for 300mm dia pipe joints	each	77.00
598	1380	Rubber insertions for 350mm dia pipe joints	each	86.00
599	1381	Rubber insertions for 400mm dia pipe joints	each	124.00
600	1382	Rubber insertions for 450mm dia pipe joints	each	157.00
601	1383	Rubber insertions for 500mm dia pipe joints	each	188.00
602	1384	Rubber insertions for 600mm dia pipe joints	each	213.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
603	1392	Mirror of superior make glass 60x45cm	each	513.00
604	1396	Vitreous china pedestal for wash basin	each	1200.00
605	1397	Pig lead	kilogram	154.00
606	1464	S& S.C.I. standard specials upto 300mm dia (heavy class)	quintal	6800.00
607	1466	S& S.C.I. standard specialsOver 300mm dia (heavy class)	quintal	7900.00
608	1468	Flanged C.I. standard specials upto 300mm dia (heavy class)	quintal	11900.00
609	1470	Flanged C.I. standard specials over 300mm dia (heavy class)	quintal	13100.00
610	1472	Casing pipe 100mm dia	metre	495.00
611	1532	Flush pipe with union spreaders & clamps all in C.P brass for single stall	each	320.00
612	1533	Flush pipe with union spreaders & clamps all in C.P brass for double stall	each	530.00
613	1534	Flush pipe with union spreaders & clamps all in C.P brass for range three stall	each	660.00
614	1535	Flush pipe with union spreaders & clamps all in C.P brass for range four stall	each	700.00
615	1540	Flush pipe and spreaders G.I.for single set of one squatting plate urinal	each	299.00
616	1541	Flush pipe and spreaders G.I.for range of two squatting plate urinal	each	330.00
617	1542	Flush pipe and spreaders G.I.for range of three squatting plate urinal	each	400.00
618	1543	Flush pipe and spreaders G.I.for range of four squatting plate urinal	each	457.00
619	1545	G.I.pipes 15 mm dia	metre	145.00
620	1546	G.I.pipes 20 mm dia	metre	188.00
621	1547	G.I.pipes 25 mm dia	metre	256.00
622	1548	G.I.pipes 32 mm dia	metre	307.00
623	1549	G.I.pipes40 mm dia	metre	376.00
624	1550	G.I.pipes50 mm dia	metre	470.00
625	1551	G.I.pipes65 mm dia	metre	600.00
626	1552	G.I.pipes80 mm dia	metre	725.00
627	1555	G.I.back (Jam) nuts 25mm dia	each	22.00
628	1559	G.I.back (Jam) nuts 65mm dia	each	37.00
629	1608	G.I.tees (equal) 25mm	each	77.00
630	1612	G.I.tees (equal) 65mm	each	480.00
631	1614	G.I. inlet connection	each	76.00
632	1616	S.C.I.soil ,waste and vent single socketed pipe 1.80metres long 75mm dia	each	537.00
633	1617	S.C.I.soil ,waste and vent single socketed pipe 1.80metres long 100 mm dia	each	655.00
634	1617A	PVC - pipes -110mm dia (4kg / sqm)	metre	253.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
635	1618	S.C.I.soil ,waste and vent single socketed pipe 1.80metres long 150 mm dia	each	1077.00
636	1620	S.C.I.plain bend 75mm dia	each	110.00
637	1621	S.C.I.plain bend 100mm dia	each	140.00
638	1622	S.C.I.plain bend 150mm dia	each	225.00
639	1624	S.C.I bend with access door 75mm dia	each	158.00
640	1625	S.C.I bend with access door100 mm dia	each	184.00
641	1625A	PVC 110mm plain bend with access door	each	220.00
642	1626B	Stoneware 150x150mm "Y" joint IS - 651	each	330.00
643	1626C	Stoneware 200x150mm "Y" joint IS - 651	each	360.00
644	1626D	Stoneware 250x150mm "Y" joint IS - 651	each	410.00
645	1626E	Stoneware 300x150mm "Y" joint IS - 651	each	630.00
646	1627	S.C.I.plain single equal junctions 75x75x75mm dia	each	155.00
647	1628	S.C.I.plain single equal junctions100x100x100mm dia	each	246.00
648	1630	S.C.I.single equal junctions 75x75x75mm dia with access door	each	245.00
649	1631	S.C.I.single equal junctions100x100x100mm dia with access door	each	310.00
650	1633	S.C.I.plain double equal junctions 75x75x75x75 mm dia	each	253.00
651	1634	S.C.I.plain double equal junctions 100x100x100x100 mm dia	each	343.00
652	1636	S.C.I.double equal junctions 75x75x75x75 mm dia with access door	each	295.00
653	1637	S.C.I.double equal junctions 100x100x100x100 mm dia with access door	each	381.00
654	1639	Slotted cowl (terminal guard) 75mm dia	each	114.00
655	1640	Slotted cowl (terminal guard)100mm dia	each	140.00
656	1641	G.I.union 15mm nominal bore	each	58.00
657	1642	G.I.union20mm nominal bore	each	71.00
658	1643	G.I.union25mm nominal bore	each	145.00
659	1644	G.I.union32mm nominal bore	each	189.00
660	1645	G.I.union 40mm nominal bore	each	278.00
661	1646	G.I.union50mm nominal bore	each	376.00
662	1647	G.I.union65mm nominal bore	each	650.00
663	1648	G.I.union80mm nominal bore	each	708.00
664	1649	Polyethylene water storage tank with cover and suitable locking arrangement	per litre	8.00
665	1653	Sand cast iron S&S plain single unequal junctions 100x100x75mm dia	each	245.00
666	1656	Sand cast iron S&S single unequal junctions 100x100x75mm dia with access door	each	295.00
667	1659	Sand cast iron S&S plain double unequal junctions 100x100x75x75mm dia	each	241.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
668	1662	Sand cast iron S&S double unequal junctions 100x100x75x75mm dia with access door	each	337.00
669	1666	Sand cast iron heel rest bend 75mm dia	each	147.00
670	1666A	PVC 75mm heel rest bend	each	95.00
671	1667	Sand cast iron heel rest bend 100mm dia	each	175.00
672	1667A	PVC 110mm heel rest bend	each	114.00
673	1669	S.C.I single equal invert branch of required degree 75x75x75mm dia	each	212.00
674	1670	S.C.I single equal invert branch of required degree 100x100x100mm dia	each	545.00
675	1672	S.C.I double equal invert branch of required degree 75x75x75x75mm dia	each	897.00
676	1673	S.C.I double equal invert branch of required degree 100x100x100x100mm dia	each	300.00
677	1674	S.C.I single unequal invert branch of required degree 100x100x75mm dia	each	226.00
678	1677	S.C.I double unequal invert branch of required degree 100x100x75x75mm dia	each	330.00
679	1682	S.C.I. door pieces 75mm dia	each	290.40
680	1683	S.C.I. door pieces 100 mm dia	each	376.20
681	1685	S.C.I. collar 75mm dia	each	366.00
682	1686	S.C.I. collar 100mm dia	each	348.00
683	1687	Unplasticised P.V.C. connection pipe with brass union 30cm long 15mm bore	each	70.00
684	1688	Unplasticised P.V.C. connection pipe with brass union 30cm long 20mm bore	each	80.00
685	1689	Unplasticised P.V.C. connection pipe with brass union 45cm long 15mm bore	each	85.00
686	1690	Unplasticised P.V.C. connection pipe with brass union 45cm long 20mm bore	each	95.00
687	1693	S.C.I. hand pump	each	855.00
688	1700	R.C.C. pipes NP2 class 100mm dia	metre	260.00
689	1701	R.C.C. pipes NP2 class 150mm dia	metre	272.00
690	1702	R.C.C. pipes NP2 class 250mm dia	metre	442.00
691	1703	R.C.C. pipes NP2 class 300mm dia	metre	837.00
692	1704	R.C.C. pipes NP2 class 450mm dia	metre	955.00
693	1705	R.C.C. pipes NP2 class 500mm dia	metre	1175.00
694	1706	R.C.C. pipes NP2 class 600mm dia	metre	1386.00
695	1707	R.C.C. pipes NP2 class 700mm dia	metre	1893.00
696	1709	R.C.C. pipes NP2 class 800mm dia	metre	2301.00
697	1710	R.C.C. pipes NP2 class 900mm dia	metre	3219.00
698	1711	R.C.C. pipes NP2 class 1000mm dia	metre	3726.00
699	1712	R.C.C. pipes NP2 class 1100mm dia	metre	4104.00
700	1713	R.C.C. pipes NP2 class 1200mm dia	metre	4514.00
701	1714	R.C.C. collars NP2 class 100mm dia	each	45.00
702	1715	R.C.C. collars NP2 class 150mm dia	each	47.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
703	1716	R.C.C.collars NP2 class250mm dia	each	71.00
704	1717	R.C.C.collars NP2 class300mm dia	each	71.00
705	1718	R.C.C.collars NP2 class450mm dia	each	142.00
706	1719	R.C.C.collars NP2 class500mm dia	each	153.00
707	1720	R.C.C.collars NP2 class600mm dia	each	183.00
708	1721	R.C.C.collars NP2 class700mm dia	each	207.00
709	1723	R.C.C.collars NP2 class800mm dia	each	277.00
710	1724	R.C.C.collars NP2 class900mm dia	each	307.00
711	1725	R.C.C.collars NP2 class1000mm dia	each	366.00
712	1726	R.C.C.collars NP2 class1100mm dia	each	384.00
713	1727	R.C.C.collars NP2 class1200mm dia	each	466.00
714	1728	RCC pipe 450mm dia NP-3 spigot	metre	1410.00
715	1729	RCC pipe600mm dia NP-3 spigot	metre	1920.00
716	1730	RCC pipe900mm dia NP-3 spigot	metre	2810.00
717	1731	RCC pipe 1000mm dia NP-3 spigot	metre	3450.00
718	1732	RCC pipe1200mm dia NP-3 spigot	metre	4700.00
719	1733	RCC pipe1800mm dia NP-3 spigot	metre	8450.00
720	1734	RCC pipe450mm dia NP-4 spigot	metre	1730.00
721	1735	RCC pipe600mm dia NP-4 spigot	metre	2310.00
722	1736	RCC pipe900mm dia NP-4 spigot	metre	4150.00
723	1737	RCC pipe 1000mm dia NP-4 spigot	metre	5080.00
724	1738	RCC pipe 1200mm dia NP-4 spigot	metre	5900.00
725	1739	RCC pipe 1800mm dia NP-4 spigot	metre	13302.00
726	1854	Stoneware pipe grade A (60 cm long) - 100 mm dia	each	85.80
727	1855	Stoneware pipes grade A (60 cm long) - 150mm dia	each	136.40
728	1856	Stoneware pipes grade A (60 cm long) - 200mm dia	each	231.00
729	1857	Stoneware pipes grade A (60 cm long) - 230mm dia	each	290.40
730	1858	Stoneware pipes grade A (60 cm long) - 250mm dia	each	376.20
731	1859	Stoneware pipes grade A (60 cm long) - 300mm dia	each	410.30
732	1859P	Stoneware pipe - 300mm dia	each	410.30
733	1863	Fire clay kitchen sink : 600x450x250mm	each	1687.00
734	1871	White vitreous china laboratory sink 450x300x150mm	each	1400.30
735	1872	White vitreous china laboratory sink 600x450x200mm	each	2366.10
736	1875	White plastic seat (solid)with lid C.P.brass hinges and rubber buffers	each	575.30
737	1876	Black plastic seat (solid)with lid C.P.brass hinges and rubber buffers	each	541.20
738	1878	Shower rose C.P.brass for 15 to 20mm inlet 100mm dia	each	200.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
739	1879	Shower rose C.P.brass for 15 to 20mm inlet 150mm dia	each	400.00
740	1881	Spun yarn	kilogram	58.30
741	1882	Strainer brass 40mm dia 1.5metre long	each	570.90
742	1885	15mm C.P.brass tap	each	358.60
743	1889	C.P.brass toilet paper holder of standard size	each	264.00
744	1891	C.I.trap standard urinal-vent arm- operating & other couplings CP.brass 50mmdia	each	222.20
745	1893	C.I.trap standard urinal-vent arm- operating & other couplings CP.brass 80mmdia	each	305.80
746	1895	C.P.brass trap 40mm dia	each	256.30
747	1896	100mm S.C.I trap with vent heel	each	222.20
748	1897	100 mm S.C.I.trap with 100mm inlet and 100mm outlet	each	250.80
749	1898	100 mm S.C.I.trap with 100mm inlet and 75mm outlet	each	244.20
750	1900	S.W.gully trap P type 100x100mm	each	77.00
751	1901	S.W.Gully trap - P type 125 x 100 mm	each	91.30
752	1902	S.W.gully trap P type 150x100mm	each	104.50
753	1903	S.W.Gully trap - P type 180 x 100 mm	each	133.10
754	1904	S.W.gully trap P type 180x150mm	each	168.30
755	1913	Vitreous china lipped front urinal	each	610.00
756	1915	Vitreous china squatting plate urinal	each	1252.90
757	1922	H.P or L.P ball valve with polythene floats:15mm dia	each	253.00
758	1923	H.P or L.P ball valve with polythene floats:20mm dia	each	379.50
759	1924	H.P or L.P ball valve with polythene floats:25mm dia	each	455.40
760	1926	20mm dia gunmetal gate valve with wheel	each	566.50
761	1927	Brass full way valve with C.I.wheel (screwed end) 25mm dia	each	580.80
762	1928	Brass full way valve with C.I.wheel (screwed end) 32mm dia	each	632.50
763	1929	Brass full way valve with C.I.wheel (screwed end)40mm dia	each	822.80
764	1930	Brass full way valve with C.I.wheel (screwed end)50mm dia	each	915.00
765	1931	Brass full way valve with C.I.wheel (screwed end)65mm dia	each	1271.00
766	1932	Brass full way valve with C.I.wheel (screwed end)80mm dia	each	1814.00
767	1933	Gunmetal non-return valve - horizontal (screwed end) 25mm dia	each	400.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
768	1934	Gunmetal non-return valve - horizontal (screwed end) 32mm dia	each	510.00
769	1935	Gunmetal non-return valve - horizontal (screwed end) 40 mm dia	each	711.00
770	1936	Gunmetal non-return valve - horizontal (screwed end) 50 mm dia	each	1043.00
771	1937	Gunmetal non-return valve - horizontal (screwed end) 65 mm dia	each	1579.00
772	1938	Gunmetal non-return valve - horizontal (screwed end) 80 mm dia	each	2466.00
773	1940	C.I.sluiice valve (with caps) class I: 100mm dia	each	2712.00
774	1941	C.I.sluiice valve (with caps) class I: 125mm dia	each	3263.00
775	1942	C.I.sluiice valve (with caps) class I: 150mm dia	each	3915.00
776	1943	C.I.sluiice valve (with caps) class I: 200mm dia	each	5593.00
777	1944	C.I.sluiice valve (with caps) class I: 250mm dia	each	8898.00
778	1945	C.I.sluiice valve (with caps) class I: 300mm dia	each	10935.00
779	1947	Vitreous china flat back wash basin 630x450mm	each	1850.00
780	1949	Vitreous china angle back wash basin 600x480mm	each	1850.00
781	1950	Vitreous china angle back wash basin 400x400 mm	each	1350.00
782	1951	C.P.brass waste 32 mm	each	70.00
783	1952	C.P.brass waste 40 mm	each	95.00
784	1953	Vitreous china Indian type W.C.pan size 580mm	each	950.00
785	1954	Vitreous china orissa type W.C.pan size 580mm	each	1190.00
786	1955	Vitreous china pedestal type water closet	each	1350.00
787	1956	Bolts and nuts 16mm dia 60mm long	each	45.00
788	1957	Bolts and nuts 16mm dia 65mm long	each	50.00
789	1958	Bolts and nuts 20mm dia 65mm long	each	80.00
790	1959	Bolts and nuts 20mm dia 70mm long	each	83.00
791	1960	Bolts and nuts 20mm dia 75mm long	each	87.00
792	1961	Bolts and nuts 20mm dia 80mm long	each	90.00
793	1962	Bolts and nuts 24mm dia 85mm long	each	95.00
794	1963	Bolts and nuts 24mm dia 90mm long	each	150.00
795	1964	Bolts and nuts 27mm dia 100mm long	each	155.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
796	1965	White vitreous china dual purpose closet(Anglo Indian W.C) suitable for use a squatting pan or european type water closet	each	1000.00
797	1966	Floor mounted white vitreous china double trap syphonic WC with 10 litre cistern and all fittings & fixtures ,seat cover etc	each	9500.00
798	1970	Vitreous china foot rests 250x125x25mm	pair	91.00
799	1980	Fly ash	cum	632.50
800	1984	Common burnt clay F.P.S.bricks tile class designation 10	1000 nos	5605.00
801	1986	Common burnt clay modular bricks tile class designation 12.5	1000 nos	6431.00
802	2391	Strips -Aluminium fluted 3.15mm thick and 150mm wide	metre	338.00
803	2392	Strips -Aluminium fluted 3.15mm thick and 200mm wide	metre	418.00
804	2393	1 mm thick Stainless steel cover plate grade 304	kg	361.00
805	2394	Coupler 16mm dia	each	67.00
806	2395	Coupler 20mm dia	each	88.00
807	2396	Coupler 25mm dia	each	130.00
808	2397	Coupler 28mm dia	each	192.00
809	2398	Coupler 32mm dia	each	231.00
810	2399	Complete roof joint of 100mm	metre	3539.00
811	2400	Complete roof joint of 150mm	metre	4084.00
812	2401	Complete roof joint of 200mm	metre	5055.00
813	2402	Epoxy adhesive	kg	189.00
814	2403	Floor joint of 100mm	metre	3876.00
815	2404	Floor joint of 150mm	metre	5007.00
816	2405	Floor joint of 200mm	metre	6695.00
817	2406	Float glass sheet of nominal thickness 4mm (weight not less than 10kg/sqm)	sqm	430.00
818	2407	Float glass sheet of nominal thickness 5.5mm (weight not less than 13.5kg/sqm)	sqm	570.00
819	2407A	Float glass sheet of nominal thickness 6.0 mm thick	sqm	650.00
820	2408	Float glass sheet of nominal thickness 8mm (weight not less than 20 kg/sqm)	sqm	1000.00
821	2409	Wall joint of 100 mm	metre	2975.00
822	2410	Wall joint of 150 mm	metre	3488.00
823	2411	Wall joint of 200 mm	metre	4194.00
824	2412	Ply wood 5 ply with commercial ply on both faces 6mm thick	sqm	378.00
825	2413	12mm commercial ply	sqm	622.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
826	2414	18mm thick block board with commercial ply veneering on both side	sqm	887.00
827	2415	21mm thick clear toughened laminated glass for fins with holes	sqm	7366.00
828	2447	Hollock ballies 125 mm diameter	metre	44.00
829	2449	Oxidised ms pull bolt lock of size 85mmx42mm - screws,bolts,nuts,& washers compl	each	41.00
830	2449R	Powder coating pull bolt lock (locking bolt) of size 85 mm x 42 mm	each	53.00
831	2451	Brass cupboard lock 6 levers of approved quality,40mm size	each	75.00
832	2452	Brass cupboard lock 6 levers of approved quality,50mm size	each	90.00
833	2453	Brass cupboard lock 6 levers of approved quality,65mm size	each	100.00
834	2454	Brass cupboard lock 6 levers of approved quality,75mm size	each	120.00
835	2455	Brass hanging type door stopper 150mm	each	80.00
836	2456	Hydraulic door closer bottle type MS body - necessary accessories & screws comple	each	1100.00
837	2459	Anodised aluminium hanging type door stopper	each	50.00
838	2464	Anodised aluminium pull bolt lock-size 85x42mm with screws,bolts,nuts,&washers	each	60.00
839	2465	Anodised aluminium casement stay -250mm	each	70.00
840	2467	Chromium plated brass pull bolt lock -85x42mm - screws,bolts,nuts,& washers compl	each	200.00
841	2468	Nickled chromium brass cupboard lock 40mm size	each	70.00
842	2469	Nickled chromium brass cupboard lock 50mm size	each	85.00
843	2470	Nickled chromium brass cupboard lock65mm size	each	100.00
844	2471	Nickled chromium brass cupboard lock75mm size	each	120.00
845	2480	Ply wood 5 ply with teak ply on both faces 9mm thick	sqm	1347.00
846	2481	Ply wood 5 ply with teak ply on one face & commercial ply on another face 9mm tk	sqm	1200.00
847	2483	Ply wood 7 ply with teak ply on one face & commercial ply on another face 9mm tk	sqm	1300.00
848	2484	Pre-laminated -decorative lamination on both side exterior gr-I MDF board 12mm t	sqm	1035.50

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
849	2485	Pre-laminated -decorative lamination on both side exterior gr-I MDF board 18mm t	sqm	1260.00
850	2486	Pre-laminated -decorative lamination one side,other side balancing lamination 25	sqm	1560.00
851	2487	Pre-laminated -decorative lamination one side,other side balancing lamination12	sqm	870.00
852	2488	Pre-laminated -decorative lamination one side,other side balancing lamination18	sqm	1135.00
853	2489	PVC edge bending tape 2.00mm thick	metre	40.00
854	2491	Pre laminated both side solid foam uPVC profile (45x20mm)	metre	175.00
855	2492	Solid foam uPVC sheet 20mm thick pre laminated on both side	sqm	3000.00
856	2493	PVC edge beading	metre	54.00
857	2494	Expandable fastner with plastic sleeve	each	9.10
858	2504	Kiln seasoning of timber	cum	1010.00
859	2506	Carben Steel galvanised (min 5 micron) dash fastner (min 5 micron) of 10mm dia double threaded 6.8 grade counter sunk head screw comprising of 10mm dia polyamide PA 6 grade sleeve .Size 10mm x 60 mm	10 nos	350.00
860	2507	Carben Steel galvanised (min 5 micron) dash fastner (min 5 micron) of 10mm dia double threaded 6.8 grade counter sunk head screw comprising of 10mm dia polyamide PA 6 grade sleeve .Size 10mmX80mm	10 nos	410.00
861	2508	Carben Steel galvanised (min 5 micron) dash fastner (min 5 micron) of 10mm dia double threaded 6.8 grade counter sunk head screw comprising of 10mm dia polyamide PA 6 grade sleeve .Size 10mmX120mm	10 nos	490.00
862	2509	Carben Steel galvanised (min 5 micron) dash fastner (min 5 micron) of 10mm dia double threaded 6.8 grade counter sunk head screw comprising of 10mm dia polyamide PA 6 grade sleeve .Size 10mmX140mm	10 nos	645.00
863	2510	Carben Steel galvanised (min 5 micron) dash fastner (min 5 micron) of 10mm dia double threaded 6.8 grade counter sunk head screw comprising of 10mm dia polyamide PA 6 grade sleeve .Size 10mmX160mm	10 nos	770.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
864	2602	Common burnt clay F.P.S (non modular) bricks class designation 3.5	1000 nos	6334.50
865	2603	Common burnt clay F.P.S (non modular) bricks class designation 5.0	1000 nos	5400.00
866	2605	Structural sealent -6mm x12mm	metre	58.00
867	2606	Spacer tape 6.4mm tkx6mm wide	metre	27.00
868	2607	Weather sealent -non staining (600ml)	each	610.00
869	2608	Weather sealent -normal (300ml)	each	212.00
870	2609	MS Brackets/Aluminium alloy brackets	kg	134.00
871	2610	Silicon gasket in kg (above 50g/m)	kg	786.00
872	2611	EPDM gasket in kg (above 60g/m)	kg	230.00
873	2612	Anchor fastner -M10	each	142.00
874	2613	SS Bolt with washer of different sizes for structural glazing / ACP cladding	each	47.50
875	2614	SS screws of sizes for structural glazing/ACP cladding	each	7.00
876	2615	Protective tape	metre	34.00
877	2616	GI flashing -1.2mm thick	kg	82.00
878	2617	6mm thick high performance glass	sqm	2400.00
879	2618	6mm thick clear heat strengthened glass	sqm	970.00
880	2619	6mm thick clear heat strengthened glass	each	190.00
881	2620	ARMS GS HD -TOP HUNG -20"-TYPE P-COUPLE	pair	2010.00
882	2621	Connection block for vision glass panel	each	50.50
883	2622	Curtain wall striker for vision glass panel	each	134.00
884	2623	Adjustable fastening pawl for vision glass pane	each	50.00
885	2624	Corner drive for vision glass pane	each	370.00
886	2625	Top wedge block for vision glass pane	each	167.00
887	2626	Glass wool density 48kg /cum -Black glass tissue (BGT)	sqm	340.00
888	2627	SS Screws - # 8x19	each	12.50
889	2628	Weather sealent -DC 789	cartridge	180.50
890	2629	Cement board	sqm	321.00
891	2630	Baker rod	metre	7.50
892	2631	4 mm thick ACP	sqm	1500.00
893	2632	Fire Stop	metre	720.00
894	2634	GI/Aluminium Sheet (0.8mm thick)	kg	89.00
895	2635	GI screws of gauge 10, length 25 mm for fixing cement fibre board to C section	each	4.10
896	2636	GI screws of gauge 10, length 45 mm for fixing cement fibre board to C section	each	4.20
897	2637	Vapour barrier	sqm	298.00
898	2704	Aluminium strip 40mm wide and 2mm thick	kilogram	325.00
899	2708	Truf Paver (500x500x40mm)	sqm	1410.00
900	2709	Ceramic tiles pieces for crazy flooring	quintal	200.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
901	2710	White marble makrana second quality plain veined stone pieces for crazy flooring	quintal	210.00
902	2711	FS800H grade flooring panel (size 600x600x32mm)	each	1005.00
903	2711A	PVC sheets polyvinyl choloride sheet 1.5mm tk	sqm	481.00
904	2712	Zinc electroplated pedestals -300mm	each	198.50
905	2712A	PVC sheets polyvinyl choloride sheet 2.0 mm tk	sqm	551.00
906	2713	Zinc electroplated pedestals -450mm	each	270.00
907	2714	Zinc electroplated tube stinger	each	90.50
908	2715	Machine screws for fixing	each	4.00
909	2717A	PVC sheets polyvinyl choloride tiles 1.5mm tk	sqm	400.00
910	2718A	PVC sheets Polyviny chloride tiles 2 mm thick	sqm	420.00
911	2723	Adhesive (rubber base)	kg	230.00
912	2736A	Rubber sheet 3.2 mm thick	sqm	250.00
913	2750	8mm thick granite stone tiles (mirror polished of all shades)	sqm	946.00
914	2751	8mm thick marble tiles (polished) Raj nagar	sqm	528.00
915	2911	Stone chippings /screenings 10/11.2mm nominal size	cum	1980.00
916	2914	Solvent	kg	50.00
917	2914A	Adhesive solvent cement	litre	193.00
918	3002	Polyvinyle chloride sheet 400 micron thick	sqm	67.00
919	3004	Stone ware spouts 100mm dia 60cm long	each	57.00
920	3050	GS corrugated sheets	quintal	6160.00
921	3080	Gunmetal non - return valve -vertical (screwed end) 25mm dia	each	330.00
922	3084	Gunmetal non - return valve -vertical (screwed end) 32mm dia	each	453.00
923	3088	Gunmetal non - return valve -vertical (screwed end) 40mm dia	each	564.00
924	3092	Gunmetal non - return valve -vertical (screwed end) 50mm dia	each	870.00
925	3096	Gunmetal non - return valve -vertical (screwed end)65mm dia	each	1348.00
926	3213	Vitreous china surgeon type wash basin of size 660x460mm	each	1461.00
927	3228	600x120mm glass shelf-anodised al-angle fr ,C.P.brass brackets & guard rail of s	each	111.00
928	3229	Vitreous china flat back wash basin 550x400mm	each	939.00
929	3300	Gunmetal non-return valve -vertical (screwed end) 80mm dia	each	1812.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
930	3311	C.I.sluiice valve (with caps) class II:100mm dia	each	4175.00
931	3314	C.I.sluiice valve (with caps) class II:125mm dia	each	4400.00
932	3317	C.I.sluiice valve (with caps) class II:150mm dia	each	5984.00
933	3320	C.I.sluiice valve (with caps) class II:200mm dia	each	8489.00
934	3321	C.I.sluiice valve (with caps) class II:250mm dia	each	11689.00
935	3326	C.I.sluiice valve (with caps) class II:300mm dia	each	14333.00
936	3327	15mm Battery based sensor pillar cock	each	7800.00
937	3617	C.P.brass union 40mm dia	each	128.00
938	3620	C.C.I. (spun) socketed soil,waste& vent pipe 1.80metres long:100mm dia	each	1361.00
939	3621	C.C.I. (spun) socketed soil,waste& vent pipe 1.80metres long:75mm dia	each	1178.00
940	3624	S.C.I. S&S bends with access door 100mm dia	each	314.00
941	3625	S.C.I. S&S bends with access door 75mm dia	each	250.00
942	3628	S.C.I. S&S bend 100 mm dia	each	264.00
943	3629	S.C.I. S&S bend 75 mm dia	each	199.00
944	3634	S.C.I S&S heel rest sanitary bend 100mm dia	each	323.00
945	3635	S.C.I S&S heel rest sanitary bend 75mm dia	each	284.00
946	3640	S.C.I. S&S single equal junctions 100x100x100mm	each	512.00
947	3641	S.C.I. S&S single equal junctions 75x75x75mm	each	385.00
948	3644	S.C.I. S&S single equal junctions with access door 100x100x100mm	each	551.00
949	3645	S.C.I. S&S single equal junctions with access door 75x75x75mm	each	408.00
950	3650	S.C.I. S&S double equal junctions - 100x100x100x100mm	each	650.00
951	3651	S.C.I. S&S double equal junctions - 75x75x75x75mm	each	519.00
952	3654	S.C.I. S&S double equal junctions with access door 100x100x100x100mm	each	699.00
953	3655	S.C.I. S&Sdouble equal junctions with access door 75x75x75x75mm	each	557.00
954	3660	S.C.I. S&S single unequal junctions 100x100x75mm	each	641.00
955	3664	S.C.I. S&S single unequal junctions with access door 100x100x75mm	each	727.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
956	3670	S.C.I. S&S double unequal junctions 100x100x75x75mm	each	889.00
957	3674	S.C.I.S&S double unequal junctions with access door 100x100x75x75mm	each	975.00
958	3681	S.C.I. S&S single equal invert branch of required degree 100x100x100mm dia	each	462.00
959	3682	S.C.I. S&S single equal invert branch of required degree 75x75x75mm dia	each	344.00
960	3685	S.C.I. S&S double equal invert branch of required degree 100x100x100 x100mmdia	each	575.00
961	3686	S.C.I. S&S double equal invert branch of required degree 75x75x75x75mm dia	each	464.00
962	3690	S.C.I. S&S single unequal invert branch of required degree 100x100x x75mmdia	each	587.00
963	3695	S.C.I. S&S double unequal invert branch of required degree 100x100x x75x75mmdia	each	799.00
964	3699	S.C.I.S&S 75mm offset for 75mm dia pipe	each	250.00
965	3707	S.C.I .S&S150mm offset for 75mm dia pipe	each	310.00
966	3708	S.C.I.S&S , 150 mm offset for100mm dia pipe	each	427.00
967	3712	S.C.I.S&S,114 mm offset for 75mm dia pipe	each	306.00
968	3713	S.C.I.S&S,114 mm offset for100mm dia pipe	each	403.00
969	3716	S.C.I. S&S,152 mm offset for 75mm dia pipe	each	383.00
970	3717	S.C.I.S&S,152mm offset for 100mm dia pipe	each	503.00
971	3728	S.C.I.S&S,door pieces 100 mm dia	each	320.00
972	3729	S.C.I.S&S,door pieces 75 mm dia	each	425.00
973	3733	S.C.I.S&S ,Slotted cowl (terminal guard) 100mm	each	213.00
974	3734	S.C.I.S&S,Slotted cowl(terminal guard) 75mm	each	197.00
975	3738	S.C.I .S&S ,collars 100mm	each	224.00
976	3739	S.C.I .S&S ,collars 75mm	each	161.00
977	3746	S.C.I. S&S , 75mm offset for 75mm dia pipe	each	176.00
978	3747	S.C.I. S&S , 75mm offset for 100mm dia pipe	each	310.00
979	3749	Vitreous china toilet paper holder of standard size	each	188.00
980	3803P	Stoneware pipe - 375mm dia	each	960.00
981	3860	560mm dia cover with frame (heavy duty)	each	4036.00
982	3861	560mm dia cover without frame (heavy duty)	each	2366.00
983	4001	Stainless steel (grade-304) hollow section round/square tubes	kg	330.00
984	4002	Stainless steel bolts / square bar and plates	kg	222.00
985	4006	Pressed steel door frames (mild steel sheet 1.60 mm) profile "B"	metre	251.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
986	4007	Pressed steel door frames (mild steel sheet 1.60 mm) profile "C"	metre	272.00
987	4008	Pressed steel door frames (mild steel sheet 1.60 mm) profile "E"	metre	320.00
988	4009	Mild steel tubes hot finished welded type	kilogram	89.00
989	4010	Mild steel tubes hot finished seamless type	kilogram	95.00
990	4011	Mild steel tubes electric resistant or induction butt welded	kilogram	95.00
991	4012	Circular C.I. Box for ceiling fan internal dia 140mm ,73mm height, toplid of 1.5mm thick M.S sheet	each	69.00
992	4013	Pulley 40mm dia	each	35.00
993	4201	Aluminium primer	litre	171.00
994	4202	Red oxide zinc chromate primer	litre	205.00
995	4203	copper acetate	kilogram	276.00
996	4204	Hydrochloric acid	kilogram	45.00
997	4204A	Concentrated hydrochloric acid	litre	140.00
998	4205	copper chloride	kilogram	305.00
999	4206	copper nitrate	kilogram	268.00
1000	4207	Ammonium chloride	kilogram	15.00
1001	5001	Mobil oil	litre	342.00
1002	5050	SS pipe 304 grades with press fit technology as per JIS 3448 standard 48.60 mm outer dia	metre	875.00
1003	6001	White marble slab Makrana second quality plain veined 18mm thick	sqm	1810.00
1004	6007	Pink marble slab plain 18 mm thick	sqm	870.00
1005	6010	Udaypur green marble slab plain 18mm thick	sqm	960.00
1006	6019	Black zebra marble slab plain 18mm thick	sqm	575.00
1007	6501	Sand zone (V)	cum	4428.00
1008	7001	Brass 100mm mortice latch and lock with 6 levers without pair of handles	each	444.00
1009	7001A	PVC switch lock of 100mm length	no	77.00
1010	7001B	Aluminium handle with lock of 75mm dia	no	111.00
1011	7003	Pair of anodised aluminium lever handles for 100mm mortice latch and lock	each	278.00
1012	7004	Vitreous china flat back wash basin 450x300mm	each	650.00
1013	7005	Vitreous china 10 litres low level cistern without fittings	each	1210.00
1014	7006	Vitreous china 10 litres low level cistern with fittings	each	1660.50
1015	7008	F.P.S.(non modular) clay fly ash bricks class designation 7.5	1000 nos	4175.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1016	7009	12.5mm thick tapered edge gypsum plain board	sqm	342.00
1017	7010	Galvanised steel ceiling section (size 80x26x0.50mm)	metre	62.00
1018	7011	Galvanised steel perimeter channel (size 20x27x30x0.5mm)	metre	36.50
1019	7012	Galvanised Steel intermediate channel (size 15x45x15x0.90mm)	metre	55.00
1020	7013	Galvanised Steel angle hanger (ceiling angle) (size 25x10x0.50mm)	metre	25.00
1021	7014	Galvanised Steel connecting clips (2.64 mm dia and 230 mm long GI wire)	each	8.50
1022	7015	Galvanised steel soffit cleat (size 27x37x25x0.60mm)	each	4.50
1023	7016	Joint filler	kilogram	35.00
1024	7017	Joint finisher	kilogram	35.00
1025	7018	Joint tape roll	roll	167.00
1026	7019	Dash fastener / chemical fastener	each	17.00
1027	7020	All drive screws (for gypsum board)	100 nos	84.00
1028	7021	Primer (for gypsum board)	litre	145.00
1029	7022	Chlorpyrifos 20% E.C / Lindane 20% E.C.	litre	273.00
1030	7023	Chromium plated brackets (curtain rods)	each	12.00
1031	7024	Acid proof cement	tonne	10500.00
1032	7025	Self tapping pan head nickel coated mild steel screws of size 13 x 3.2mm	1000nos	710.00
1033	7025A	Secondary Reinforcement fibre	kg	475.00
1034	7026	Fibre joint tape 50 mm wide (90 metre) roll	per roll	225.00
1035	7027	M.S.Butt hinges 125x90x4 mm	10 nos	146.00
1036	7028	12.5mm thick fully perforated gypsum board	sqm	1198.00
1037	7029	Galvanised wire mesh average width of aperture 1.4mm & nominal dia wire 0.63mm	sqm	335.00
1038	7030	12.5mm tk tapered edge gypsum fire resistant board	sqm	330.00
1039	7031	12.5mm tk tapered edge gypsum moisture resistant board	sqm	370.00
1040	7032	Frosted glass sheet of nominal thickness 4mm (weighing not less than 10kg/sqm)	sqm	620.00
1041	7033	Nickel plated M.S.pipe 25 mm dia	metre	104.00
1042	7034	Nickel plated M.S.pipe 20 mm dia	metre	97.00
1043	7035	Nickel plated M.S.brackets for curtain rod 20mm	each	9.50
1044	7036	Nickel plated M.S.brackets for curtain rod 25mm	each	12.00
1045	7040	Oxidised mild steel screws 35mm	100 nos	67.00
1046	7040R	Powder coating screws 35 mm	100 nos	91.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1047	7042	Mild steel conduit pipe (heavy type) ISI marked - 20mm dia	metre	80.00
1048	7043	Mild steel conduit pipe (heavy type) ISI marked - 25mm dia	metre	91.00
1049	7044	Rolling shutters of 80x0.90mm laths	sqm	1750.00
1050	7045	Rolling shutters of 80x1.20mm laths	sqm	1850.00
1051	7046	Top cover of rolling shutters 0.90 mm thick	metre	620.00
1052	7047	Top cover of rolling shutters 1.20 mm thick	metre	750.00
1053	7048	Rawl plug 50mm (designation 10 nos)	each	18.00
1054	7049	Teak wood lipping of size 25x3mm in pelmets	metre	28.50
1055	7050	PU primer	sqm	70.00
1056	7051	40 mm (average) PU spray having 40-45 kg/cum density	sqm	565.00
1057	7052	GI wire netting 3/4" x 24 G	sqm	36.00
1058	7053	400 G polythene sheet	sqm	21.00
1059	7055	Flat pressed 3 layer & graded particle board (medium density) grade 1 conforming	sqm	645.00
1060	7056	Aluminium tee channel (heavy duty) with rollers and stop end	metre	135.00
1061	7059	Aluminium hanging floor door stopper with twin rubber & stopper	each	84.00
1062	7060	Hydraulic door closer tubular type aluminium section body	each	1080.00
1063	7063	Oxidised M.S. casement stay (straight peg type) 300 mm not less than 0.33kg	each	50.00
1064	7063R	Powder coating casement stay (straight peg type) 300 mm not less than 0.33kg)	each	33.00
1065	7064	Oxidised M.S. casement stay (straight peg type) 250 mm not less than 0.28kg	each	23.00
1066	7064R	Powder coating casement stay (straight peg type) 250 mm not less than 0.28kg)	each	42.00
1067	7065	Oxidised M.S. casement stay (straight peg type) 200 mm not less than 0.24kg	each	18.00
1068	7065R	Powder coating casement stay (straight peg type) 200 mm not less than 0.24kg)	each	58.00
1069	7068	Extra for providing grided rolling shutters with 8mm dia M.S. rod	sqm	418.00
1070	7070	Chequered PCC tiles 22 mm tk marble chips of size 6mm -light shade white cement	sqm	579.00
1071	7071	White marble Raj nagar Plain 18mm thick upto 0.50 sqm area	sqm	820.00
1072	7072	Wall mounted water closet size 780x370x690mm	each	7941.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1073	7073	Adjustable vitreous china cistern with fittings of flushing capacity 3litre /6litre 9 adjustable to 4 litre /8 litre	each	3300.00
1074	7074	White vitreous china waterless urinal of size 600x330x315mm	each	19580.00
1075	7075	Cistern with fittings for waterless urinal	each	4200.00
1076	7076	Battery based infrared sensor operated white vitreous urinal of aprox.size 610x390x370mm	each	8850.00
1077	7077	Acid and alkali resistant tiles 300x300 mm size,10mm thick	10 nos	688.00
1078	7087	S.C.I. Tee 150mm	each	634.00
1079	7090	Expanded polystyrene type N-normal 50mm thick	sqm	140.00
1080	7091	Expanded polystyrene type -SE 50mm thick	sqm	188.00
1081	7095	Stainless steel kitchen sink - with drain board bowl depth 250mm	each	5500.00
1082	7096	Stainless steel kitchen sink - with drain board510 x 1040 mm bowl depth 225mm	each	5445.00
1083	7097	Stainless steel kitchen sink - with drain board510 x 1040 mm bowl depth 200mm	each	4650.00
1084	7098	Stainless steel kitchen sink - with drain board510 x 1040 mm bowl depth 178mm	each	3520.00
1085	7101	Stainless steel kitchen sink - without drain board 610x510mm bowl depth 200mm	each	2200.00
1086	7102	Stainless steel kitchen sink - without drain board 610x460mm bowl depth 200mm	each	1980.00
1087	7103	Stainless steel kitchen sink - without drain board470x420mm bowl depth 178mm	each	1760.00
1088	7104	Coloured Orissa pattern W.C.pan 580x440mm	each	1760.00
1089	7105	Coloured pedestal type W.C.pan 580x440mm (European type)	each	1700.00
1090	7106	Coloured vitreous china 10lit .low level cistern	each	3080.00
1091	7107	Coloured (other than black) solid P.V.C.seat in European W.C.pan	each	500.00
1092	7112	Circular shape 450mm dia mirror with plastic moulded frame	each	590.00
1093	7113	Rectangular shape 453x357 mm mirror with plastic moulded frame	each	390.00
1094	7114	Oval shape 450x350mm (outer dimensions) mirror with plastic moulded frame	each	580.00
1095	7115	Rectangular shape 1500x450mm mirror with plastic moulded frame	each	960.00
1096	7116	Hard board 6mm thick	sqm	160.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1097	7117	Semi rigid PVC waste pipe for sink & wash basin 32 mm dia - length not less than 700mm i/c PVC waste fittings	each	28.00
1098	7118	Semi rigid PVC waste pipe for sink & wash basin 40 mm dia - length not less than 700mm i/c PVC waste fittings	each	33.00
1099	7119	Flexible (coil shaped) PVC waste for sink & wash basin 32mm dia - length not less than 700mm i/c PVC waste fittings	each	33.00
1100	7120	Flexible (coil shaped) PVC waste for sink & wash basin 40mm dia - length not less than 700mm i/c PVC fittings	each	33.00
1101	7123	Coloured high density polythylene / polypropylene 10 lit (full flush) capacity controlled low level flusing cistern with fittings	each	979.00
1102	7126	White vitreous china 10 litre (full flush) capacity controlled low level flusing cistern with all fittings	each	1695.00
1103	7127	Coloured vitreous china 10 litre (full flush) capacity controlled low level flusing cistern with all fittings	each	2542.00
1104	7128	S.W.intercepting trap 100mm dia	each	170.00
1105	7129	S.W.intercepting trap 150mm dia	each	230.00
1106	7130	Rectangular shape 600x450mm precast RCC manhole cover with frame - LD-25	each	960.00
1107	7131	Square shape 450x450mm precast RCC manhole cover with frame -LD-25	each	965.00
1108	7132	Circular shape 450mm dia precast RCC manhole cover with frame -LD-25	each	810.00
1109	7133	Rectangualr shape 500x500mm precast RCC manhole cover with frame -M.D.10	each	910.00
1110	7134	Circular shape 500mm dia precast RCC manhole cover with frame -M.D-10	each	870.00
1111	7135	Circular shape 560mm dia precast RCC manhole cover with frame -H.D-20	each	1430.00
1112	7136	Circular shape 560mm dia precast RCC manhole cover with frame -E.H.D-35	each	1580.00
1113	7137	Factory made 35mm thick shutters with laminated veneer lumber styles & rails as per TADS 15:1995 and panels of 12mm thick plain type-I, medium density flat pressed three layer , graded particle board (FPT-I) as per IS:3087 bonded with BWP type synthetic resin adhesive, as per IS:848	sqm	2300.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1114	7139	Factory made 35mm thick shutters with laminated veneer lumber styles & rails as per TADS 15:1995 and panels of 12mm thick both sides prelaminated type-I, medium density flat pressed three layer , graded particle board (FPT-I) as per IS:3087 bonded with BWP type synthetic resin adhesive, as per IS:848	sqm	2650.00
1115	7143	Factory made 35mm thick shutters with laminated veneer lumber styles & rails as per TADS 15:1995 and panels of 12mm thick one side prelaminated type-I, and other side balancing lamination , medium density flat pressed three layer , graded particle board (FPT-I) as per IS:3087 bonded with BWP type synthetic resin adhesive, as per IS:848	sqm	2562.50
1116	7151	Factory made 30mm thick shutters with laminated veneer lumber styles & rails as per TADS 15:1995 and panels of sheet glass using 10kg / sqm glass panes.	sqm	2170.00
1117	7154	Factory made 35mm thick shutters with laminated veneer lumber styles & rails as per TADS 15:1995 and panels of galvanised wire gauge with average width of aperture 1.4mm in both directiopns with wire of dia 0.63mm.	sqm	2204.00
1118	7155	Factory made 30mm thick shutters with laminated veneer lumber styles & rails as per TADS 15:1995 and panels of galvanised wire gauge with average width of aperture 1.4mm in both directiopns with wire of dia 0.63mm.	sqm	1950.00
1119	7157	Laminated veneer lumber confirming to TADS 15 : 1995 manufactured in factory in frames of doors , windows	cum	880.00
1120	7178	Chemical ASTM C-type 1	kg	150.00
1121	7181	C.I.pile shoe	kilogram	59.00
1122	7182	M.S.clamps for pile shoe of 35 kg per pile	kilogram	53.00
1123	7183	Bentonite of 35 kg per pile	tonne	5300.00
1124	7184	Oxidised M.S.safety chain (weighing not less than 450 gms) for door	each	45.00
1125	7184R	Powder coating safety chain (weighing not less than 450 gms) for door	each	81.00
1126	7187	C.I.grating 150mm dia ,weighing not less than 440 gm	each	25.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1127	7188	UPVC pipes (working pressure 4kg/sq.cm) single sockketed pipe 75mm dia	metre	154.00
1128	7188A	UPVC pipes single socketed pipe 75 mm dia - (working pressure 6kg / sq.cm)	metre	207.00
1129	7189	UPVC pipes (working pressure 4kg/sq.cm) single sockketed pipe 110mm dia	metre	286.00
1130	7189A	UPVC pipes single socketed pipe 110mm dia -(working pressure 6kg / sq.cm)	metre	341.00
1131	7190	UPVC pipes (working pressure 4kg/sq.cm) rubber (seal) ring 75mm dia	each	15.00
1132	7190A	U-PVC pipes (working pressure 6kg /sq.cm) Rubber (Seal)ring 75mm dia	metre	29.00
1133	7191	UPVC pipes (working pressure 4kg/sq.cm) rubber (seal) ring 110mm dia	each	22.00
1134	7191A	U-PVC pipes (working pressure 6kg / sq.cm) rubber (seal) ring 110mm dia	metre	33.00
1135	7192	UPVC coupler for UPVC drainage pipes 75mm	each	61.00
1136	7193	UPVC coupler for UPVC drainage pipes 110mm	each	88.00
1137	7194	UPVC pushfit coupler (single) 75mm thick	each	61.00
1138	7195	UPVC pushfit coupler (single) 110mm thick	each	112.00
1139	7196	UPVC single equal tee (without door) 75x75x75mm	each	97.00
1140	7197	UPVC single equal tee (without door) 110x110x110mm	each	187.00
1141	7198	UPVC single equal tee (with door) 75x75x75mm	each	120.00
1142	7199	UPVC single equal tee (with door) 110x110x110mm	each	212.00
1143	7208	UPVC bend 87.5 degree 75mm bend	each	83.00
1144	7209	UPVC bend 87.5 degree 110mm bend	each	112.00
1145	7212	UPVC plain shoe 75mm bend	each	168.00
1146	7213	UPVC plain shoe 110mm bend	each	307.00
1147	7214	UPVC pipe clip 75mm bend	each	19.00
1148	7215	UPVC pipe clip 110mm bend	each	48.00
1149	7218	UPVC bend with door 50mm	each	133.00
1150	7231	Resin bonded glass wool 16kg/cum ; 50mm thick	sqm	158.00
1151	7231A	P/A - FIBRE REINFORCED ACRYLIC PLASTER- for roof	sqm	637.00
1152	7231B	P/A - FIBRE REINFORCED ACRYLIC PLASTER- for parapet wall	sqm	487.00
1153	7231C	Chipping ,rackout damaged tile joints & fill with C:M 1:4 admixed- SBR	Rmt	77.00
1154	7231D	Laying one layer of P3180,3mm thick	sqm	694.00
1155	7231E	Applying Solar reflective aluminium paint	sqm	78.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1156	7232	Resin bonded glass wool 24kg/cum ; 50mm thick	sqm	227.00
1157	7233	Fibre glass tissue reinforcement type II grade I	sqm	77.00
1158	7238	High albedo paint	kg	320.00
1159	7239	Epoxy paint	litre	361.00
1160	7240	Fire retardant paint	litre	350.00
1161	7241	Melamine polish	litre	392.00
1162	7244	Table rubbed polished stone 18mm thick (75x50cm) Agaria marble stone -18mm thick	sqm	1139.00
1163	7245	Table rubbed polished stone 18mm thick (75x50cm) Granite stone -18mm thick	sqm	2214.00
1164	7246	Vertical load testing (initial) of piles in accordance with IS :2911 (Part -IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc.complete as per specification and upto 50 tonne capacity pile	per test	24668.00
1165	7247	Vertical load testing (initial) of piles in accordance with IS :2911 (Part -IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc.complete as per specification & above 50 tonne and up to 100 tonne capacity pile	per test	34788.00
1166	7248	Vertical load testing (initial) of piles in accordance with IS :2911 (Part -IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc.complete as per specification & group of two or more up to 50 tonne	per test	47438.00
1167	7249	Cyclic vertical load testing of piles in accordance with IS :2911 (Part -IV) including preparation of pile head etc. for Single pile upto 50 tonne capacity	per test	14548.00
1168	7250	Cyclic vertical load testing of piles in accordance with IS :2911 (Part -IV) including preparation of pile head etc. for Single pile above 50 tonne capacity pile and upto 100 tonne capacity pile.	per test	22770.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1169	7251	Cyclic vertical load testing of piles in accordance with IS :2911 (Part -IV) including preparation of pile head etc. for group of two piles upto 50 tonne capacity pile	per test	29095.00
1170	7252	Lateral load testing of single pile in accordance with IS :2911 part - IV for determining safe allowable lateral load on pile upto 50 tonne capacity	per test	14548.00
1171	7253	Lateral load testing of single pile in accordance with IS :2911 part - IV for determining safe allowable lateral load on pile above 50 tonne capacity	per test	22770.00
1172	7254	Hardening compound	litre	42.00
1173	7257	C.P.brass bibcock 15 mm	each	453.00
1174	7258	C.P.brass long nose bibcock 15mm	each	508.00
1175	7259	C.P.brass long body bibcock	each	557.00
1176	7260	C.P.brass stop cock (conceaed)15mm	each	732.00
1177	7261	C.P.brass angle valve 15mm	each	314.00
1178	7266	Pressed clay tiles 18mm thick 250x250 mm size	1000 nos	10300.00
1179	7267	Plain ceiling tiles (BWP type phenol formaldehyde synthetic resin bonded (600x600x12mm)	each	125.00
1180	7268	Semi perforated ceiling tiles (600x600x12mm)	each	125.00
1181	7269	25mm thick particle board	sqm	630.00
1182	7270	30mm thick prelaminated flush door shutter	sqm	1452.00
1183	7271	teakwood lipping 25mm wide x12mm thick	metre	68.00
1184	7272	25mm thick melamine faced prelaminated three layer particle board	sqm	1113.00
1185	7273	Resin bonded rockwool 48kg/cum	sqm	274.00
1186	7274	Glass wool 50mm thick	sqm	320.00
1187	7280	Waste plastic additive	tonne	53721.50
1188	7281	Chemical ASTM C - type II	kg	225.00
1189	7295	Granite of any colour ,18mm tk (slab area upto 0.50 sqm)	sqm	2410.00
1190	7296	Granite of any colour ,30mm tk (slab area upto 0.50 sqm)	sqm	3012.00
1191	7297	Granite of any colour ,18mm tk (slab area over 0.50 sqm)	sqm	2648.00
1192	7298	Granite of colour black, cherry/ ruby red 18mm thick (slab area above 0.50 sqm)	sqm	2152.00
1193	7299	Granite stone slab all colour except black, cherry / ruby red 30mm thick (slab area above 0.50 sqm)	sqm	1290.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1194	7306	Aluminium T or L sections	kilogram	266.00
1195	7307	For flush door shutters extra for providing teak veneering on one side instead of commercial veneering	sqm	450.00
1196	7308	Anodised aluminium work for fixed portion	kg	696.00
1197	7309A	Anodised aluminium section	kg	389.00
1198	7312	Expandable fastener with plastic sleeve and M.S.screws: 25mm long	each	11.00
1199	7313	Expandable fastener with plastic sleeve and M.S.screws: 32mm long	each	13.00
1200	7314	Expandable fastener with plastic sleeve and M.S.screws: 40mm long	each	14.00
1201	7315	Expandable fastener with plastic sleeve and M.S.screws: 50mm long	each	17.00
1202	7318	Plasticizer / super plasticizer	kilogram	65.00
1203	7319	Wall form panel 1250x500 mm	each	1410.00
1204	7320	Tie bolt 12mm dia 100mm length	each	64.00
1205	7320D	Bonding admixture incl.materials & labour	sqm	180.00
1206	7321	Tie bolt 12mm dia 150mm length	each	80.10
1207	7322	Tie bolt 20mm dia 150mm length	each	97.50
1208	7323	Tie bolt 20mm dia 225mm length	each	108.60
1209	7324	Spring coil 12mm	each	21.00
1210	7325	Plastic cone 12mm dia	each	24.00
1211	7326	Corner angle 45x45x5mm 1.50 m long	each	398.60
1212	7327	100mm channel shoulder 2.5m long	each	1580.80
1213	7328	Double clip (bridge clip)	each	127.00
1214	7329	Single clip	each	101.50
1215	7330	M.S.tube 40mm dia	metre	368.50
1216	7331	Wall form panel 1250x450mm	each	1380.40
1217	7332	Corner angle 45x45x5mm 2.50m long	each	448.00
1218	7333	Column clamp 450x1070mm	each	1630.80
1219	7334	Prop 2m (2-3.5m)	each	1090.00
1220	7335	Binding wire	kilogram	71.20
1221	7338	Gun metal cramp	kilogram	444.60
1222	7339	Stainless steel cramp	kilogram	456.60
1223	7340	Stainless steel pin	kg	252.60
1224	7342	Adjustable span ESO +SI (2.35 -3.40)	each	2510.50
1225	7343	Adjustable telescopic prop 3m (2.02 - 3.75m)	each	1568.80
1226	7344	Beam clamp 300-380mm (450-1070mm)	each set	560.50
1227	7345	Prop 4 m	each	1560.00
1228	7346	Double coupler	each	74.00
1229	7347	Cadmium plated full threaded steel screws (30x4mm dia)	100 nos	36.50
1230	7348	Aluminium washer 2mm thick 15 mm dia	100 nos	13.50
1231	7349	12 mm M.S.'U' beading	metre	20.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1232	7354	Plastic encapsulated M.S. foot rest 30x20x15cm	each	151.40
1233	7355	RCC vent shaft 9.10m long of standard design	each	4600.00
1234	7358	Flusing Cistern P.V.C 10 litre capacity (low level) (white) (with fittings , assessories and flush pipe)	each	845.00
1235	7359	P.V.C. automatic flusing cistern 5 litre capacity	each	640.50
1236	7361	P.V.C. automatic flusing cistern10 litre capacity	each	705.50
1237	7362	CP brass health faucet	each	1202.00
1238	7363	15mm C.P.brass tap with elbow operation lever	each	920.50
1239	7364	White glazed fire clay draining board 600x450x25mm	each	729.50
1240	7366	Glass reinforced Gypsum (GRG) board 12.5mm thick	sqm	330.50
1241	7367	Galvanised M.S.sheet 0.5mm tk pressesd channel section of size 50x32mm	metre	81.00
1242	7369	Galvanised M.S.sheet 0.50mm tk pressed stud:48x34x36mm	metre	77.00
1243	7375	G.I.flush pipe and C.P.brass spreader including C.P.connecting pipe single lipped urinal	each	355.00
1244	7376	G.I.flush pipe and C.P.brass spreader including C.P.connecting pipe range of two lipped urinal	each	592.00
1245	7377	G.I.flush pipe and C.P.brass spreader including C.P.connecting pipe range of three lipped urinals	each	696.00
1246	7378	G.I.flush pipe and C.P.brass spreader including C.P.connecting pipe range four lipped urinals	each	1079.00
1247	7379	White vitreous china clay half stall urinal flat back 580x380x350mm or angle back 450x375x350 mm with waste fittings as per IS:2556	each	1565.00
1248	7380	Precast RCC grating frame 500x450mm horizontal grating	each	844.50
1249	7381	Precast RCC grating frame 450x100mm vertical grating	each	430.00
1250	7383	12mm dia 50 mm long wedge type expanded zinc alloy dash fastener	each	10.00
1251	7385	3 mm thick translucent white acrylic plastic sheet	sqm	750.00
1252	7386	12 mm thick particle board ceiling tile	sqm	444.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1253	7387	Spigot for standard jointing	kilogram	62.80
1254	7388	Dash hold fastener 12.5mm dia, 50mm long with 6mm dia bolt	each	66.40
1255	7389	Anodising 15 microns on aluminium sections	kilogram	55.50
1256	7390	EPDM gasket for uPVC window/door	metre	35.20
1257	7391	Anodising 25 microns on aluminium sections	kilogram	64.00
1258	7392	Powder coating 50 microns on aluminium sections	kilogram	69.00
1259	7393	Polyester powder coating 50 microns on aluminium sections	kilogram	77.00
1260	7394	Double action hydraulic floor spring with stainless steel cover plate	each	2237.00
1261	7395	6mm dia G.I.adjustable hangers including clips (upto 1.2m length)	each	47.00
1262	7396	Double action hydraulic floor spring with brass cover plate	each	2200.00
1263	7397	Base jack	each	246.80
1264	7398	Challies	each	1085.60
1265	7399	Cup locks	each	107.40
1266	7400	15mm PTMT bib cock	each	134.00
1267	7401	15mm PTMT bibcock with flange (fancy)	each	182.00
1268	7402	15mm PTMT bibcock long body with flange	each	190.60
1269	7403	15mm dia PTMT stop cock (male thread)	each	131.00
1270	7405	20mm dia PTMT stop cock	each	175.00
1271	7406	PTMT pillar cock	each	212.00
1272	7407	PTMT push cock 15mm dia	each	120.50
1273	7408	PTMT push cock 12mm dia 20mm BSP	each	110.00
1274	7409	PTMT grating 100mm dia	each	45.60
1275	7410	PTMT pillar cock (fancy) 15mm foam flow	each	245.80
1276	7411	125mm grating with waste hole	each	60.80
1277	7412	Rectangular type openable circular lid 150mm size 18mm high - 100mm dia(110gm)	each	125.00
1278	7415	Double acting air valve 50mm	each	4244.00
1279	7416	Double acting air valve 80mm	each	5706.00
1280	7417	Double acting air valve 100mm	each	7097.00
1281	7418	Water meter (including testing charges) 80mm	each	2505.00
1282	7419	Water meter (including testing charges) 100mm	each	4400.00
1283	7420	Water meter (including testing charges) 150mm	each	6660.00
1284	7421	Water meter (including testing charges) 200mm	each	7090.00
1285	7422	Dirt box strainer 80mm	each	3340.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1286	7423	Dirt box strainer 100mm	each	5009.00
1287	7424	Dirt box strainer 150mm	each	6541.00
1288	7425	Dirt box strainer 200 mm	each	8850.00
1289	7426	Cat's eye	each	240.00
1290	7427	Water stops serrated with central bulb (225mm wide,8-11 mm thick)	metre	453.00
1291	7428	Water stops Dumb bell with central bulb	metre	418.00
1292	7429	Kickers	metre	513.00
1293	7430	Wedge expansion hold fastener 1/4" or 6 mm	each	14.00
1294	7431	Wedge expansion hold fastener 3/8" or 10mm	each	17.00
1295	7432	Wedge expansion hold fastener 1/2" or 12mm	each	32.00
1296	7439	8mm thick (mirror polished tiles machine cut edge) Raj nagar white	sqm	610.00
1297	7442	Wheel 75mm dia ,40mm wide	each	73.00
1298	7443	Aluminium single cleat of size 30x32x3mm	each	14.00
1299	7444	Aliminium grip strip of size 50x12x2mm	each	10.00
1300	7445	25mm thick prelaminated flush door shutter both side decorative	sqm	1314.00
1301	7449	Aluminium U beading	kilogram	290.00
1302	7451	Glass sheet (Pin headed) 4mm thick	sqm	409.00
1303	7452	Raj nagar plain white marble (table rubbed & polished) 18mm thick (slab area upto 0.50sqm)	sqm	884.20
1304	7453	Raj nagar plainwhitemarble (table rubbed & polished) 18mm thick (slab area more than 0.50sqm)	sqm	990.50
1305	7466	Second class deodar teakwood lipping 30mm wide x 12mm thick	metre	28.00
1306	7468	Veneered particle board with commercial veneering on both sides 12mm tk	sqm	557.00
1307	7477	Prelaminated particle board with one side decorative and other side balancing lamination , flat pressed 3 layer & graded (medium density) grade - I , type II conforming to IS :12823 (exterior grade) 12mm thick	sqm	626.00
1308	7478	Prelaminated particle board with one side decorative and other side balancing lamination , flat pressed 3 layer & graded (medium density) grade - I , type II conforming to IS :12823 (exterior grade) 18mm thick	sqm	696.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1309	7479	Prelaminated particle board with one side decorative and other side balancing lamination , flat pressed 3 layer & graded (medium density) grade - I , type II conforming to IS :12823 (exterior grade) 25mm thick	sqm	835.00
1310	7480	Prelaminated particle board with both sides decorative lamination , flat pressed 3 layer & graded (medium density) grade - I , type II conforming to IS :12823 (exterior grade) 12mm thick	sqm	737.00
1311	7485	Oxidised M.S.hinges finished with nickel plating 50mm(over all width)	metre	44.00
1312	7486	Oxidised M.S.hinges finished with nickel plating 65mm(over all width)	metre	56.00
1313	7491	PTMT -Waste Coupling 31/32 mm	each	70.20
1314	7492	PTMT -Waste Coupling 38/40mm	each	85.00
1315	7493	PTMT -Bottle trap 31/32mm	each	411.00
1316	7494	PTMT - Bottle trap 38/40mm	each	446.00
1317	7495	PTMT ball cock 15mm complete with Epoxy coated aluminium rod & H.D.ball	each	168.00
1318	7496	PTMT ball cock 20mm complete with Epoxy coated aluminium rod & H.D.ball	each	244.00
1319	7497	PTMT ball cock 25mm complete with Epoxy coated aluminium rod & H.D.ball	each	551.00
1320	7498	PTMT ball cock 40mm complete with Epoxy coated aluminium rod & H.D.ball	each	1037.00
1321	7499	PTMT ball cock50mm complete with Epoxy coated aluminium rod & H.D.ball	each	1559.00
1322	7500	PTMT angle stop cock with flange 15mm	each	167.00
1323	7501	PTMT Swiveling shower 15mm	each	112.00
1324	7503	PTMT liquid soap container of 400 ml capacity	each	188.00
1325	7504	PTMT Towel ring 215x200x37mm	each	151.00
1326	7505	PTMT -Towel rail (450 mm long)	each	251.00
1327	7506	PTMT - Towel rail (600 mm long)	each	293.00
1328	7507	PTMT Shelf 450x124x36mm	each	342.00
1329	7508	PTMT -Urinal Spreader 15mm	each	167.00
1330	7509	PTMT soap dish/holder 138x102x75mm	each	151.00
1331	7512	PTMT handle 125x34x24mm	each	39.00
1332	7513	PTMT handle 150x34x24mm	each	42.00
1333	7514	PTMT butt hinges 75x60x10mm	each	51.00
1334	7515	PTMT butt hinges 100x75x10mm	each	67.00
1335	7516	PTMT tower bolt 152x42x18mm	each	84.00
1336	7517	PTMT tower bolt 202x42x18mm	each	100.00
1337	7518	PTMT door catcher 72x42mm	each	33.00
1338	7550	Surveyor charges	hectare	529.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1339	7551	Surveyor charges	metre	7.00
1340	7552	Coir veneered board 4mm thick	sqm	328.00
1341	7552I	weighing charges	cum	9.00
1342	7553	Coir veneered board 6mm thick	sqm	429.00
1343	7555	Coir veneered board 12mm thick	sqm	762.00
1344	7556	Coir veneered board 18mm thick	sqm	1141.00
1345	7559	Testing Charge & hire charges of machinery - upto 10 metre	1job	1601.00
1346	7560	Testing Charge & hire charges of machinery - 10 metre to 20 metre	1 job	2178.00
1347	7561	Testing Charge & hire charges of machinery - 20 metre to 30 metre	1 job	2540.00
1348	7562	0.5 HP- monoblock pumpset	each	4048.00
1349	7563	1 HP- monoblock pumpset	each	5500.00
1350	7564	2 HP- monoblock pumpset	each	12500.00
1351	7565	Fixing in masonry pedestal & earth connections including all	job	550.00
1352	7641	Hubless centrifugally cast (spun) iron terminal guard (slotted cowl) - 100 mm dia as per IS 15905	each	369.00
1353	7651	Ductile iron class K-9 pipe conforming to IS.8329 100mm dia	metre	1075.00
1354	7652	Ductile iron class K-9 pipe conforming to IS.8329 150mm dia	metre	1590.00
1355	7653	Ductile iron class K-9 pipe conforming to IS.8329 200mm dia	metre	2110.00
1356	7654	Ductile iron class K-9 pipe conforming to IS.8329 250mm dia	metre	3018.00
1357	7655	Ductile iron class K-9 pipe conforming to IS.8329 300mm dia	metre	3760.50
1358	7656	Ductile iron class K-9 pipe conforming to IS.8329 350mm dia	metre	4607.00
1359	7657	Ductile iron class K-9 pipe conforming to IS.8329 400mm dia	metre	5912.00
1360	7658	Ductile iron class K-9 pipe conforming to IS.8329 450mm dia	metre	6970.00
1361	7659	Ductile iron class K-9 pipe conforming to IS.8329 500mm dia	metre	8700.00
1362	7660	Ductile iron class K-9 pipe conforming to IS.8329 600mm dia	metre	10450.00
1363	7661	Ductile iron class K-9 pipe conforming to IS.8329 700mm dia	metre	14600.00
1364	7662	Ductile iron class K-9 pipe conforming to IS.8329 750mm dia	metre	15700.00
1365	7663	Ductile iron class K-9 pipe conforming to IS.8329 800mm dia	metre	15900.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1366	7664	Ductile iron class K-9 pipe conforming to IS.8329 900mm dia	metre	19214.00
1367	7665	Ductile iron class K-9 pipe conforming to IS.8329 1000mm dia	metre	21410.00
1368	7666	Rubber gaskets conforming to I.S.5382 of S.B.R quality 100mm dia	each	41.50
1369	7668	Rubber gaskets conforming to I.S.5382 of S.B.R quality 150mm dia	each	49.60
1370	7669	Rubber gaskets conforming to I.S.5382 of S.B.R quality 200 mm dia	each	87.00
1371	7670	Rubber gaskets conforming to I.S.5382 of S.B.R quality 250 mm dia	each	105.00
1372	7671	Rubber gaskets conforming to I.S.5382 of S.B.R quality 300 mm dia	each	156.00
1373	7672	Rubber gaskets conforming to I.S.5382 of S.B.R quality 350 mm dia	each	182.00
1374	7673	Rubber gaskets conforming to I.S.5382 of S.B.R quality 400 mm dia	each	263.00
1375	7674	Rubber gaskets conforming to I.S.5382 of S.B.R quality 450 mm dia	each	311.00
1376	7675	Rubber gaskets conforming to I.S.5382 of S.B.R quality 500 mm dia	each	376.00
1377	7676	Rubber gaskets conforming to I.S.5382 of S.B.R quality 600 mm dia	each	498.00
1378	7677	Rubber gaskets conforming to I.S.5382 of S.B.R quality 700 mm dia	each	580.00
1379	7678	Rubber gaskets conforming to I.S.5382 of S.B.R quality 750 mm dia	each	724.00
1380	7679	Rubber gaskets conforming to I.S.5382 of S.B.R quality 800 mm dia	each	833.00
1381	7680	Rubber gaskets conforming to I.S.5382 of S.B.R quality 900 mm dia	each	904.00
1382	7681	Rubber gaskets conforming to I.S.5382 of S.B.R quality 1000 mm dia	each	1157.00
1383	7682	Ductile Iron K-12 specials suitable for push on jointing upto 600mm dia	quintal	17090.00
1384	7683	Ductile Iron K-12 specials suitable for push on jointing over 600mm dia	quintal	19481.00
1385	7684	Ductile Iron K-12 specials suitable mechanical jointing asper I.S.9523 upto 600mm dia	quintal	18090.00
1386	7685	Ductile Iron K-12 specials suitable mechanical jointing asper I.S.9523 over 600 mm dia	quintal	19481.00
1387	7686	Ductile Iron pipe class K-9 flanges and welding 100mm dia	metre	1572.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1388	7687	Ductile Iron pipe class K-9 flanges and welding 150mm dia	metre	2346.00
1389	7688	Ductile Iron pipe class K-9 flanges and welding 200mm dia	metre	3070.00
1390	7689	Ductile Iron pipe class K-9 flanges and welding 250mm dia	metre	4034.00
1391	7690	Ductile Iron pipe class K-9 flanges and welding 300mm dia	metre	5110.00
1392	7691	Ductile Iron pipe class K-9 flanges and welding 350mm dia	metre	6392.00
1393	7692	Ductile Iron pipe class K-9 flanges and welding 400mm dia	metre	7679.00
1394	7693	Ductile Iron pipe class K-9 flanges and welding 450mm dia	metre	8779.00
1395	7694	Ductile Iron pipe class K-9 flanges and welding 500mm dia	metre	10600.00
1396	7695	Ductile Iron pipe class K-9 flanges and welding 600mm dia	metre	14024.00
1397	7696	Ductile Iron pipe class K-9 flanges and welding 700mm dia	metre	17893.00
1398	7697	S&S centrifugally (Spun) C.I.pipe class LA 100mm dia	metre	1086.00
1399	7698	S&S centrifugally (Spun) C.I.pipe class LA 125mm dia	metre	1280.00
1400	7699	S&S centrifugally (Spun) C.I.pipe class LA 150mm dia	metre	1628.00
1401	7700	S&S centrifugally (Spun) C.I.pipe class LA 200mm dia	metre	2157.00
1402	7701	S&S centrifugally (Spun) C.I.pipe class LA 250mm dia	metre	2971.00
1403	7702	S&S centrifugally (Spun) C.I.pipe class LA 300mm dia	metre	5320.00
1404	7703	S&S centrifugally (Spun) C.I.pipe class LA 350mm dia	metre	6550.00
1405	7704	S&S centrifugally (Spun) C.I.pipe class LA 400mm dia	metre	8528.00
1406	7705	S&S centrifugally (Spun) C.I.pipe class LA 450mm dia	metre	10210.00
1407	7706	S&S centrifugally (Spun) C.I.pipe class LA 500mm dia	metre	11950.00
1408	7707	S&S centrifugally (Spun) C.I.pipe class LA 600mm dia	metre	16670.00
1409	7708	S&S centrifugally(spun)C.I.pipe specials- IS 1538 suitable for lead jointing upto 300mm dia	quintal	7300.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1410	7709	S&S centrifugally(spun)C.I.pipe specials- IS 1538 suitable for lead jointing over 300mm dia	quintal	8489.00
1411	7710	S&S centrifugally(spun)C.I.pipe specials suitable mech.joint-IS 13382 upto 300mm	quintal	8489.00
1412	7711	S&S centrifugally(spun)C.I.pipe specials suitable for mechanical joint-IS 13382 over 300 mm dia	quintal	9318.00
1413	7712	Screwed double flanged cetrifugally cast (spun) C.I. pipe of class -B conforming to - IS.1536 - 100mm dia	metre	1630.00
1414	7713	Screwed double flanged cetrifugally cast (spun) C.I. pipe of class-B conforming to -IS.1536 - 150mm dia	metre	2527.00
1415	7714	Screwed double flanged cetrifugally cast (spun) C.I. pipe of class-B conforming to -IS.1536 - 200mm dia	metre	3496.00
1416	7715	Screwed double flanged cetrifugally cast (spun) C.I. pipe of class-B conforming to -IS.1536 - 250mm dia	metre	4675.00
1417	7716	Screwed double flanged cetrifugally cast (spun) C.I. pipe of class-B conforming to -IS.1536 - 300mm dia	meter	5942.00
1418	7717	Screwed double flanged cetrifugally cast (spun) C.I. pipe of class-B conforming to -IS.1536 - 350mm dia	meter	7605.00
1419	7718	Screwed double flanged cetrifugally cast (spun) C.I. pipe of class-B conforming to -IS.1536 - 400mm dia	meter	9826.00
1420	7719	Screwed double flanged cetrifugally cast (spun) C.I. pipe of class-B conforming to -IS.1536 - 450mm dia	metre	12733.00
1421	7720	Screwed double flanged cetrifugally cast (spun) C.I. pipe of class-B conforming to -IS.1536 - 500mm dia	metre	17324.00
1422	7721	Screwed double flanged cetrifugally cast (spun) C.I. pipe of class-B conforming to -IS.1536 - 600mm dia	metre	21693.00
1423	7722	Ductile Iron Class K-7 pipe conforming to IS.8329 - 100mm dia	metre	1090.20
1424	7723	Ductile Iron Class K-7 pipe conforming to IS.8329 - 150mm dia	metre	1530.00
1425	7724	Ductile Iron Class K-7 pipe conforming to IS.8329 - 200mm dia	metre	2040.50
1426	7725	Ductile Iron Class K-7 pipe conforming to IS.8329 - 250mm dia	metre	2810.50

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1427	7726	Ductile Iron Class K-7 pipe conforming to IS.8329 - 300mm dia	metre	3900.00
1428	7727	Ductile Iron Class K-7 pipe conforming to IS.8329 - 350mm dia	metre	4620.00
1429	7728	Ductile Iron Class K-7 pipe conforming to IS.8329 - 400mm dia	metre	5308.00
1430	7729	Ductile Iron Class K-7 pipe conforming to IS.8329 - 450mm dia	metre	6470.00
1431	7730	Ductile Iron Class K-7 pipe conforming to IS.8329 - 500mm dia	metre	7658.00
1432	7731	Ductile Iron Class K-7 pipe conforming to IS.8329 - 600mm dia	metre	9950.00
1433	7732	Ductile Iron Class K-7 pipe conforming to IS.8329 - 700mm dia	metre	12895.00
1434	7733	Ductile Iron Class K-7 pipe conforming to IS.8329 - 800mm dia	metre	16085.00
1435	7734	Ductile Iron Class K-7 pipe conforming to IS.8329 - 900mm dia	metre	21100.00
1436	7735	Ductile Iron Class K-7 pipe conforming to IS.8329 - 1000mm dia	metre	22310.00
1437	7736	Extruded burnt flyash clay sewer bricks conforming to IS.4885	1000 nos	5288.00
1438	7737	Fly ash bricks conforming to I.S.12894	1000 nos	6250.00
1439	7738	Calcium silicate bricks machine moulded conforming to IS.4139	1000 nos	7000.00
1440	7743	M.S.pipe 150mm dia casing pipe	metre	1460.00
1441	7744	M.S.pipe 200mm dia casing pipe	metre	1844.00
1442	7745	PVC blind pipe 150mm dia as per IS:12818	metre	690.00
1443	7746	PVC blind pipe 200mm dia as per IS:12818	metre	1100.00
1444	7747	MS.Cap 150mm dia	each	210.00
1445	7748	MS.Cap 200mm dia	each	268.00
1446	7749	MS.bail plug 150mm dia	each	268.00
1447	7750	MS.bail plug 200mm dia	each	376.00
1448	7751	PVC slotted pipe 150mm dia as per IS:12818	metre	770.00
1449	7752	PVC slotted pipe 200mm dia as per IS:12818	metre	1196.00
1450	7753	Stone Boulder 50mm to 200mm	cum	1165.00
1451	7754	Gravel 5mm to 10mm	cum	770.00
1452	7755	Gravel 1.5mm to 2mm	cum	770.00
1453	7756	Gravel 3 mm to 6 mm	cum	770.00
1454	7757	M.S.pipe 100mm dia casing pipe	metre	1080.00
1455	7758	uPVC blind pipe 100mm dia as per IS:12818	metre	600.00
1456	7759	uPVCslotted pipe 100mm dia as per IS:12818	metre	583.00
1457	7760	M.S.cap 100mm dia	each	185.00
1458	7761	M.S.bail plug 100 mm dia	each	214.50
1459	7762	Precast RCC .perforated slab	each	1172.00
1460	7763	Water supply tanker of 5000 litre capacity	each	1189.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1461	7764	M.S.socket 100 mm dia	each	184.00
1462	7765	M.S.socket 150 mm dia	each	337.00
1463	7766	M.S.socket 200 mm dia	each	433.00
1464	7767	Stone cleaning chemical approved by ASI	litre	294.00
1465	7768	Water repellent chemical approved by ASI	litre	2100.00
1466	7769	Stone surface strengthening chemical approved by ASI	litre	1400.00
1467	7770	Turpentine oil	litre	98.50
1468	7771	Liquid amonia 5%	litre	215.00
1469	7772	Pea gravel	cum	770.00
1470	7774	Stone size 10 X 10 X 7.50 cm	each	16.00
1471	7775	Sodium pentachlorophenate	kilogram	832.00
1472	7800	Ceramic glazed tiles I st quality - minimum thickness 5mm in all colours shade and designs except burgundy,bottle green, black	sqm	380.00
1473	7801	Ceramic glazed tiles I st quality 300X300 mm in all shades and designs of white , Ivory, grey, fume red brown etc.,	sqm	495.00
1474	7802	Ceramic glazed tiles I st quality 300X300 mm in all shades designs except white , Ivory, grey, fume red brown et.,	sqm	550.00
1475	7803	Rectified ceramic glazed tiles I st quality 300x300 mm or more in all shades designs white,ivory,grey,fume red, brown etc.,	sqm	660.00
1476	7804	Rectified ceramic glazed tiles I st quality 300x300 mm or more in all shades designs except white,ivory,grey,fume red, brown etc.,	sqm	660.00
1477	7805	Salem stainless steel AISI-304(18/8)Orrisa pattern W.C.pan 724mmx578mm	each	6050.00
1478	7806	Salem stainless steel AISI-304(18/8)round basin 405mmx355mm	each	2430.00
1479	7807	Salem stainless steel AISI-304(18/8)wash basin530mmx345mm	each	2700.00
1480	7808	Centrifugally cast (spun) iron S&S 100mm inlet&100mm outlet	each	450.00
1481	7809	Centrifugally cast (spun) iron S&S 100mm inlet&75mm outlet	each	487.00
1482	7850	Agaria white marble slab plain 18mm thick	sqm	1475.50
1483	7857	P.T.M.T grating square slit 150mm	each	105.50
1484	7858	P.T.M.T Urinal cock 15mm dia	each	160.00
1485	7859	P.T.M.T bib cock with nozzle 15mm	each	191.00
1486	7861	P.T.M.T stop cock (concealed)15mm	each	210.00
1487	7862	15mm nominal bore & 30cm length PVC connection pipe with P.T.M.T.nuts	each	46.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1488	7863	15mm nominal bore & 45cm length PVC connection pipe with P.T.M.T.nuts	each	55.00
1489	7864	P.T.M.T extension nipple 15mm	each	53.00
1490	7865	P.T.M.T extension nipple 20mm	each	63.00
1491	7866	P.T.M.T extension nipple 25mm	each	95.00
1492	7893	Tactile tile	sqm	1340.00
1493	7900	Modular common burnt clay bricks of class designation 7.5	1000 nos	7000.00
1494	7901	Machine moulded perforated common burnt clay FPS (non modular) bricks of class designation 12.5	1000 nos	6800.00
1495	7902	Machine moulded common burnt clay modular perforated bricks of class designation 12.5	1000 nos	6970.00
1496	7903	Machine moulded common burnt clay FPS (non modular) bricks of class designation 12.5	1000 nos	7000.00
1497	7904	Machine moulded common burnt clay tile bricks of class designation 12.5	1000 nos	6600.00
1498	7911	Chemical rust remover	litre	364.00
1499	7913	Epoxy	kg	790.00
1500	7914	SBR Polymer	kg	300.00
1501	7915	Woven PVC cloth	sqm	36.50
1502	7921	Adhesive chemical	ml	3.00
1503	7922	Bit of drilling machine for hole upto 30mm dia	each	670.00
1504	7923	G.I. injection nipple 12mm dia 75mm long	each	60.00
1505	7924	Blowing compressed air for cleaning holes upto 30mm dia	each	14.00
1506	7925	L shaped 100mm long, 10mm dia mild steel shear key	kg	90.00
1507	7927	Acrylic polymer chemical for cracks	kg	45.00
1508	8001	24mm tk factory made shutters with style,rails&panels of PVC extruded sections in white, grey or wooden finish	sqm	2200.00
1509	8002	30mm tk factory made shutters with style,rails&panels of PVC extruded sections in white, grey or wooden finish	sqm	2200.00
1510	8003	Factory made PVC rigid foam panelled shutter	sqm	2200.00
1511	8004	Factory made PVC rigid foam panelled shutter as per IS :4020	sqm	2200.00
1512	8005A	S/F UPVC framed side hung window	sqm	3300.00
1513	8005B	S/F UPVC framed glazed sliding window	sqm	3300.00
1514	8006	Factory made PVC rigid foam sheet 1mm thick	sqm	231.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1515	8007	Factory made PVC rigid foam sheet 5mm thick	sqm	880.00
1516	8008	Factory made prelaminated PVC rigid foam sheet 5mm thick	sqm	1045.00
1517	8009	PVC corner beading of 9.5mm including wastage @ 5%	metre	72.00
1518	8010	48mmx40mmx1.5mm tk factory made door frame PVC extruded sec.white,grey,or wooden finish	metre	176.00
1519	8011	Factory made door frame PVC extruded sheet	metre	462.00
1520	8012	Adhesive solvent cement	kg	220.00
1521	8013	Factory made EPS core wall panel / roof panel sandwiched between two engineered welded wire fabric mesh of 3 mm dia G.I wire mesh with 50mm pitch in both the directions , kept at 120 - 135 mm gap and inter connected by the zig zag G.I.wire of 3mm dia at alternate row by welding	sqm	2210.00
1522	8014	Factory made door frame of size 50x47mm with wall tk 5mm made of single piece extruded profile	metre	660.00
1523	8015	Expanded poly ethylene foam sheet 4mm thick of density 40kg /cum	sqm	25.00
1524	8016	High density expanded poly ethylene (EPE) foam 1mm thick	sqm	12.50
1525	8017	Fire rated door frame made with 1.6mm thick G.I.sheet (120 minutes fire rating)	metre	1400.00
1526	8018	Fire rated door shutter made with 1.6mm thick G.I.sheet (120 minutes fire rating) including hinges (without glass panels)	sqm	7000.00
1527	8021	Bamboo wood tile flooring 14mm thick of minimum size 1800mm x 130mm	sqm	4700.00
1528	8022	Bamboo wood quarter round 18mm thick of size 1900mm x 18mm	metre	158.00
1529	8023	Bamboo wood door reducer 14mm thick of size 1900mm x 44mm	metre	348.50
1530	8024	Bamboo wood skirting 14mm thick of size 1900mm x 85mm	sqm	410.00
1531	8025	Bamboo wood tile wall cladding 10mm thick of size 1900mm x 135mm	sqm	4600.00
1532	8026	Bamboo wood T-mold 14mm thick of size 1900mm x 44mm	metre	358.00
1533	8027	Bamboo wood Threshold 14mm thick of size 1900mm x 44mm	metre	341.45
1534	8028	Bamboo wood shutter of doors	cum	2300.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1535	8029	Bamboo wood panelling (10mm thick)	cum	2260.00
1536	8030	Superior class bamboo wood door frame 65mm thick	cum	2300.00
1537	8031	Aluminium sheets grade 5052, 4mm thick for wall panel / deck panel / WRB panel / Kicker panels / door closing panels (for form work)	sqm	11200.40
1538	8032	Aluminium sheets grade 5052, 4mm thick for internal corner / column corners /(for form work)	sqm	16000.00
1539	8033	Aluminium sheets grade 5052, 4mm thick for Mid solidier/end solidier (for form work)	sqm	43000.00
1540	,8034	External corner 2050 mm	each	1906.50
1541	8035	External corner 825 mm	each	795.00
1542	8036	Soldier tie 370mm	each	400.00
1543	8037	Adjustable prop -2.0 x 2.0 m	each	1500.00
1544	8038	Pin - 50	each	25.00
1545	8039	Pin - 127	each	75.00
1546	8040	wedge	each	20.00
1547	8041	wall tie - 150 (335mm)	each	65.00
1548	8042	Polythene Sleeve 90 x 150 mm	each	4.50
1549	'8043	Polythene Roll - 150mm long	each	8.20
1550	8044	Vertical Soldier - 1100 mm	each	500.00
1551	8045	Wall Attached Bracket 600x 1000 mm	each	1320.00
1552	8046	Alignment Pipe - 3.00 Mtr	each	1350.00
1553	8047	Alignment Bracket	each	650.00
1554	8048	Tie Rod for Bracket - 500 mm	each	160.00
1555	8049	Anchor Wing Nut dia 100 mm	each	90.00
1556	8050	Debit Pin - 250mm	each	85.00
1557	8051	PVC pipe dia 20mm - 150mm long	each	8.00
1558	8052	PVC Cone	each	8.00
1559	8053	Bolt+Nut - 16 x 80 mm	each	37.00
1560	8054	Flat washer dia 16, 3 mm thick	each	8.00
1561	8055	Bolt + Nut -16 x 30 mm	each	28.00
1562	8056	Door spacer 45 x 45 x 5 - 1135 mm long	each	500.00
1563	8057	Door spacer 45 x 45 x 5 - 985 mm long	each	450.00
1564	8100	Powder coated MS butt hinges 100x58x1.9mm	10 nos	152.00
1565	8101	SS ball bearing of size 100 x 89 x 3 mm	each	547.00
1566	8200	A.P.P.modified polymeric felt (two layers) 1.5mm tk	sqm	73.00
1567	8201	A.P.P.modified polymeric felt (two layers) 2 mm tk	sqm	124.00
1568	8203	A.P.P.modified 2mm tk membrane reinforced with glass fibre matt	sqm	215.00
1569	8204	A.P.P.modified 3mm tk membrane reinforced with glass fibre matt	sqm	270.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1570	8205	A.P.P.modified 3mm tk membrane reinforced with polyester matt	sqm	320.00
1571	8206	Bitumen primer for bitumen membrane	litre	109.00
1572	8207	Geotextile 120 grams per sqm membrane	sqm	61.00
1573	8210	Stainless steel screws 50mm	100 nos	362.00
1574	8211	Stainless steel screws 40mm	100 nos	290.00
1575	8212	Stainless steel screws 30mm	100 nos	260.00
1576	8214	Stainless steel screws 20mm	100 nos	170.00
1577	8215	Stainless steel butt hinges 125x64x1.9mm IS:12817 marked	10 nos	388.50
1578	8216	Stainless steel butt hinges 100x58x1.9mm IS:12817 marked	10 nos	318.00
1579	8217	Stainless steel butt hinges 75x47x1.8mm IS:12817 marked	10 nos	350.00
1580	8218	Stainless steel butt hinges 50x37x1.5mm IS:12817 marked	10 nos	200.00
1581	8219	Stainless steel butt hinges (heavy weight) 125x64x2.50 mm IS:12817 marked	10 nos	500.00
1582	8220	Stainless steel butt hinges (heavy weight) 100x60x2.50 mm IS:12817 marked	10 nos	350.00
1583	8221	Stainless steel butt hinges (heavy weight) 75x50x2.5 mm IS:12817 marked	10 nos	280.00
1584	8222	M.S.heavy weight butt hinges 125x90x4.0mm IS:1341 marked	10 nos	435.00
1585	8223	M.S.heavy weight butt hinges 100x75x3.5mm IS:1341 marked	10 nos	240.00
1586	8224	M.S.heavy weight butt hinges 75 x60x3.1mm IS:1341 marked	10 nos	130.00
1587	8225	M.S.heavy weight butt hinges 50x40x2.5mm IS:1341 marked	10 nos	110.00
1588	8226	Concealed zinc coated hinges 19 - 20 mm thick with mounting plate	10 nos	570.00
1589	8300	1216mm PE-AL-PE composite pressure pipe	metre	128.00
1590	8301	1620mm PE-AL-PE composite pressure pipe	metre	165.00
1591	8302	2025mm PE-AL-PE composite pressure pipe	metre	189.00
1592	8303	2532 mm PE-AL-PE composite pressure pipe	metre	255.00
1593	8304	3240 mm PE-AL-PE composite pressure pipe	metre	334.00
1594	8305	4050 mm PE-AL-PE composite pressure pipe	metre	443.00
1595	8501	Polymer modified cementation coating	kilogram	165.00
1596	8502	Fibre glass cloth	sqm	52.00
1597	8504	Multi surface paint	litre	370.50
1598	8505	Acrylic exterior paint	litre	230.00
1599	8506	Premium Acrylic exterior paint	litre	420.00
1600	8507	Textured exterior paint	litre	435.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1601	8508	Primer for cement paint	litre	123.00
1602	8509	Special primer (C.W.)	litre	190.00
1603	8510	Metal primer (U.G)	litre	156.00
1604	8514	40mm long S.S.screws with plastic rawl plugs	each	54.00
1605	8515	Galavanised MS 8mm outer diametre M-6 dash fastener 50mm long	each	50.00
1606	8552	Mineral fibre beveled regular edged ceiling tiles 595 X 595mm ,16 mm thick	sqm	1150.00
1607	8553	Mineral fibre beveled regular edged ceiling tiles 595 X 595mm ,16 mm thick with bio - block conforming to ISO 5 (class 100) specifications	sqm	1232.00
1608	8554	Mineral fiber beveled regular edged ceiling tiles 595 x 595 mm , 20mm thick	sqm	1400.00
1609	8555	G.I.main runner 15 X 32 mm of 3000 mm length , 0.33 mm thick	each	322.00
1610	8556	G.I cross -T 15 X 32 mm of 1200 mm length ,0.33 mm thick	each	133.00
1611	8558	G.I.hanger rod 6mm dia fully threaded upto 1000 mm length	metre	45.00
1612	8559	Staillesss steel U Channel of size (50x25x2mm)	metre	273.00
1613	8560	Non staining water resistant clear silicon	metre	88.00
1614	8561	Extruded polystyrene rigid insulation board 50 mm thick	sqm	710.00
1615	8563	15mm thick , light weight, integral densified micro look edged , false ceiling tiles of size 595 x 595 mm	sqm	1000.00
1616	8564	15mm thick , light weight, fully perforated square / butt edge integral densified , false ceiling tiles of size 595 X 595 mm	sqm	1210.00
1617	8565	Galavanised MS hanger rod 6mm dia MS fully threaded upto 1000mm length	each	40.00
1618	8566	Powder coated steel section main -T ceiling sections 15 X 42 X 0.40 mm (3000 mm long)	each	315.00
1619	8567	Galvanised mild steel perimeter wall angles 22 X 19 X 0.40 mm (3000 mm long)	each	155.00
1620	8568	Powder coated Galvanised iron intermediate cross - T section 15 X 42 X 0.40mm (1200 mm long)	each	130.00
1621	8569	Powder coated Galvanised iron intermediate cross - T section 15 X 42 X 0.40mm (600 mm long)	each	63.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1622	8576	Crates made of Mesh type 10X 12(D=100mm) Zinc coated .(Mesh wire diameter 3.00 mm)	sqm	255.00
1623	8577	Crates made of Mesh type 10X 12(D=100mm) Zn + PVC coated .Mesh wire diameter 2.70 / 3.70 mm (ID/OD)	sqm	300.00
1624	8578	Crates made of Mesh type 10X 12(D=100mm) Zn + 10% Al.alloy + PVC coated. Mesh wire diameter 2.70/3.70 mm (ID/OD)	sqm	390.00
1625	8579	Cold form light gauge steel C - section of thickness 0.75mm i/c zink coating /sliting etc.	kg	175.00
1626	8580	Wastage of cold form light gauge steel	kg	23.00
1627	8581	12mm thick micro regular edged semi perforated GRG (Glass Fibre Reinforced Gypsum) false ceiling tiles of size 595 X 595 mm	sqm	715.00
1628	8582	12mm thick micro regular edged fully perforated GRG (Glass Fibre Reinforced Gypsum) false ceiling tiles of size 595 X 595 mm	sqm	810.00
1629	8583	10mm thick square edge fully perforated GRG (Glass Fibre Reinforced Gypsum) false ceiling tiles of size 595 X 595 mm	sqm	1005.00
1630	8587	Galvanized iron intermediate cross - T section 15 X 32 X 0.33 mm (600 mm long)	each	47.00
1631	8588	Galvanized MS hanger rod 6mm dia MS fully threaded up to 1000 mm length	each	36.00
1632	8589	Calcium silicate tegular edged ceiling tiles 595x595 mm & 15mm thick on edges	sqm	1130.00
1633	8590	Galvanised steel main Tee ceiling section size 24x38x0.33mm (3 metre long)	each	195.00
1634	8591	Galvanised steel perimeter wall angle size 24x24x0.40mm (3 metre long)	each	152.00
1635	8592	Galvanised steel intermediate cross T section size 24x25x0.33mm (1.2 metre long)	each	98.00
1636	8593	Galvanised steel intermediate cross T section size 24x25x0.33mm (0.6 metre long)	each	51.00
1637	8594	Galvanised Steel soffit cleat size 25 X 35 X 1.60 mm	each	6.00
1638	8595	Wooden screws with plastic rawl plugs 35x8mm	each	1.50
1639	,8596	Galvanised MS 8mm outer diameter M-6 dash fastner 25mm long	each	45.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1640	8597	GI metal tile clip in plain beveled edge global white colour tiles of size 600x600 and 0.5mm thick	sqm	1000.00
1641	8598	GI metal tile clip perforated beveled edge global whitecolour tiles of size 600x600 and 0.5mm thick	sqm	1050.00
1642	8599	GI metal tile lay in plain tegular edge global white colour tiles of size 595x595 and 0.5mm thick	sqm	900.00
1643	8600	GI metal tile lay in perfoarted tegular edge global white colour tiles of size 595x595 and 0.5mm thick	sqm	1000.00
1644	8601	PVC laminated gypsum tiles (square edge) of size 595x595mm and 12.5mm thick	sqm	1120.00
1645	8602	Gypsum tiles fully perforated square edge size 595x595 mm and 12.5mm thick	sqm	688.00
1646	8604	Spring T-section 24x34x0.45mm(3.00metre long)	metre	260.00
1647	8605	C wall angle section 20x30x20x0.5mm (3.00 metre long)	metre	190.00
1648	8606	Main C carrier size 10x38x10x0.70mm (3.00 metre long)	metre	220.00
1649	8607	Spring T-connector	each	7.00
1650	8608	C carrier connector	each	15.00
1651	8609	C suspension clip	each	12.50
1652	8610	Wire coupling clip	each	13.00
1653	8611	Main T ceiling sections 24x38x0.3mm (3 metre long)	each	149.00
1654	8612	Perimeter wall angle 24x24x0.3mm (3 metre long)	each	90.00
1655	8613	Intermediate cross T-section 24x25x0.3mm(1.2m long)	each	85.00
1656	8614	Intermediate cross T-section 24x25x0.3mm(0.6m long)	each	40.00
1657	8615	Hanger rod 4mm thick	each	20.00
1658	8616	Adjustment clip 85x30x0.8mm	each	8.00
1659	8617	Soffit cleat (size 27x37x25x1.60mm)	each	6.00
1660	8618	Dash fastener 6mm dia 50mm long	each	12.50
1661	8619	Galvanised MS L- shape level adjuster of size 85 x 25 x 2 mm	each	25.00
1662	8620	Vitrified floor tile 50x50cm conforming to IS 15622 : 2006 group (B1a)	sqm	600.00
1663	8621	Vitrified floor tile 60x60cm conforming to IS 15622 : 2006 group (B1a)	sqm	650.00
1664	8622	Vitrified floor tile 80x80cm conforming to IS 15622 : 2006 group (B1a)	sqm	850.00
1665	8622A	Empty HDPE Cement bags	no	3.60

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1666	8623	Vitrified floor tile 100x100cm conforming to IS 15622 : 2006 group (B1a)	sqm	1200.00
1667	8625	Poly propylene - Random-Co-polymer(PPR)pipes SDR7.4-16mm outer dia	metre	42.00
1668	8626	Poly propylene - Random-Co-polymer(PPR)pipes SDR7.4-20mm outer dia	metre	64.00
1669	8627	Poly propylene - Random-Co-polymer(PPR)pipes SDR7.4-25mm outer dia	metre	90.00
1670	8628	Poly propylene - Random-Co-polymer(PPR)pipes SDR7.4-32mm outer dia	metre	145.00
1671	8629	Poly propylene - Random-Co-polymer(PPR)pipes SDR7.4-40mm outer dia	metre	216.00
1672	8630	Poly propylene - Random-Co-polymer(PPR)pipes SDR7.4-50mm outer dia	metre	340.00
1673	8631	Poly propylene - Random-Co-polymer(PPR)pipes SDR7.4-63mm outer dia	metre	377.00
1674	8632	Poly propylene - Random-Co-polymer(PPR)pipes SDR7.4-75mm outer dia	metre	559.94
1675	8633	Poly propylene - Random-Co-polymer(PPR)pipes SDR7.4-90mm outer dia	metre	800.23
1676	8634	Poly propylene - Random-Co-polymer(PPR)pipes SDR11-110mm outer dia	metre	1186.13
1677	8635	Poly propylene - Random-Co-polymer(PPR)pipes SDR11-160mm outer dia	metre	2945.00
1678	8636	Chlorinated polyvinyl-chloride (CPVC) pipe 15mm outer dia	metre	80.00
1679	8637	Chlorinated polyvinyl-chloride (CPVC) pipe 20mm outer dia	metre	116.00
1680	8637A	ASTM pipes - 20 mm dia	metre	129.00
1681	8638	Chlorinated polyvinyl-chloride (CPVC) pipe 25mm outer dia	metre	165.00
1682	8638A	ASTM pipes - 25 mm dia	metre	154.00
1683	8639	Chlorinated polyvinyl-chloride (CPVC) pipe 32mm outer dia	metre	235.00
1684	8639A	ASTM pipes - 32 mm dia	metre	204.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1685	8640	Chlorinated polyvinyl-chloride (CPVC) pipe 40mm outer dia	metre	325.00
1686	8640A	ASTM pipes - 40 mm dia	metre	242.00
1687	8641	Chlorinated polyvinyl-chloride (CPVC) pipe 50mm outer dia	metre	530.00
1688	8641A	ASTM pipes - 50 mm dia	metre	330.00
1689	8642	Chlorinated polyvinyl-chloride (CPVC) pipe 62.5mm inner dia	metre	1045.00
1690	8642A	ASTM pipes - 63 mm dia	metre	341.00
1691	8643	Chlorinated polyvinyl-chloride (CPVC) pipe 75mm inner dia	metre	1400.00
1692	8643A	ASTM pipes - 75 mm dia	metre	241.00
1693	8644	Chlorinated polyvinyl-chloride (CPVC) pipe 100mm inner dia	metre	2000.00
1694	8644A	ASTM pipes - 90 mm dia	metre	305.00
1695	8645	Chlorinated polyvinyl-chloride (CPVC) pipe 150mm inner dia	metre	3616.00
1696	8645A	ASTM pipes - 110 mm dia	metre	436.00
1697	8646	Silicon sealant	cartridge	320.00
1698	8647	Stainless steel screws 30mm x 4mm	100 nos	44.00
1699	8648	Hermetically sealed double glazed unit made with 6mm thick clear float glass both side having 12mm air gap	sqm	2875.00
1700	8649	Stainless steel (SS 304 gr) adjustable friction window stay 205x19mm	each	213.00
1701	8650	Stainless steel (SS 304 gr) adjustable friction window stay 255x19mm	each	234.00
1702	8651	Stainless steel (SS 304 gr) adjustable friction window stay 355x19mm	each	303.00
1703	8652	Stainless steel (SS 304 gr) adjustable friction window stay 510x19mm	each	567.00
1704	8653	Stainless steel (SS 304 gr) adjustable friction window stay 710x19mm	each	1040.00
1705	8654	Masking tape	metre	3.00
1706	8655	Autoclaved aerated cement (AAC) blocks (60x20x20 cm `100 each)	cum	3500.00
1707	8656	Gypsum panel 666x500x100mm size	sqm	651.00
1708	8657	Bonding plaster for gypsum panel	kg	73.00
1709	8659	Water proof ply 12mm tk	sqm	870.00
1710	8660	Aluminum casement window fastener (anodised AC15)	each	59.00
1711	8661	Aluminum casement window fastener (powder coated)	each	63.00
1712	8662	Aluminum casement window fastener (polyester powder coated)	each	62.00
1713	8663	Aluminium round shape handle (anodised AC 15) outer dia 100 mm	each	71.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1714	8664	Aluminium round shape handle (powder coated) outer dia 100 mm	each	75.00
1715	8665	Aluminium round shape handle (polyster powder coated) outer dia 100 mm dia	each	81.00
1716	8666	Stainless steel screws 25mm x4mm	100 nos	51.00
1717	8667	UV stabilised 2mm tk plain FRP sheet	sqm	611.00
1718	8668	UV stabilised 2mm tk corrugated FRP sheet	sqm	726.00
1719	8669	Mangalore ridge tiles 20mm tk	each	32.00
1720	8670	Mangalore tiles 20mm tk	each	21.00
1721	8671	Precoated galvanised iron profile sheet 0.5mm TCT	sqm	455.50
1722	8672	Precoated galvanised steel plain ridges 0.50 mm TCT and 500 - 600 mm wide	metre	480.00
1723	8673	Precoated galvanised steel flashings/aprons 0.50mm TCT and upto 600mm wide	metre	480.00
1724	8674	Precoated galvanised steel gutter 600mm overall girth	metre	523.00
1725	8675	Precoated galvanised steel north light curves	metre	523.00
1726	8676	Precoated galvanised steel barge board (upto 300mm)	metre	480.00
1727	8677	Precoated galvanised steel crimp curve	sqm	609.00
1728	8678	1 mm tk 35mm wide bright finished stainless steel piano hinges	metre	63.00
1729	8682	Epoxy grout	kg	670.00
1730	8683	Red sand stone gang saw cut 30mm tk	sqm	610.00
1731	8684	White sand stone gang saw cut 30mm tk	sqm	632.00
1732	8689	Interlocking C.C.paver block (60mm tk M-30)	sqm	550.00
1733	8692	RBT reinforced barbed wire	metre	12.50
1734	8693	Turn buckle and strengthening bolt	each set	55.00
1735	8695	Chain link fabric fencing mesh of size 50x50mm made of G.I wire of dia 4mm	sqm	375.00
1736	8696	Chain link fabric fencing mesh of size 50x50mm made of G.I wire of dia 4mm,PVC coated to outer dia 5mm	sqm	410.00
1737	8697	Chain link fabric fencing mesh of size 25x25mm made of G.I wire of dia 3mm	sqm	485.00
1738	8698	Stainless steel cramps (wt-260gm) with nuts ,bolts & washer for dry stone cladding	each	135.00
1739	8699	8mm tk tapered edge calcium silicate board	sqm	385.00
1740	8700	10mm tk calcium silicate board	sqm	495.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1741	8701	SS pipe 304 grades with press fit technology as per JIS 3448 standard 48.60 mm outer dia	metre	860.00
1742	8702	Coupling / Socket fittings for 15.88 mm OD SS pipe	each	80.00
1743	8703	Telescopic drawer channels 300mm long	set	310.00
1744	8704	Stainless steel roller for sliding arrangement in racks/cupboard/cabinet shutter	each	12.00
1745	8705	50 mm x 42 mm x 2mm thick factory made door frame of PVC extruded sections in white,grey,or wooden finish	metre	189.00
1746	8706	25mm tk factory made PVC flush door shutter	sqm	2860.00
1747	8707	Factory made glass reinforced plastic door frame 90x45mm	metre	508.00
1748	8708	30mm tk factory made glass fibre reinforced plastic panel door shutter	sqm	2759.00
1749	8709	30mm tk factory made solid PVC profile panelled door single piece extruded profile decorative finish (wood grain printed on both sides)	sqm	3200.00
1750	8710	Factory made solid PVC door frame 60x30mm	metre	363.00
1751	8711	20mm factory made solid PVC panel door shutter	sqm	2940.00
1752	8712	30mm tk factory made solid PVC profile panelled door single piece extruded profile decorative finish	sqm	2710.00
1753	8713	Fiber glass reinforced plastic chajja	sqm	4150.00
1754	8714	Magnetic catcher triple strip vertical type	each	29.00
1755	8715	Magnetic catcher double strip horizontal type	each	22.00
1756	8716	100mm mortice lock with 6 levers for aluminium door	each	305.00
1757	8717	12.5mm tk glass fibre reinforced gypsum board	sqm	225.00
1758	8719	Teak wood lipping / moulded beading or Taj beading ornamental bleading of size 18x5mm	metre	38.00
1759	8720	Ceiling section 0.55mm thick having a knurled web of 51.55mm and , two flanges of 26 mm each with lips of 10.55mm	metre	62.00
1760	8721	Perimeter channel having one flange of 20mm and another flange of 30mm with thickness of 0.55mm and web of length 27 mm	metre	37.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1761	8722	Nylon sleeves & wooden screws(40mm)	each	3.00
1762	8723	Counter sunk ribbed head screw 25mm	100 nos	100.00
1763	8724	12mm tk marine plywood conforming to IS:710	sqm	1110.00
1764	8725	12mm tk fire retardant plywood conforming to IS:5509	sqm	1206.00
1765	8726	1.5mm tk decorative laminated sheet	sqm	706.00
1766	8727	1.0mm tk decorative laminated sheet	sqm	510.00
1767	8730	30mm tk factory made glass fibre reinforced plastic flush door shutter	sqm	3600.00
1768	8731	High polymer modified quickset tile adhesive	per kg	22.00
1769	8732	Synthetic ployster triangular fibre length 12mm, effective dia 10-40microns and specific gravity of 1.34 to 1.40	kg	500.00
1770	8733	Synthetic ployster triangular fibre of length 6mm, effective diameter 10-40microns and specific gravity of 1.34 to 1.40	kg	550.00
1771	8734	P.V.C. Single piece extruded door frame of profile size 50 mm x 47 mm with wall thickness of 5mm	metre	435.00
1772	8735	35mm tk factory made solid panel PVC door shutter of single piece extruded profile non decorative finished (Matt finished)	sqm	2890.00
1773	8736	35mm tk factory made solid panel PVC door shutter of single piece extruded profile decorative finished (wood grain finished)	sqm	3500.00
1774	8737	Stainless steel wire gauge (Gr-304) aperture 1.4mm & 0.5mm dia wire	sqm	1210.00
1775	8738	Factory made door frame fire rated (60 minutes) made with 16 SWG GI sheet of section 143mm X 57mm duly filled with vermiculite based concrete mix	metre	1450.00
1776	8739	Fire rated door shutter made with 16 SWG GI sheet (60 minutes) without panel	sqm	6785.00
1777	8740	Fire seal putty	kg	720.00
1778	8741	Clear fire resistant glass panes 6mm tk (60minutes)	sqm	31000.00
1779	8742	GI U beading of 16 SWG GI sheet (zinc coating > 120gm/sqm) with ceramic tape of suitable thickness and fire resistant primer coating	metre	400.00
1780	8743	Matrix mineral board	metre	95.00
1781	8744	Panic bar /latch (double point)	each	7000.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1782	8745	65x55x2mm tk factory made door frame of PVC extruded section white,grey or wooden finish	metre	500.00
1783	8746	37mm tk factory made shutter with style,rails& panels PVC extruded section white,or g	sqm	3300.00
1784	8747	75x53x2mm tk factory made door frame PVC extruded section white,grey or wooden finish	metre	540.00
1785	8748	37mm tk factory made fusion welded shutter with style,rails,&panels PVC extruded section in wooden finish	sqm	3500.00
1786	8750	Zinc alloy (white powder coated) casement handle for UPVC windows	each	200.00
1787	8751	Zinc alloy (white powder coated)touch lock for UPVC windows	each	185.00
1788	8752	Zinc alloy body with single nylon roller (weight bearing capacity to be 40 kg) for uPVC sliding windows	each	75.00
1789	8753	Zinc alloy rollers for UPVC door	each	147.00
1790	8753A	Stainless Steel (SS-304) with adjustable double nylon roller (weight bearing capacity to be 120kg) for uPVC sliding door / window	each	164.00
1791	8754	Zinc alloy (white powder coated) casement lock for UPVC sliding door / windows	each	165.00
1792	8755	Stainless steel friction hinge - 200x19x1.9mm for UPVC windows	each	310.00
1793	8756	Stainless steel friction hinge - 250x19x1.9mm for UPVC windows	each	375.00
1794	8757	Stainless steel friction hinges (SS - 304 grade) size 300x19x1.9mm for uPVC windows	each	486.00
1795	8758	Stainless steel friction hinges (SS - 304 grade) - 350x19x1.9mm for UPVC windows	each	565.00
1796	8759	Stainless steel friction hinges (SS - 304 grade) size -400x19x1.9mm for UPVC windows	each	680.00
1797	8760	UPVC extruded profile casement window frame (50mmx50mm)	metre	294.00
1798	8761	UPVC extruded profile casement window sash (style&rail)(62x34mm)	metre	267.00
1799	8762	UPVC extruded profile casement window mullion (intermediate section)(66x50mm)	metre	330.00
1800	8763	UPVC extrudedprofilecasement window'T'profile(1 vert.length betw.2 shutter)	metre	89.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1801	8764	UPVC extruded profile casement window glazing bead (12mmx18mm)	metre	89.00
1802	8765	UPVC extruded profile casement window frame (67mmx62mm)	metre	419.00
1803	8766	UPVC extruded profile casement window sash/mullion (67x75mm)(style,rail& intermedia	metre	473.00
1804	8767	UPVC extruded profile casement window glazing bead(35mmx18mm)	metre	152.00
1805	8768	UPVC extruded profile 2 track sliding frame (67x52mm)	metre	437.00
1806	8769	UPVC extruded profile sliding window sash(60mmx44mm)	metre	410.00
1807	8770	UPVC extruded profile sliding interlock window (1vert.length each shutter) 45.5x28mm	metre	89.00
1808	8771	UPVC extruded profile sliding door sash(80mmx44mm)	metre	517.00
1809	8772	Aluminium track on bottom rail for UPVC window	metre	42.50
1810	8773	Wool plie / weather pile strip for uPVC sliding window	meter	27.00
1811	8774	Aluminium grill as per IS 1868	kg	343.50
1812	8775	Steel galvanized tubular reinforcement for UPVC door/window	metre	81.00
1813	8776	Stainless steel dash fastener of 8mm dia & 75mm long bolt	each	25.00
1814	8777	GI fastener 100 x 8mm	each	21.00
1815	8778	Toughened glass 12mm tk	sqm	2625.00
1816	8779	SS pipe 304 gr with press fit technology -JIS 3448 standard 15.88mm OD	metre	190.00
1817	8780	SS pipe 304 gr with press fit technology -JIS 3448 standard 22.22mm OD	metre	333.00
1818	8781	SS pipe 304 gr with press fit technology -JIS 3448 standard 28.58mm OD	metre	410.00
1819	8782	SS pipe 304 gr with press fit technology -JIS 3448 standard 34.00mm OD	metre	615.00
1820	8783	SS pipe 304 gr with press fit technology -JIS 3448 standard 42.70mm OD	metre	760.00
1821	8783A	SS pipe 304 gr with press fit tech - JIS 3448 st- 48.60 mm outer dia	metre	1056.00
1822	8784	8mm tk Calcium silicate perforated tiles - 595x595mm	sqm	1045.00
1823	8785	8mm thick tapered edge calcium silicate board	sqm	385.00
1824	8786	Coupling / Socket fittings for 22.22mm outer dia SS pipe	each	116.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1825	8787	Coupling / Socket fittings for 28.58mm outer dia SS pipe	each	140.00
1826	8788	Coupling / Socket fittings for 34.00mm outer dia SS pipe	each	299.00
1827	8789	Coupling / Socket fittings for 42.70mm outer dia SS pipe	each	430.00
1828	8790	Coupling / Socket fittings for 48.60mm outer dia SS pipe	each	580.00
1829	8791	Reducer for 22.22mm X 15.88 mm outer dia SS pipe	each	140.00
1830	8792	Reducer for 28.58mm X 15.88 mm outer dia SS pipe	each	189.00
1831	8793	Reducer for 28.58mm X 22.22 mm outer dia SS pipe	each	195.00
1832	8794	Reducer for 34.00 mm x 15.88 mm outer dia SS pipe	each	290.00
1833	8795	Reducer for 34.00mm X 22.22 mm outer dia SS pipe	each	289.00
1834	8796	Reducer for 34.00mm X 28.58 mm outer dia SS pipe	each	315.50
1835	8797	Reducer for 42.70mm X 15.88 mm outer dia SS pipe	each	481.00
1836	8798	Reducer for 42.70mm X 22.22 mm outer dia SS pipe	each	485.00
1837	8799	Reducer for 42.70mm X 28.58 mm outer dia SS pipe	each	486.00
1838	8800	Reducer for 42.70mm X 34.00 mm outer dia SS pipe	each	520.00
1839	8801	Reducer for 48.60mm X 15.88 mm outer dia SS pipe	each	610.00
1840	8802	Reducer for 48.60mm X 22.22 mm outer dia SS pipe	each	616.00
1841	8803	Reducer for 48.60mm X 28.58 mm outer dia SS pipe	each	619.00
1842	8804	Reducer for 48.60mm X 34.00 mm outer dia SS pipe	each	625.00
1843	8805	Reducer for 48.60mm X 42.70 mm outer dia SS pipe	each	550.00
1844	8806	Slip coupling / socket 15.88mm outer dia SS pipe	each	155.00
1845	8807	Slip coupling / socket 22.22mm outer dia SS pipe	each	240.00
1846	8808	Slip coupling / socket 28.58mm outer dia SS pipe	each	310.00
1847	8809	Slip coupling / socket 34.00mm outer dia SS pipe	each	462.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1848	8810	Slip coupling / socket 42.70mm outer dia SS pipe	each	635.00
1849	8811	Slip coupling / socket 48.60mm outer dia SS pipe	each	790.00
1850	8812	Elbow 90 degree for 15.88 mm outer dia SS pipe	each	116.50
1851	8813	Elbow 90 0 for 22.22 mm outer dia SS pipe	each	200.00
1852	8814	Elbow 90 0 for 28.58 mm outer dia SS pipe	each	280.00
1853	8815	Elbow 90 0 for 34.00 mm outer dia SS pipe	each	560.00
1854	8816	Elbow 90 0 for 42.70 mm outer dia SS pipe	each	820.00
1855	8817	Elbow 90 0 for 48.60 mm outer dia SS pipe	each	910.00
1856	8818	Reducing Elbow 90 0 for 22.22mm x15.88mm outer dia SS pipe	each	200.00
1857	8819	Reducing Elbow 90 0 for 28.58mm x15.88mm outer dia SS pipe	each	270.00
1858	8820	Reducing Elbow 90 0 for 28.58mm x22.22mm outer dia SS pipe	each	296.50
1859	8821	Reducing Elbow 90 0 for 34.00mm x22.22mm outer dia SS pipe	each	410.00
1860	8822	Reducing Elbow 90 0 for 34.00mm x28.58mm outer dia SS pipe	each	490.00
1861	8823	Reducing Elbow 90 0 for 42.70mm x34.00mm outer dia SS pipe	each	640.00
1862	8824	Equal tee for 15.88 mm outer dia SS pipe	each	220.00
1863	8825	Equal tee for 22.22 mm outer dia SS pipe	each	310.00
1864	8826	Equal tee for 28.58 mm outer dia SS pipe	each	390.00
1865	8827	Equal tee for 34.00 mm outer dia SS pipe	each	805.00
1866	8828	Equal tee for 42.70mm outer dia SS pipe	each	1080.00
1867	8829	Equal tee for 48.60mm outer dia SS pipe	each	1320.00
1868	8830	Reducing Tee for 22.22mm x15.88mm outer dia SS pipe	each	274.00
1869	8831	Reducing Tee for 28.58mm x15.88mm outer dia SS pipe	each	367.00
1870	8832	Reducing Tee for 28.58mm x22.22mm outer dia SS pipe	each	389.00
1871	8833	Reducing Tee for 34.00mm x15.88mm outer dia SS pipe	each	690.00
1872	8834	Reducing Tee for 34.00mm x22.22mm outer dia SS pipe	each	728.00
1873	8835	Reducing Tee for 34.00mm x28.58mm outer dia SS pipe	each	745.00
1874	8836	Reducing Tee for 42.70mm x15.88mm outer dia SS pipe	each	1140.00
1875	8837	Reducing Tee for 42.70mm x22.22mm outer dia SS pipe	each	1090.00
1876	8838	Reducing Tee for 42.70mm x28.58mm outer dia SS pipe	each	1100.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1877	8839	Reducing Tee for 42.70mm x34.00mm outer dia SS pipe	each	1120.00
1878	8840	Reducing Tee for 48.60mm x15.88mm outer dia SS pipe	each	1195.00
1879	8841	Reducing Tee for 48.60mm x22.22mm outer dia SS pipe	each	1210.00
1880	8842	Reducing Tee for 48.60mm x28.58mm outer dia SS pipe	each	1265.00
1881	8843	Reducing Tee for 48.60mm x34.00mm outer dia SS pipe	each	1285.00
1882	8844	Reducing Tee for 48.60mm x42.70mm outer dia SS pipe	each	1320.00
1883	8845	Stainless steel Male thread Tee for 15.88 mm outer dia x 15mm nominal dia threaded	each	365.00
1884	8846	Stainless steel Male thread Tee for 22.22 mm outer dia x 15mm nominal dia threaded	each	440.00
1885	8847	Stainless steel Male thread Tee for 22.22 mm outer dia x 20mm nominal dia threaded	each	465.00
1886	8848	Stainless steel Male thread Tee for 28.58 mm outer dia x 15mm nominal dia threaded	each	540.00
1887	8849	Stainless steel Male thread Tee for 28.58 mm outer dia x 20mm nominal dia threaded	each	545.00
1888	8850	Stainless steel Male thread Tee for 28.58 mm outer dia x 25mm nominal dia threaded	each	610.00
1889	8851	Stainless steel Male thread Tee for 34.00 mm outer dia x 15mm nominal dia threaded	each	780.00
1890	8852	Stainless steel Male thread Tee for 34.00 mm outer dia x 20mm nominal dia threaded	each	805.00
1891	8853	Stainless steel Male thread Tee for 34.00 mm outer dia x 25mm nominal dia threaded	each	1010.00
1892	8854	Stainless steel Male thread Tee for 34.00 mm outer dia x 32mm nominal dia threaded	each	1270.00
1893	8855	Stainless steel Male thread Tee for 42.70 mm outer dia x 15mm nominal dia threaded	each	1195.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1894	8856	Stainless steel Male thread Tee for 42.70 mm outer dia x 20mm nominal dia threaded	each	1205.00
1895	8857	Stainless steel Male thread Tee for 42.70 mm outer dia x 25mm nominal dia threaded	each	1310.00
1896	8858	Stainless steel Male thread Tee for 42.70 mm outer dia x 32mm nominal dia threaded	each	1460.00
1897	8859	Stainless steel Male thread Tee for 42.70 mm outer dia x 40mm nominal dia threaded	each	1780.00
1898	8860	Stainless steel Male thread Tee for 48.60 mm outer dia x 15mm nominal dia threaded	each	1275.00
1899	8861	Stainless steel Male thread Tee for 48.60 mm outer dia x 20mm nominal dia threaded	each	1330.00
1900	8862	Stainless steel Male thread Tee for 48.60 mm outer dia x 25mm nominal dia threaded	each	1390.00
1901	8863	Stainless steel Male thread Tee for 48.60 mm outer dia x 32mm nominal dia threaded	each	1660.00
1902	8864	Stainless steel Male thread Tee for 48.60 mm outer dia x 40mm nominal dia threaded	each	1820.00
1903	8865	Stainless steel Male thread Tee for 48.60 mm outer dia x 50mm nominal dia threaded	each	2230.00
1904	8866	Stainless steel Female thread Tee for 15.88 mm outer dia x 15mm nominal dia threaded	each	375.00
1905	8867	Stainless steel Female thread Tee for 22.22 mm outer dia x 15mm nominal dia threaded	each	440.00
1906	8868	Stainless steel Female thread Tee for 22.22 mm outer dia x 20mm nominal dia threaded	each	460.00
1907	8869	Stainless steel Female thread Tee for 28.58 mm outer dia x 15mm nominal dia threaded	each	575.00
1908	8870	Stainless steel Female thread Tee for 28.58 mm outer dia x 20mm nominal dia threaded	each	580.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1909	8871	Stainless steel Female thread Tee for 28.58 mm outer dia x 25mm nominal dia threaded	each	645.00
1910	8872	Stainless steel Female thread Tee for 34.00 mm outer dia x 15mm nominal dia threaded	each	865.00
1911	8873	Stainless steel Female thread Tee for 34.00 mm outer dia x 20mm nominal dia threaded	each	880.00
1912	8874	Stainless steel Female thread Tee for 34.00 mm outer dia x 25mm nominal dia threaded	each	998.00
1913	8875	Stainless steel Female thread Tee for 34.00 mm outer dia x 32mm nominal dia threaded	each	1170.00
1914	8876	Stainless steel Female thread Tee for 42.70 mm outer dia x 15mm nominal dia threaded	each	1160.00
1915	8877	Stainless steel Female thread Tee for 42.70 mm outer dia x 20mm nominal dia threaded	each	1170.00
1916	8878	Stainless steel Female thread Tee for 42.70 mm outer dia x 25mm nominal dia threaded	each	1320.00
1917	8879	Stainless steel Female thread Tee for 42.70 mm outer dia x 32mm nominal dia threaded	each	1385.00
1918	8880	Stainless steel Female thread Tee for 42.70 mm outer dia x 40mm nominal dia threaded	each	1510.00
1919	8881	Stainless steel Female thread Tee for 48.60 mm outer dia x 15mm nominal dia threaded	each	1385.00
1920	8882	Stainless steel Female thread Tee for 48.60 mm outer dia x 20mm nominal dia threaded	each	1400.00
1921	8883	Stainless steel Female thread Tee for 48.60 mm outer dia x 25mm nominal dia threaded	each	1458.00
1922	8884	Stainless steel Female thread Tee for 48.60 mm outer dia x 32mm nominal dia threaded	each	1545.00
1923	8885	Stainless steel Female thread Tee for 48.60 mm outer dia x 40mm nominal dia threaded	each	1610.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1924	8886	Stainless steel Female thread Tee for 48.60 mm outer dia x 50mm nominal dia threaded	each	1770.00
1925	8887	Stainless steel Female threaded Connector /Adapter for 15.88 mm OD x 15mm nominal threaded	each	255.00
1926	8888	Stainless steel Female threaded Connector /Adapter for 22.22 mm OD x 15mm nominal threaded	each	310.00
1927	8889	Stainless steel Female threaded Connector /Adapter for 22.22 mm OD x 20mm nominal threaded	each	320.00
1928	8890	Stainless steel Female threaded Connector /Adapter for 28.58 mm OD x 15mm nominal threaded	each	372.00
1929	8891	Stainless steel Female threaded Connector /Adapter for 28.58 mm OD x 20mm nominal threaded	each	385.00
1930	8892	Stainless steel Female threaded Connector /Adapter for 28.58 mm OD x 25mm nominal threaded	each	455.00
1931	8893	Stainless steel Female threaded Connector /Adapter for 34.00 mm OD x 25mm nominal threaded	each	550.00
1932	8894	Stainless steel Female threaded Connector /Adapter for 34.00 mm OD x 32mm nominal threaded	each	725.00
1933	8895	Stainless steel Female threaded Connector /Adapter for 42.70 mm OD x 32mm nominal threaded	each	772.00
1934	8896	Stainless steel Female threaded Connector /Adapter for 42.70 mm OD x 40mm nominal threaded	each	912.00
1935	8897	Stainless steel Female threaded Connector /Adapter for 48.60 mm OD x 40mm nominal threaded	each	1200.00
1936	8898	Stainless steel Female threaded Connector /Adapter for 48.60 mm OD x 50mm nominal threaded	each	1300.00
1937	8899	Stainless steel Male threaded Connector /Adapter for 15.88 mm OD x 15mm nominal threaded	each	260.00
1938	8900	Stainless steel Male threaded Connector /Adapter for 22.22 mm OD x 15mm nominal threaded	each	310.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1939	8901	Stainless steel Male threaded Connector /Adapter for22.22 mm OD x20mm nominal threaded	each	340.00
1940	8902	Stainless steel Male threaded Connector /Adapter for28.58 mm OD x20mm nominal threaded	each	420.00
1941	8903	Stainless steel Male threaded Connector /Adapter for28.58 mm OD x25mm nominal threaded	each	430.00
1942	8904	Stainless steel Male threaded Connector /Adapter for34.00 mm OD x25mm nominal threaded	each	620.00
1943	8905	Stainless steel Male threaded Connector /Adapter for34.00 mm OD x32mm nominal threaded	each	760.00
1944	8906	Stainless steel Male threaded Connector /Adapter for42.70 mm OD x32mm nominal threaded	each	870.00
1945	8907	Stainless steel Male threaded Connector /Adapter for42.70 mm OD x40mm nominal threaded	each	975.00
1946	8908	Stainless steel Male threaded Connector /Adapter for48.60 mm OD x40mm nominal threaded	each	1127.50
1947	8909	Stainless steel Male threaded Connector /Adapter for48.60 mm OD x50mm nominal threaded	each	1525.50
1948	8910	Stainless steel Valve connector for 15.88mm OD X15mm nominal dia threaded	each	315.00
1949	8911	Stainless steel Valve connector for 22.22mm OD X15mm nominal dia threaded	each	370.00
1950	8912	Stainless steel Valve connector for 22.22mm OD X20mm nominal dia threaded	each	400.00
1951	8913	Stainless steel Valve connector for 28.58mm OD X25mm nominal dia threaded	each	568.00
1952	8914	Stainless steel Valve connector for34.00mm OD X32mm nominal dia threaded	each	843.00
1953	8915	Stainless steel Valve connector for42.70mm OD X40mm nominal dia threaded	each	1200.00
1954	8916	Stainless steel Valve connector for48.60mm OD X50mm nominal dia threaded	each	1600.00
1955	8917	Stainless steel Female threaded elbow 90 0 for 15.88mm OD x 15mm nominal dia threaded	each	262.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1956	8918	Stainless steel Female threaded elbow 90 0 for 22.22mm OD x 15mm nominal dia threaded	each	355.00
1957	8919	Stainless steel Female threaded elbow 90 0 for 22.22mm OD x 20mm nominal dia threaded	each	368.00
1958	8920	Stainless steel Female threaded elbow 90 0 for 28.58mm OD x 25mm nominal dia threaded	each	548.00
1959	8921	Stainless steel Female threaded elbow 90 0 for 34.00mm OD x 32mm nominal dia threaded	each	946.00
1960	8922	Stainless steel Female threaded elbow 90 0 for 42.70mm OD x 32mm nominal dia threaded	each	1197.00
1961	8923	Stainless steel Female threaded elbow 90 0 for 42.70mm OD x 40mm nominal dia threaded	each	1290.00
1962	8924	Stainless steel Female threaded elbow 90 0 for 48.60mm OD x 40mm nominal dia threaded	each	1430.00
1963	8925	Stainless steel Female threaded elbow 90 0 for 48.60mm OD x50mm nominal dia threaded	each	1660.00
1964	8926	Stainless steel Male threaded elbow 90 0 for 15.88mm OD x15mm nominal dia threaded	each	275.00
1965	8927	Stainless steel Male threaded elbow 90 0 for 22.22mm OD x15mm nominal dia threaded	each	352.00
1966	8928	Stainless steel Male threaded elbow 90 0 for 22.22mm OD x20mm nominal dia threaded	each	367.00
1967	8929	Stainless steel Male threaded elbow 90 0 for 28.58mm outer dia X 25 mm nominal dia threaded	each	492.00
1968	8930	Stainless steel Male threaded elbow 90 0 for 34.00mm outer dia X 25 mm nominal dia threaded	each	787.00
1969	8931	Stainless steel Male threaded elbow 90 0 for 34.00mm outer dia X 32 mm nominal dia threaded	each	955.00
1970	8932	Stainless steel Male threaded elbow 90 0 for 42.70mm outer dia X 32 mm nominal dia threaded	each	1210.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1971	8933	Stainless steel Male threaded elbow 90 0 for 42.70mm outer dia X 40 mm nominal dia threaded	each	1375.00
1972	8934	Stainless steel Male threaded elbow 90 0 for 48.60mm outer dia X 40 mm nominal dia threaded	each	1540.00
1973	8935	Stainless steel Male threaded elbow 90 0 for 48.60mm outer dia X 50 mm nominal dia threaded	each	1856.00
1974	8936	Stainless steel Cap for 15.88 mm outer dia pipe	each	61.00
1975	8937	Stainless steel Cap for 22.22 mm outer dia pipe	each	86.00
1976	8938	Stainless steel Cap for 28.58 mm outer dia pipe	each	120.00
1977	8939	Stainless steel Cap for 34.00 mm outer dia pipe	each	220.50
1978	8940	Stainless steel Cap for 42.70 mm outer dia pipe	each	327.00
1979	8941	Stainless steelCap for48.60 mm outer dia pipe	each	428.00
1980	8942	Stainless steel Pipe bridge for 15.88 mm outer dia pipe	each	290.00
1981	8943	Stainless steel Pipe bridge for 22.22 mm outer dia pipe	each	365.00
1982	8944	Stainless steel Pipe bridge for 28.58 mm outer dia pipe	each	550.00
1983	8945	4 point façade glass bracket without flat head bolts	nos	4500.00
1984	8946	2 point façade glass bracket (wall mounted without flat head bolt)	nos	2300.00
1985	8947	1 point façade glass bracket (wall mounted without flat head bolt)	nos	1810.00
1986	8948	Flate haed bolt for brackets of spider glazing	nos	875.00
1987	8949	400 mm long fin plate without fastners	pair	7960.00
1988	8953	Micro silica	kg	45.00
1989	8954	Stop end tubes for diaphragmwall 600mm dia	sqm	6.50
1990	8955	Driving end tubes for diaphragm wall 600mm dia	sqm	97.50
1991	8956	Bi- Axial extruded GeoGrids of minimum Tensile strength 15 kN/m in the longitudinal and transverse direction	sqm	135.00
1992	8957	Bi- Axial extruded GeoGrids of minimum Tensile strength 20 kN/m in the longitudinal and transverse direction	sqm	155.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
1993	8958	Bi- Axial extruded GeoGrids of minimum Tensile strength 30 kN/m in the longitudinal and transverse direction	sqm	250.00
1994	8959	Bi- Axial extruded GeoGrids of minimum Tensile strength 40 kN/m in the longitudinal and transverse direction	sqm	370.00
1995	8960	Geosynthetic drainage with two filtering non woven geotextiles having a "W" configuration as longitudinal parallel channels. Minimum thickness to be 7.2mm , with two filltering UV stablized polypropylene nonwoven geotextile of minimum thickness of 0.75mm having pores of 150 micron and tensile strength of 8.0 kN/m and having plane flow capacity of 2.1L / (m.s) at hydraulic gradient of 1.0 & 20 kPa pressure tensile strength of 18kN/m , with mass per unit area of 740 gsm .	sqm	710.00
1996	8961	Geosynthetic drainage Composite having themobonding a drainage core - HDPE geonet comprises of two sets of parallel overlayed ribs integrally connected to have a rhomboidal shape with a polyethylene film and a nonwoven geotextile having mass per unit area 130 g / sq.m and tensile strength of 8.0 kN/m having in plane flow capacity of 0.7 L / (m.s) at hydraulic gradient of 1.0 & 20 kPa pressure and tensile strength of 13.5kN/m , with mass per unit area of 830 gsm.	sqm	845.00
1997	8962	Synthetic Geogrid having uliimate tensile strength - 100 kN/m	sqm	300.00
1998	8963	Synthetic Geogrid having uliimate tensile strength - 150 kN/m	sqm	310.00
1999	8964	Synthetic Geogrid having uliimate tensile strength - 200 kN/m	sqm	430.00
2000	8965	Synthetic Geogrid having uliimate tensile strength - 250 kN/m	sqm	480.00
2001	8966	Synthetic Geogrid having uliimate tensile strength - 300 kN/m	sqm	490.00
2002	8967	Synthetic Geogrid having uliimate tensile strength - 350 kN/m	sqm	500.00
2003	8968	Synthetic Geogrid having uliimate tensile strength - 400 kN/m	sqm	640.00
2004	8969	Synthetic Geogrid having uliimate tensile strength - 500 kN/m	sqm	720.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2005	8970	Synthetic Geogrid having ultimate tensile strength - 600 kN/m	sqm	740.00
2006	8971	Synthetic Geogrid having ultimate tensile strength - 700 kN/m	sqm	897.00
2007	8972	Synthetic Geogrid having ultimate tensile strength - 800 kN/m	sqm	1005.00
2008	8973	Synthetic Geogrid having ultimate tensile strength - 900 kN/m	sqm	1210.00
2009	8974	Synthetic Geogrid having ultimate tensile strength - 1000 kN/m	sqm	1375.00
2010	8975	Synthetic Geogrid having ultimate tensile strength - 1100 kN/m	sqm	1340.00
2011	8976	Synthetic Geogrid having ultimate tensile strength -1200 kN/m	sqm	1500.00
2012	8977	Aluminium profile industrial troughed sheet of alloy 31500 / 31000/40800, conforming to IS 1254 , IS 737 , IS 2676 , 0.71mm thick , the profile detail width 1044 / 920 mm , cover width 1000 / 875 mm	sqm	820.00
2013	8978	Aluminium profile industrial troughed sheet of alloy 31500 / 31000/40800, conforming to IS 1254 , IS 737 , IS 2676 , 0.91mm thick , the profile detail width 1044 / 920 mm , cover width 1000 / 875 mm	sqm	1100.00
2014	9001	Dry excavation in shore area	cum	80.00
2015	9001A	C.P Brass Centre Hole Basin Mixer with Cast Spout	each	1250.00
2016	9003	Cost of RCC slotted ring 900 mm dia , 300mm ht, 40mm tk	no	260.00
2017	9004	Cost of RCC ring 900 mm dia , 300mm ht, 40mm tk	no	230.00
2018	9005	Cost of RCC ring with slab 900 mm dia , 300mm ht, 40mm tk	no	450.00
2019	9101	Mineral fibre of size 600x600 mm 1/2"thick	sqm	460.00
2020	9102	Metal grid of hot dipped galvanized steel main T bars 24x33mm 3.6mts at 1.2m c/c	no	200.00
2021	9103	Metal gridof hotdipped galvanized steel cross T bars 24x25mm 0.27mmtkt1.2m	no	75.00
2022	9104	Metal gridof hotdipped galvanized steel cross T bars 24x25mm 0.27mmtkt0.6m	no	40.00
2023	9105	Wall angle of size 24x24x0.27mm tk,length 3m	no	130.00
2024	9106	Hanger rods 60 cm long with bolts @ 1.2 m c/c	no	20.00
2025	9107	Labour charges for providing Dakin mineral false ceiling with all related works	sqm	300.00
2026	9108	GI frame size 80x26x0.55mm tk with screw	metre	180.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2027	9109	Labour charges for providing superior fire rated gypsum board scaffolding	sqm	300.00
2028	9110	600x600mm eboard tiles 6mm tk	sqm	250.00
2029	9111	Powder coated GI grid structure of size 24x 33x0.27 mm tk	metre	60.00
2030	9112	labourcharges- providing eboard false ceiling suspended onGI section with scaffo	sqm	250.00
2031	9113	Al.composite panel 3mm thick	sqm	2750.00
2032	9114	Al.sec.of size 38x38 mm approx.@ 0.490 kg / mt	metre	319.00
2033	9115	la.cha.providing wall panelling with Al.rollcopated compo.panel	sqm	340.00
2034	9201	Conducting test 10 m depth from the ground level	job	8200.00
2035	9202	Extra for conducting test in additional metre from 10m to 20m depth	metre	1000.00
2036	9203	Extra for conducting test in additional metre from 20m to 30m depth	metre	1100.00
2037	9204	Extra for conducting test in additional metre from 30m to 40m depth	metre	1450.00
2038	9205	Conducting chemical analysis of ground water	job	2400.00
2039	9206	Conducting chemical analysis of sub.soil	job	2400.00
2040	9207	Making trial pits of required size upto max.of 1.5m depth	job	6100.00
2041	9208	Collecting disturbed and / or undisturbed soil from the trial pit	job	4900.00
2042	9999	Sundries	Ls	2.00
2043	9999A	M30 grade cover block	each	2.00
2044	9999B	Incidental charge (8.33)	job	10.00
2045	9999C	Upto 5km (82.36)	job	85.00
2046	9999G	Loading (16)	job	20.00
2047	9999H	Unloading (16)	job	20.00
2048	B001	150mm plain UPVC casing pipe Class 'CM' IS 12818	metre	650.00
2049	B001A	UPVC end cap for 150mm dia pipe	no	250.00
2050	B002	200 mm plain UPVC casing pipe Class 'CM' IS 12818	metre	1527.00
2051	B004	200mm slotted UPVC casing pipe Class RS IS 12818	metre	1054.00
2052	B006	M.S.centering guide 200 mm	metre	140.00
2053	B007	M.S.endcap 200mm	each	1234.00
2054	B011	Pebbles	cum	4000.00
2055	B013	M.S.Top cover	each	436.00
2056	B014	Making 3mm slots in 150mm dia UPVC casing pipe	Rmt	55.00
2057	B015	M.S 8" to 4" saddle set with 4" coupling	each	1950.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2058	B016	Making 3 mm slots in 200 mm dia UPVC casing pipe	Rmt	72.00
2059	2610A	Laterite stone dressed for building work (For Mahe Region)	100 nos	4840.00
2060	2640	Clear,toughened,interlayer,non-wired fire resistant (120min) glass panes 11mm tk	sqm	27500.00
2061	2641	G.I.U beading of 1.6mm tk G.I.Sheet with M4x38mm SS screws	metre	260.00
2062	2642	Ceramic tape 5 x 20 mm size	metre	440.00
2063	8208	Stainless steel fancy handles (125mm) for kitchen cabinet	10 nos	770.00
2064	8209	Stainless steel fancy handles (100mm) for kitchen cabinet	10 nos	550.00
2065	8210A	Stainless steel fancy handles (75mm) for kitchen cabinet	10 nos	330.00
2066	8121	uPVC extruded (small series) casement window frame 47x50mm incl 5% wastage	metre	247.00
2067	8122	uPVC extruded (small series) casement sash/window mullion 47x68 mm incl 5% waste	metre	275.00
2068	8125	uPVC extruded glazing bead of appor.dime.for small series casement window Sash	metre	100.00
2069	3991	GI (1.6+or- 0.2mm) tk reinforcement for small series casement window frame,sash,	metre	72.00
2070	3995	G.I.fasteners 100 x 8 mm	each	18.00
2071	8126	uPVC extruded (big series) casement window frame 67x60mm incl 5% wastage	metre	390.00
2072	8128	uPVC extruded (big series) casement window sash/mullion 67x80mm	metre	470.00
2073	8130	uPVC extruded glazing bead - for big series	metre	125.00
2074	3992	GI (1.6+or- 0.2mm) tk reinforcement for big series casement window frame,sash,	metre	77.00
2075	8127	uPVC extruded (big series) casement door frame size 67 x64 mm i.c 5 %waste	metre	410.00
2076	8129	uPVC extruded (big series) casement door sash size 67 x110 mm i.c 5 %waste	metre	600.00
2077	3993	GI (1.6 +or-0.2mm)tk reinforcement for big series casement door sash waste 5%	metre	105.00
2078	8116	Zinc alloy (white powder coated)3D hinges for uPVC door	each	455.00
2079	8117	Zinc alloy (white pc coated)handles with zinc plated mild steel mutipoint	each set	2200.00
2080	8133	uPVC extruded (small series) 2 track sliding window frame size 52x44mm	metre	300.00
2081	8137	uPVC extruded (small series) 2 track sliding window sash size 32x60mm	metre	280.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2082	8140	uPVC extruded interlock of appropriate dimension for small series sliding window	metre	82.00
2083	8135	uPVC extruded (small series) 3 track sliding window frame size 92x44mm	metre	400.00
2084	8134	uPVC extruded (big series) 2 track sliding window frame size 67x50mm	metre	410.00
2085	8138	uPVC extruded (big series) 2 track sliding window sashsize 46x62mm	metre	345.00
2086	8141	uPVC extruded interlock of appropriate dimension for bigl series sliding window	metre	93.00
2087	8132	uPVC extruded gl.bead of appropriate dimension for big sr.sliding window sash	metre	90.00
2088	8136	uPVC extruded (big series) 3 track sliding window frame size 116x45mm	metre	555.00
2089	8139	uPVC extruded (big series) 3 track sliding window sash size 46x62mm	metre	345.00
2090	8131	uPVC extruded gl.bead of appro.dime for small series sliding window	metre	60.00
2091	3994	GI (1.6+or-0.2mm) tk reinforcement for big series sliding window sash	metre	95.00
2092	8118	Zinc alloy (white pc coat)handles al.with zinc plated ms multipoint -sl.window	each set	1050.00
2093	8142	uPVC extruded inline adopter	metre	95.00
2094	8143	uPVC extruded 2 track sliding door frame	metre	357.00
2095	8119	Zinc alloy (wt powder coated)handles with key along wt zinc plated	each set	1250.00
2096	8749	Zinc alloy (wt powder coated) touch lock wt.hook for wire mesh shutter	each	135.00
2097	8624	Border tiles 200x75mm size 5mm tk	each	18.00
2098	0772	White cement based polymer modified self curing compound in powder form	kg	17.00
2099	8500	Water for jetting / blowback	1000 litre	1650.00
2100	0087	H/C of Suction jetting machine 2200 PSI machine i/c POL&operator	day	38000.00
2101	0085	Using cost of Ultra Violet Radiation tube	hour	210.00
2102	1890	Centrifugally sand cast (spun) S&S "P" or "S" trap	each	330.00
2103	1880	Dismantled "P" or "S" trap scrap (app.Wt 2kg)	kg	25.00
2104	9007	C.P.Brass Centre Hole basin mixer with cast spout	each	1320.00
2105	1313	8 mm dia C.P.Brass / S.S.Jet with flexible tube upto 1 metre long with S.S plate	each	220.00
2106	7121	Bottle Trap	each	720.00
2107	7122	CP Brass single lever telephonic wall mixer of approved make	each	4500.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2108	7621	Hubless centrifugallycast(spun) iron pipes as per IS 15905 -100mmdia (3m length)	metre	800.00
2109	7622	Hubless centrifugallycast(spun) iron pipes as per IS 15905 -75mmdia (3m length)	metre	650.00
2110	7639	Hubless centrifugallycast(spun) iron bend with access door -100mm dia -IS15905	each	420.00
2111	7623	Hubless centrifugallycast(spun) iron plain bend - IS 15905-100mm dia	each	265.00
2112	7624	Hubless centrifugallycast(spun) iron plain bend IS 15905-75mm dia	each	180.00
2113	7625	Hubless centrifugallycast(spun) iron double eq.plain junction-IS 15905	each	532.00
2114	7626	Hubless centrifugally cast(spun) iron double equal pl.junction	each	286.00
2115	7640	Hubless centrifugally cast(spun) iron bend with access door 75mm dia IS 15905	each	303.00
2116	7627	Hubless centrifugally cast(spun) iron single equal pl.junction-100x100x100	each	410.00
2117	7628	Hubless centrifugally cast(spun) iron single equal pl.junction75x75x75	each	225.00
2118	7629	Hubless centrifugally cast(spun) iron double unequal pl.junction100x100x75x75	each	421.00
2119	7630	Hubless centrifugally cast(spun) iron single unequal pl.junction100x100x75	each	392.00
2120	7631	Hubless centrifugallycast(spun)iron double equal pl.invert branch100x100x100x100	each	653.00
2121	7632	Hubless centrifugallycast(spun)iron single equal pl.invert branch100x100x100	each	410.00
2122	7633	Hubless centrifugallycast(spun)iron single equal pl.invert branch75x75x75	each	270.00
2123	7634	Hubless centrifugallycast(spun)iron sl.unequal pl.invert branch45deg.100x100x75	each	450.00
2124	7635	Hubless centrifugallycast(spun)iron 65mmoffset 100mm diapipe _IS 15905	each	378.00
2125	7636	Hubless centrifugallycast(spun)iron75mmoffset 100mm diapipe _IS 15905	each	308.00
2126	7637	Hubless centrifugallycast(spun)iron130mmoffset 100mm diapipe _IS 15905	each	457.00
2127	7638	Hubless centrifugallycast(spun)iron 130mmoffset 75mm diapipe _IS 15905	each	325.00
2128	7644	SS 304gr shielded coupling EPDM rubber gasket 100mm dia Hubless	each	287.00
2129	7645	SS 304gr shielded coupling EPDM rubber gasket 75mm dia Hubless	each	262.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2130	7642	Hubless centrifugallycast(spun)iron trap 100mm inlet&100mm outlet	each	560.00
2131	7643	Hubless centrifugallycast(spun)iron trap 100mm inlet&75mm outlet	each	404.00
2132	0593	C.P.Brass Extension Nipple (1/2"x2" size)	each	45.00
2133	2604	Weather/structural non sag elastomeric PU sealant (600 mlSausage)for joints	each	532.00
2134	0352	Integral / crystalline admixture	kg	309.00
2135	8511	Fibre reinforced elastomeric liquid water proofing membrane	litre	199.00
2136	0351	Integral / crystalline slurry	kg	252.00
2137	8512	Cementitious water proofing coating with elastic polymers	kg	190.00
2138	0354	Integral / crystalline dry shake	kg	365.00
2139	8513	Acrylic modified resin based texture	kg	49.00
2140	0353	Crystalline mortar @ 1.50 kg per meter	kg	248.00
2141	0355	Swellable type water stop tape (crystalline sealing compound)	metre	416.00
2142	0356	Swellable type water stop primer (@3.78 litre per 240 running metre)	litre	1690.00
		BASIC RATE FOR PUBLIC HEALTH ITEMS - CHAPTER No.31,32,33		
		Note: These rates are at site of work and are exclusive of GST & Contractors profit		
2143	10A	UNLOADING-100mm dia	metre	0.63
2144	10B	UNLOADING-125mm dia	metre	0.84
2145	10C	UNLOADING-150mm dia	metre	1.05
2146	10D	UNLOADING-200mm dia	metre	1.70
2147	10E	UNLOADING-250mm dia	metre	2.42
2148	10F	UNLOADING-300mm dia	metre	2.99
2149	10G	UNLOADING-350mm dia	metre	3.54
2150	10H	UNLOADING-400mm dia	metre	5.71
2151	10I	UNLOADING-450 to 500mm dia	metre	6.98
2152	10J	UNLOADING-600 to 1000mm dia	metre	10.47
2153	10K	unloading below 100mm dia	metre	0.53
2154	1372A	65mm dia (Rubber insertion for flanged pippe joints)	each	25.00
2155	1372N	700mm dia (Rubber insertion for flanged pippe joints)	each	1043.00
2156	1372O	750mm dia (Rubber insertion for flanged pippe joints)	each	2250.00
2157	1372P	800mm dia (Rubber insertion for flanged pippe joints)	each	2541.00
2158	1372Q	900mm dia (Rubber insertion for flanged pippe joints)	each	2831.00
2159	1372R	1000mm dia (Rubber insertion for flanged pippe joints)	each	3696.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2160	1373A	80mm Dia (Rubber gasket styrene Butadiene Rubber(SBR) IS-5382&12820&ISI mark)	each	40.00
2161	1373B	100mm Dia (Rubber gasket styrene Butadiene Rubber(SBR) IS-5382&12820&ISI mark)	each	45.00
2162	1373C	150mm Dia (Rubber gasket styrene Butadiene Rubber(SBR) IS-5382&12820&ISI mark)	each	60.00
2163	1373D	200mm Dia (Rubber gasket styrene Butadiene Rubber(SBR) IS-5382&12820&ISI mark)	each	90.00
2164	1373E	250mm Dia (Rubber gasket styrene Butadiene Rubber(SBR) IS-5382&12820&ISI mark)	each	120.00
2165	1373F	300mm Dia (Rubber gasket styrene Butadiene Rubber(SBR) IS-5382&12820&ISI mark)	each	150.00
2166	1373G	350mm Dia (Rubber gasket styrene Butadiene Rubber(SBR) IS-5382&12820&ISI mark)	each	185.00
2167	1373H	400mm Dia (Rubber gasket styrene Butadiene Rubber(SBR) IS-5382&12820&ISI mark)	each	246.00
2168	1373I	450mm Dia (Rubber gasket styrene Butadiene Rubber(SBR) IS-5382&12820&ISI mark)	each	291.00
2169	1373J	500mm Dia (Rubber gasket styrene Butadiene Rubber(SBR) IS-5382&12820&ISI mark)	each	352.00
2170	1373K	600mm Dia (Rubber gasket styrene Butadiene Rubber(SBR) IS-5382&12820&ISI mark)	each	440.00
2171	1373L	700mm Dia(Rubber gasket styrene Butadiene Rubber(SBR) IS-5382&12820&ISI mark)	each	541.00
2172	1373M	750mm Dia (Rubber gasket styrene Butadiene Rubber(SBR) IS-5382&12820&ISI mark)	each	676.00
2173	1373N	800mm Dia (Rubber gasket styrene Butadiene Rubber(SBR) IS-5382&12820&ISI mark)	each	777.00
2174	1373O	900mm Dia (Rubber gasket styrene Butadiene Rubber(SBR) IS-5382&12820&ISI mark)	each	845.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2175	1373P	1000mm Dia (Rubber gasket styrene Butadiene Rubber(SBR) IS-5382&12820&ISI mark)	each	1081.00
2176	1374A	80mm Dia - Rubber gasket EPDM IS-5382, IS - 12820 & ISI mark	each	45.00
2177	1374B	100mm Dia - Rubber gasket EPDM IS-5382, IS - 12820 & ISI mark	each	55.00
2178	1374C	150mm Dia - Rubber gasket EPDM IS-5382, IS - 12820 & ISI mark	each	72.00
2179	1374D	200mm Dia - Rubber gasket EPDM IS-5382, IS - 12820 & ISI mark	each	109.00
2180	1374E	250mm Dia - Rubber gasket EPDM IS-5382, IS - 12820 & ISI mark	each	152.00
2181	1374F	300mm Dia - Rubber gasket EPDM IS-5382, IS - 12820 & ISI mark	each	203.00
2182	1374G	350mm Dia - Rubber gasket EPDM IS-5382, IS - 12820 & ISI mark	each	230.00
2183	1374H	400mm Dia - Rubber gasket EPDM IS-5382, IS - 12820 & ISI mark	each	320.00
2184	1374I	450mm Dia - Rubber gasket EPDM IS-5382, IS - 12820 & ISI mark	each	352.00
2185	1374J	500mm Dia - Rubber gasket EPDM IS-5382, IS - 12820 & ISI mark	each	440.00
2186	1374K	600mm Dia - Rubber gasket EPDM IS-5382, IS - 12820 & ISI mark	each	609.00
2187	1374L	700mm Dia - Rubber gasket EPDM IS-5382, IS - 12820 & ISI mark	each	906.00
2188	1374M	750mm Dia - Rubber gasket EPDM IS-5382, IS - 12820 & ISI mark	each	1048.00
2189	1374N	800mm Dia - Rubber gasket EPDM IS-5382, IS - 12820 & ISI mark	each	1147.00
2190	1374O	900mm Dia - Rubber gasket EPDM IS-5382, IS - 12820 & ISI mark	each	1257.00
2191	1374P	1000mm Dia - Rubber gasket EPDM IS-5382, IS - 12820 & ISI mark	each	1644.00
2192	1555A	Water meter standard quality	each	1017.00
2193	1559A	25 mm X 20 mm dia -GI reducer - IS-1239 part 2	each	34.00
2194	1559AA	150 mm x 80 mm dia-GI reducer - IS-1239 part 2	each	1797.00
2195	1559AB	150 mm x 100 mm dia-GI reducer - IS-1239 part 2	each	1800.00
2196	1559AC	150 mm x 125 mm dia-GI reducer - IS-1239 part 2	each	1800.00
2197	1559B	32 mm x 20 mm dia -GI reducer - IS-1239 part 2	each	48.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2198	1559C	32 mm x 25 mm dia -GI reducer - IS-1239 part 2	each	51.00
2199	1559D	40 mm x 20 mm dia -GI reducer - IS-1239 part 2	each	59.00
2200	1559D1	40 mm x 25 mm dia -GI reducer - IS-1239 part 2	each	64.00
2201	1559E	40 mm x 32 mm dia -GI reducer - IS-1239 part 2	each	64.00
2202	1559F	50 mm x 20 mm dia -GI reducer - IS-1239 part 2	each	85.00
2203	1559F1	50 mm x 25 mm dia -GI reducer - IS-1239 part 2	each	87.00
2204	1559G	50 mm x 32 mm dia -GI reducer - IS-1239 part 2	each	89.00
2205	1559H	50 mm x 40 mm dia -GI reducer - IS-1239 part 2	each	89.00
2206	1559I	65 mm x 20 mm dia -GI reducer - IS-1239 part 2	each	153.00
2207	1559I1	65 mm x 25 mm dia -GI reducer - IS-1239 part 2	each	153.00
2208	1559J	65 mm x 32 mm dia -GI reducer - IS-1239 part 2	each	153.00
2209	1559K	65 mm x 40 mm dia-GI reducer - IS-1239 part 2	each	153.00
2210	1559L	65 mm x 50 mm dia -GI reducer - IS-1239 part 2	each	153.00
2211	1559M	80 mm x 32 mm dia-GI reducer - IS-1239 part 2	each	225.00
2212	1559N	80 mm x 40 mm dia -GI reducer - IS-1239 part 2	each	225.00
2213	1559O	80 mm x 50 mm dia -GI reducer - IS-1239 part 2	each	225.00
2214	1559P	80 mm x 65 mm dia -GI reducer - IS-1239 part 2	each	225.00
2215	1559Q	100 mm x 40 mm dia -GI reducer - IS-1239 part 2	each	343.00
2216	1559R	100 mm x 50 mm dia-GI reducer - IS-1239 part 2	each	343.00
2217	1559S	100 mm x 65 mm dia -GI reducer - IS-1239 part 2	each	343.00
2218	1559T	100 mm x 80 mm dia -GI reducer - IS-1239 part 2	each	347.00
2219	1559U	125 mm x 50 mm dia -GI reducer - IS-1239 part 2	each	1314.00
2220	1559V	125 mm x 65 mm dia -GI reducer - IS-1239 part 2	each	1314.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2221	1559W	125 mm x 80 mm dia -GI reducer - IS-1239 part 2	each	1331.00
2222	1559X	125 mm x 100 mm dia-GI reducer - IS-1239 part 2	each	1331.00
2223	1559Y	150 mm x 50 mm dia -GI reducer - IS-1239 part 2	each	1792.00
2224	1559Z	150 mm x 65 mm dia -GI reducer - IS-1239 part 2	each	1792.00
2225	1560	15 mm dia - GI ELBOW - IS-1239 part 2	each	23.00
2226	1560A	20 mm dia - GI ELBOW - IS-1239 part 2	each	32.00
2227	1560B	25 mm dia - GI ELBOW - IS-1239 part 2	each	42.00
2228	1560C	32 mm dia - GI ELBOW - IS-1239 part 2	each	66.00
2229	1560D	40 mm dia - GI ELBOW - IS-1239 part 2	each	88.00
2230	1560E	50 mm dia - GI ELBOW - IS-1239 part 2	each	120.00
2231	1560F	65 mm dia - GI ELBOW - IS-1239 part 2	each	235.00
2232	1560G	80 mm dia - GI ELBOW - IS-1239 part 2	each	308.00
2233	1560H	100 mm dia - GI ELBOW - IS-1239 part 2	each	569.00
2234	1560I	125 mm dia - GI ELBOW - IS-1239 part 2	each	1942.00
2235	1560J	150 mm dia - GI ELBOW - IS-1239 part 2	each	2788.00
2236	1561A	25 mm X 20 mm dia -GI red.elb.- IS-1239 part 2	each	42.00
2237	1561AA	150 mm x 80 mm dia -GI red.elb.- IS-1239 part 2	each	2407.00
2238	1561AB	150 mm x 100mm dia-GI red.elb.- IS-1239 part 2	each	2420.00
2239	1561AC	150 mm x 125mm dia -GI red.elb.- IS-1239 part 2	each	2424.00
2240	1561B	32 mm x 20 mm dia -GI red.elb.- IS-1239 part 2	each	64.00
2241	1561C	32 mm x 25 mm dia -GI red.elb.- IS-1239 part 2	each	64.00
2242	1561D	40 mm x 20 mm dia -GI red.elb.- IS-1239 part 2	each	85.00
2243	1561D1	40 mm x 25 mm dia -GI red.elb.- IS-1239 part 2	each	89.00
2244	1561E	40 mm x 32 mm dia -GI red.elb.- IS-1239 part 2	each	90.00
2245	1561F	50 mm x 20 mm dia -GI red.elb.- IS-1239 part 2	each	120.00
2246	1561F1	50 mm x 25 mm dia -GI red.elb.- IS-1239 part 2	each	123.00
2247	1561G	50 mm x 32 mm dia -GI red.elb.- IS-1239 part 2	each	127.00
2248	1561H	50 mm x 40 mm dia -GI red.elb.- IS-1239 part 2	each	127.00
2249	1561I	65 mm x 20 mm dia -GI red.elb.- IS-1239 part 2	each	239.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2250	1561I1	65 mm x 25 mm dia -GI red.elb.- IS-1239 part 2	each	245.00
2251	1561J	65 mm x 32 mm dia -GI red.elb.- IS-1239 part 2	each	245.00
2252	1561K	65 mm x 40 mm dia -GI red.elb.- IS-1239 part 2	each	245.00
2253	1561L	65 mm x 50 mm dia -GI red.elb.- IS-1239 part 2	each	245.00
2254	1561M	80 mm x 32 mm dia -GI red.elb.- IS-1239 part 2	each	312.00
2255	1561N	80 mm x 40 mm dia -GI red.elb.- IS-1239 part 2	each	312.00
2256	1561O	80 mm x 50 mm dia -GI red.elb.- IS-1239 part 2	each	322.00
2257	1561P	80 mm x 65 mm dia -GI red.elb.- IS-1239 part 2	each	322.00
2258	1561Q	100 mm x 40 mm dia -GI red.elb.- IS-1239 part 2	each	586.00
2259	1561R	100 mm x 50 mm dia -GI red.elb.- IS-1239 part 2	each	586.00
2260	1561S	100 mm x 65 mm dia -GI red.elb.- IS-1239 part 2	each	586.00
2261	1561T	100 mm x 80 mm dia -GI red.elb.- IS-1239 part 2	each	586.00
2262	1561U	125 mm x 50 mm dia -GI red.elb.- IS-1239 part 2	each	1903.00
2263	1561V	125 mm x 65 mm dia -GI red.elb.- IS-1239 part 2	each	1903.00
2264	1561W	125 mm x 80 mm dia -GI red.elb.- IS-1239 part 2	each	1907.00
2265	1561X	125 mm x 100mm dia -GI red.elb.- IS-1239 part 2	each	1907.00
2266	1561Y	150 mm x 50 mm dia -GI red.elb.- IS-1239 part 2	each	2398.00
2267	1561Z	150 mm x 65 mm dia -GI red.elb.- IS-1239 part 2	each	2407.00
2268	1562A	15mm - GI HexNipple- IS-1239 part 2	each	24.00
2269	1562B	20mm - GI HexNipple- IS-1239 part 2	each	34.00
2270	1562C	25mm - GI HexNipple- IS-1239 part 2	each	47.00
2271	1562D	32mm - GI HexNipple- IS-1239 part 2	each	65.00
2272	1562E	40mm - GI HexNipple- IS-1239 part 2	each	76.00
2273	1562F	50mm - GI HexNipple- IS-1239 part 2	each	112.00
2274	1562G	65mm - GI HexNipple- IS-1239 part 2	each	220.00
2275	1562H	80mm - GI HexNipple- IS-1239 part 2	each	356.00
2276	1562I	100mm - GI HexNipple- IS-1239 part 2	each	600.00
2277	1563A	15mm - GI Bend- IS-1239 part 2	each	30.00
2278	1563B	20mm - GI Bend- IS-1239 part 2	each	51.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2279	1563C	25mm - GI Bend- IS-1239 part 2	each	68.00
2280	1563D	32mm - GI Bend- IS-1239 part 2	each	85.00
2281	1563E	40mm - GI Bend- IS-1239 part 2	each	127.00
2282	1563F	50mm - GI Bend- IS-1239 part 2	each	178.00
2283	1563G	65mm - GI Bend- IS-1239 part 2	each	254.00
2284	1563H	80mm - GI Bend- IS-1239 part 2	each	397.00
2285	1563I	100mm - GI Bend- IS-1239 part 2	each	702.00
2286	1563J	125mm - GI Bend- IS-1239 part 2	each	1119.00
2287	1563K	150mm - GI Bend- IS-1239 part 2	each	1610.00
2288	1564A	15mm - GI Coupling- IS-1239 part 2	each	22.00
2289	1564B	20mm - GI Coupling- IS-1239 part 2	each	31.00
2290	1564C	25mm - GI Coupling- IS-1239 part 2	each	37.00
2291	1564D	32mm - GI Coupling- IS-1239 part 2	each	47.00
2292	1564E	40mm - GI Coupling- IS-1239 part 2	each	55.00
2293	1564F	50mm - GI Coupling- IS-1239 part 2	each	92.00
2294	1564G	65mm - GI Coupling- IS-1239 part 2	each	148.00
2295	1564H	80mm - GI Coupling- IS-1239 part 2	each	225.00
2296	1564I	100mm - GI Coupling- IS-1239 part 2	each	359.00
2297	1564J	125mm - GI Coupling- IS-1239 part 2	each	644.00
2298	1564K	150mm - GI Coupling- IS-1239 part 2	each	712.00
2299	1565A	15 mm - GI Plug - IS-1239 part 2	each	13.00
2300	1565B	20 mm - GI Plug - IS-1239 part 2	each	17.00
2301	1565C	25 mm - GI Plug - IS-1239 part 2	each	23.00
2302	1565D	32 mm - GI Plug - IS-1239 part 2	each	30.00
2303	1565E	40 mm - GI Plug - IS-1239 part 2	each	34.00
2304	1565F	50 mm - GI Plug - IS-1239 part 2	each	51.00
2305	1565G	65 mm - GI Plug - IS-1239 part 2	each	66.00
2306	1565H	80 mm - GI Plug - IS-1239 part 2	each	93.00
2307	1565I	100 mm - GI Plug - IS-1239 part 2	each	112.00
2308	1565J	125 mm - GI Plug - IS-1239 part 2	each	214.00
2309	1565K	150 mm - GI Plug - IS-1239 part 2	each	354.00
2310	1566A	15mm - GI Cap - IS-1239 part 2	each	14.00
2311	1566B	20mm - GI Cap - IS-1239 part 2	each	19.00
2312	1566C	25mm - GI Cap - IS-1239 part 2	each	24.00
2313	1566D	32mm - GI Cap - IS-1239 part 2	each	30.00
2314	1566E	40mm - GI Cap - IS-1239 part 2	each	42.00
2315	1566F	50mm - GI Cap - IS-1239 part 2	each	53.00
2316	1566G	65mm - GI Cap - IS-1239 part 2	each	72.00
2317	1566H	80mm - GI Cap - IS-1239 part 2	each	85.00
2318	1566I	100mm - GI Cap - IS-1239 part 2	each	114.00
2319	1566J	125mm - GI Cap - IS-1239 part 2	each	229.00
2320	1566K	150mm - GI Cap - IS-1239 part 2	each	361.00
2321	1567A	15 mm dia - GI Pipe Nipple 10cm long	each	23.00
2322	1567B	20 mm dia - GI Pipe Nipple 10cm long	each	31.00
2323	1567B1	25 mm dia - GI Pipe Nipple 10cm long	each	41.00
2324	1567C	32 mm dia - GI Pipe Nipple 10cm long	each	44.00
2325	1567D	40 mm dia - GI Pipe Nipple 10cm long	each	50.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2326	1567E	50 mm dia - GI Pipe Nipple 10cm long	each	61.00
2327	1567F	65 mm dia - GI Pipe Nipple 10cm long	each	85.00
2328	1567G	80 mm dia - GI Pipe Nipple 10cm long	each	114.00
2329	1567H	100 mm dia - GI Pipe Nipple 10cm long	each	153.00
2330	1567I	125 mm dia - GI Pipe Nipple 10cm long	each	233.00
2331	1567J	150 mm dia - GI Pipe Nipple 10cm long	each	254.00
2332	1568A	15 mm dia - GI Pipe Nipple 15cm long	each	30.00
2333	1568B	20 mm dia - GI Pipe Nipple 15cm long	each	42.00
2334	1568B1	25 mm dia - GI Pipe Nipple 15cm long	each	55.00
2335	1568C	32 mm dia - GI Pipe Nipple 15cm long	each	57.00
2336	1568D	40 mm dia - GI Pipe Nipple 15cm long	each	68.00
2337	1568E	50 mm dia - GI Pipe Nipple 15cm long	each	85.00
2338	1568F	65 mm dia - GI Pipe Nipple 15cm long	each	123.00
2339	1568G	80 mm dia - GI Pipe Nipple 15cm long	each	168.00
2340	1568H	100 mm dia - GI Pipe Nipple 15cm long	each	240.00
2341	1568I	125 mm dia - GI Pipe Nipple 15cm long	each	273.00
2342	1568J	150 mm dia - GI Pipe Nipple 15cm long	each	364.00
2343	1569A	15 mm dia - GI Pipe Nipple 23cm long	each	31.00
2344	1569B	20 mm dia - GI Pipe Nipple 23cm long	each	57.00
2345	1569B1	25 mm dia - GI Pipe Nipple 23cm long	each	81.00
2346	1569C	32 mm dia - GI Pipe Nipple 23cm long	each	85.00
2347	1569D	40 mm dia - GI Pipe Nipple 23cm long	each	93.00
2348	1569E	50 mm dia - GI Pipe Nipple 23cm long	each	125.00
2349	1569F	65 mm dia - GI Pipe Nipple 23cm long	each	178.00
2350	1569G	80 mm dia - GI Pipe Nipple 23cm long	each	243.00
2351	1569H	100 mm dia - GI Pipe Nipple 23cm long	each	290.00
2352	1569I	125 mm dia - GI Pipe Nipple 23cm long	each	343.00
2353	1569J	150 mm dia - GI Pipe Nipple 23cm long	each	415.00
2354	1570A	15 mm dia - GI Pipe Nipple 30cm long	each	55.00
2355	1570B	20 mm dia - GI Pipe Nipple 30cm long	each	73.00
2356	1570B1	25 mm dia - GI Pipe Nipple 30cm long	each	102.00
2357	1570C	32 mm dia - GI Pipe Nipple 30cm long	each	102.00
2358	1570D	40 mm dia - GI Pipe Nipple 30cm long	each	125.00
2359	1570E	50 mm dia - GI Pipe Nipple 30cm long	each	178.00
2360	1570F	65 mm dia - GI Pipe Nipple 30cm long	each	246.00
2361	1570G	80 mm dia - GI Pipe Nipple 30cm long	each	315.00
2362	1570H	100 mm dia - GI Pipe Nipple 30cm long	each	497.00
2363	1570I	125 mm dia - GI Pipe Nipple 30cm long	each	536.00
2364	1570J	150 mm dia - GI Pipe Nipple 30cm long	each	693.00
2365	1571A	Ferrule-15mm - (IS-2692)	each	458.00
2366	1571B	Ferrule-20mm - (IS-2692)	each	498.00
2367	1571C	Ferrule-25mm - (IS-2692)	each	590.00
2368	1572A	Mild steel bracket 40 mm x 20 mm	each	110.00
2369	1572AA	Mild steel bracket 200 mm x 100 mm	each	458.00
2370	1572AB	Mild steel bracket 200 mm x 125 mm	each	458.00
2371	1572AB1	Mild steel bracket 250 X 20	each	381.00
2372	1572AB2	Mild steel bracket 250 X 40	each	381.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2373	1572AB3	Mild steel bracket 250 X 50	each	381.00
2374	1572AC	Mild steel bracket 250 mm x 65 mm	each	508.00
2375	1572AD	Mild steel bracket 250 mm x 80 mm	each	508.00
2376	1572AE	Mild steel bracket 250 mm x 100 mm	each	508.00
2377	1572AF	Mild steel bracket 250 mm x 125 mm	each	508.00
2378	1572AG	Mild steel bracket 250 mm x 150 mm	each	508.00
2379	1572AG1	Mild steel bracket 300 X 20	each	403.00
2380	1572AG2	Mild steel bracket 300 X 40	each	403.00
2381	1572AG3	Mild steel bracket 300 X 20	each	403.00
2382	1572AH	Mild steel bracket 300 mm x 65 mm	each	678.00
2383	1572AI	Mild steel bracket 300 mm x 80 mm	each	678.00
2384	1572AJ	Mild steel bracket 300 mm x 100 mm	each	742.00
2385	1572AK	Mild steel bracket 300 mm x 125 mm	each	742.00
2386	1572B	Mild steel bracket 50 mm x 20 mm	each	119.00
2387	1572C	Mild steel bracket 65 mm x 20 mm	each	132.00
2388	1572D	Mild steel bracket 65 mm x 40 mm	each	142.00
2389	1572E	Mild steel bracket 65 mm x 50 mm	each	254.00
2390	1572F	Mild steel bracket 80 mm x 20 mm	each	294.00
2391	1572G	Mild steel bracket 80 mm x 40 mm	each	297.00
2392	1572H	Mild steel bracket 80 mm x 50 mm	each	297.00
2393	1572I	Mild steel bracket 80 mm x 65 mm	each	297.00
2394	1572J	Mild steel bracket 100 mm x 20 mm	each	312.00
2395	1572K	Mild steel bracket 100 mm x 40 mm	each	314.00
2396	1572L	Mild steel bracket 100 mm x 50 mm	each	314.00
2397	1572M	Mild steel bracket 100 mm x 65 mm	each	314.00
2398	1572N	Mild steel bracket 100 mm x 80 mm	each	314.00
2399	1572O	Mild steel bracket 125 mm x 20 mm	each	381.00
2400	1572P	Mild steel bracket 125 mm x 40 mm	each	381.00
2401	1572Q	Mild steel bracket 125 mm x 50 mm	each	381.00
2402	1572R	Mild steel bracket 125 mm x 65 mm	each	381.00
2403	1572S	Mild steel bracket 125 mm x 80 mm	each	381.00
2404	1572T	Mild steel bracket 125 mm x 100 mm	each	407.00
2405	1572T1	Mild steel bracket 150 X 20	each	407.00
2406	1572T2	Mild steel bracket 150 X 40	each	407.00
2407	1572T3	Mild steel bracket 150 X 50	each	407.00
2408	1572U	Mild steel bracket 150 mm x 65 mm	each	407.00
2409	1572V	Mild steel bracket 150 mm x 80 mm	each	407.00
2410	1572W	Mild steel bracket 150 mm x 100 mm	each	407.00
2411	1572X	Mild steel bracket 150 mm x 125 mm	each	449.00
2412	1572X1	Mild steel bracket 200 X 20	each	360.00
2413	1572X2	Mild steel bracket 200 X 40	each	360.00
2414	1572X3	Mild steel bracket 200 X 50	each	360.00
2415	1572Y	Mild steel bracket 200 mm x 65 mm	each	458.00
2416	1572Z	Mild steel bracket 200 mm x 80 mm	each	458.00
2417	1573A	40mm - MS Flange	each	71.00
2418	1573B	50mm - MS Flange	each	85.00
2419	1573C	65mm - MS Flange	each	136.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2420	1573D	80mm - MS Flange	each	182.00
2421	1573E	100mm - MS Flange	each	285.00
2422	1573F	125mm - MS Flange	each	610.00
2423	1573G	150mm - MS Flange	each	805.00
2424	1574A	100 mm x 80 mm dia - Reducing MS Flange	each	458.00
2425	1574B	125 mm x 80 mm dia - Reducing MS Flange	each	593.00
2426	1574C	125 mm x 100 mm dia - Reducing MS Flange	each	593.00
2427	1574D	150 mm x 80 mm dia - Reducing MS Flange	each	814.00
2428	1574E	150 mm x 100 mm dia - Reducing MS Flange	each	814.00
2429	1574F	150 mm x 125 mm dia - Reducing MS Flange	each	814.00
2430	1575A	25 mm X 20 mm dia - GI reducer (unequal) Tee IS-1239 part 2	each	55.00
2431	1575AA	150 mm x 65 mm dia- GI reducer (unequal) Tee IS-1239 part 2	each	2876.00
2432	1575AB	150 mm x 80 mm dia - GI reducer (unequal) Tee IS-1239 part 2	each	2876.00
2433	1575AC	150 mm x 100 mm dia - GI reducer (unequal) Tee IS-1239 part 2	each	2878.00
2434	1575AD	150 mm x 125 mm dia - GI reducer (unequal) Tee IS-1239 part 2	each	2878.00
2435	1575B	32 mm x 20 mm dia - GI reducer (unequal) Tee IS-1239 part 2	each	85.00
2436	1575C	32 mm x 25 mm dia - GI reducer (unequal) Tee IS-1239 part 2	each	90.00
2437	1575D	40 mm x 20 mm dia - GI reducer (unequal) Tee IS-1239 part 2	each	110.00
2438	1575D1	40 mm x 25 mm dia - GI reducer (unequal) Tee IS-1239 part 2	each	110.00
2439	1575E	40 mm x 32 mm dia - GI reducer (unequal) Tee IS-1239 part 2	each	110.00
2440	1575F	50 mm x20 mm dia - GI reducer (unequal) Tee IS-1239 part 2	each	169.00
2441	1575F1	50 mm x25 mm dia - GI reducer (unequal) Tee IS-1239 part 2	each	172.00
2442	1575G	50 mm x 32 mm dia - GI reducer (unequal) Tee IS-1239 part 2	each	172.00
2443	1575H	50 mm x 40 mm dia - GI reducer (unequal) Tee IS-1239 part 2	each	172.00
2444	1575I	65 mm x 20 mm dia - GI reducer (unequal) Tee IS-1239 part 2	each	270.00
2445	1575I1	65 mm x 25 mm dia - GI reducer (unequal) Tee IS-1239 part 2	each	270.00
2446	1575J	65 mm x 32 mm dia - GI reducer (unequal) Tee IS-1239 part 2	each	270.00
2447	1575K	65 mm x 40 mm dia - GI reducer (unequal) Tee IS-1239 part 2	each	270.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2448	1575L	65 mm x 50 mm dia - GI reducer (unequal) Tee IS-1239 part 2	each	270.00
2449	1575M	80 mm x 32 mm dia - GI reducer (unequal) Tee IS-1239 part 2	each	430.00
2450	1575N	80 mm x 40 mm dia- GI reducer (unequal) Tee IS-1239 part 2	each	430.00
2451	1575O	80 mm x 50 mm dia - GI reducer (unequal) Tee IS-1239 part 2	each	430.00
2452	1575P	80 mm x 65 mm dia- GI reducer (unequal) Tee IS-1239 part 2	each	430.00
2453	1575Q	100 mm x 40 mm dia - GI reducer (unequal) Tee IS-1239 part 2	each	695.00
2454	1575R	100 mm x 50 mm dia - GI reducer (unequal) Tee IS-1239 part 2	each	699.00
2455	1575S	100 mm x 65 mm dia - GI reducer (unequal) Tee IS-1239 part 2	each	703.00
2456	1575T	100 mm x 80 mm dia - GI reducer (unequal) Tee IS-1239 part 2	each	712.00
2457	1575U	125 mm x 40 mm dia - GI reducer (unequal) Tee IS-1239 part 2	each	2513.00
2458	1575V	125 mm x 50 mm dia - GI reducer (unequal) Tee IS-1239 part 2	each	2513.00
2459	1575W	125 mm x 65 mm dia - GI reducer (unequal) Tee IS-1239 part 2	each	2513.00
2460	1575X	125 mm x 80 mm dia - GI reducer (unequal) Tee IS-1239 part 2	each	2513.00
2461	1575Y	125 mm x 100 mm dia - GI reducer (unequal) Tee IS-1239 part 2	each	2513.00
2462	1575Z	150 mm x 50 mm dia - GI reducer (unequal) Tee IS-1239 part 2	each	2876.00
2463	1596A	80 mm dia - CI flanges - IS-1538	each	339.00
2464	1596B	100mm dia - CI flanges - IS-1538	each	398.00
2465	1596C	150mm dia - CI flanges - IS-1538	each	492.00
2466	1596D	200mm dia - CI flanges - IS-1538	each	615.00
2467	1596E	250mm dia - CI flanges - IS-1538	each	839.00
2468	1596F	300mm dia - CI flanges - IS-1538	each	1063.00
2469	1596G	350mm dia - CI flanges - IS-1538	each	1398.00
2470	1596H	400mm dia - CI flanges - IS-1538	each	1790.00
2471	1596I	450mm dia - CI flanges - IS-1538	each	2209.00
2472	1596J	500mm dia - CI flanges - IS-1538	each	2517.00
2473	1596K	600mm dia - CI flanges - IS-1538	each	3188.00
2474	1596L	700mm dia - CI flanges - IS-1538	each	4335.00
2475	1596M	750mm dia - CI flanges - IS-1538	each	5923.00
2476	1596N	800mm dia - CI flanges - IS-1538	each	6885.00
2477	1598A	80 mm - CI Sluice value - IS-14846/2000 - PN-1.0 with cap	each	3724.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2478	1598B	100 mm - CI Sluice valve - IS-14846/2000 - PN-1.0 with cap	each	5019.00
2479	1598C	125 mm - CI Sluice valve - IS-14846/2000 - PN-1.0 with cap	each	6242.00
2480	1598D	150 mm - CI Sluice valve - IS-14846/2000 - PN-1.0 with cap	each	7615.00
2481	1598E	200 mm - CI Sluice valve - IS-14846/2000 - PN-1.0 with cap	each	12333.00
2482	1598F	250 mm - CI Sluice valve - IS-14846/2000 - PN-1.0 with cap	each	19936.00
2483	1598G	300 mm - CI Sluice valve - IS-14846/2000 - PN-1.0 with cap	each	25436.00
2484	1598H	350 mm - CI Sluice valve - IS-14846/2000 - PN-1.0 with cap	each	36160.00
2485	1598I	400 mm - CI Sluice valve - IS-14846/2000 - PN-1.0 with cap	each	45373.00
2486	1598J	450 mm - CI Sluice valve - IS-14846/2000 - PN-1.0 with cap	each	65997.00
2487	1598K	500 mm - CI Sluice valve - IS-14846/2000 - PN-1.0 with cap	each	86619.00
2488	1598L	600 mm - CI Sluice valve - IS-14846/2000 - PN-1.0 with cap	each	129242.00
2489	1599A	80 mm - CI Sluice valve - IS-14846/2000 - PN-1.0 with hand wheel	each	3953.00
2490	1599B	100 mm - CI Sluice valve - IS-14846/2000 - PN-1.0 with hand wheel	each	5247.00
2491	1599C	125 mm - CI Sluice valve - IS-14846/2000 - PN-1.0 with hand wheel	each	6471.00
2492	1599D	150 mm - CI Sluice valve - IS-14846/2000 - PN-1.0 with hand wheel	each	7958.00
2493	1599E	200 mm - CI Sluice valve - IS-14846/2000 - PN-1.0 with hand wheel	each	12686.00
2494	1599F	250mm - CI Sluice valve - IS-14846/2000 - PN-1.0 with hand wheel	each	20395.00
2495	1599G	300 mm - CI Sluice valve - IS-14846/2000 - PN-1.0 with hand wheel	each	25780.00
2496	1599H	350 mm - CI Sluice valve - IS-14846/2000 - PN-1.0 with hand wheel	each	37535.00
2497	1599I	400 mm - CI Sluice valve - IS-14846/2000 - PN-1.0 with hand wheel	each	46059.00
2498	1599J	450 mm - CI Sluice valve - IS-14846/2000 - PN-1.0 with hand wheel	each	67142.00
2499	1599K	500 mm - CI Sluice valve - IS-14846/2000 - PN-1.0 with hand wheel	each	87765.00
2500	1599L	600 mm - CI Sluice valve - IS-14846/2000 - PN-1.0 with hand wheel	each	130388.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2501	1600A	80 mm - CI Sluice valve - IS-14846/2000 - PN-1.06 with cap	each	4044.00
2502	1600H	350 mm - CI Sluice valve - IS-14846/2000 - PN-1.06 with cap	each	43392.00
2503	1600I	400 mm - CI Sluice valve - IS-14846/2000 - PN-1.06 with cap	each	54447.00
2504	1600J	450 mm - CI Sluice valve - IS-14846/2000 - PN-1.06 with cap	each	70195.00
2505	1600K	500 mm - CI Sluice valve - IS-14846/2000 - PN-1.06 with cap	each	102458.00
2506	1600L	600 mm - CI Sluice valve - IS-14846/2000 - PN-1.06 with cap	each	138122.00
2507	1601A	80 mm - CI Sluice valve - IS-14846/2000 - PN-1.06 with hand wheel	each	4111.00
2508	1601B	100 mm - CI Sluice valve - IS-14846/2000 - PN-1.06 with hand wheel	each	5631.00
2509	1601C	125 mm - CI Sluice valve - IS-14846/2000 - PN-1.06 with hand wheel	each	7103.00
2510	1601D	150 mm - CI Sluice valve - IS-14846/2000 - PN-1.06 with hand wheel	each	8474.00
2511	1601E	200 mm - CI Sluice valve - IS-14846/2000 - PN-1.06 with hand wheel	each	13108.00
2512	1601F	250 mm - CI Sluice valve - IS-14846/2000 - PN-1.06 with hand wheel	each	21604.00
2513	1601G	300 mm - CI Sluice valve - IS-14846/2000 - PN-1.06 with hand wheel	each	28280.00
2514	1601H	350 mm - CI Sluice valve - IS-14846/2000 - PN-1.06 with hand wheel	each	44081.00
2515	1601I	400 mm - CI Sluice valve - IS-14846/2000 - PN-1.06 with hand wheel	each	55135.00
2516	1601J	450 mm - CI Sluice valve - IS-14846/2000 - PN-1.06 with hand wheel	each	71649.00
2517	1601K	500 mm - CI Sluice valve - IS-14846/2000 - PN-1.06 with hand wheel	each	102458.00
2518	1601L	600 mm - CI Sluice valve - IS-14846/2000 - PN-1.06 with hand wheel	each	139579.00
2519	1602	20 mm - CI Single air valve	each	515.00
2520	1603A	40 mm - CI Double air valve	each	1430.00
2521	1603B	50 mm - CI Double air valve	each	1443.00
2522	1603C	65 mm - CI Double air valve	each	1880.00
2523	1603D	80 mm - CI Double air valve	each	1950.00
2524	1603E	100 mm - CI Double air valve	each	2239.00
2525	1603F	150 mm - CI Double air valve	each	6108.00
2526	1603G	200 mm - CI Double air valve	each	12686.00
2527	1604A	50 mm - CI Reflux non return valve IS-5312 single door PN-1.6	each	2405.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2528	1604B	65 mm - CI Reflux non return valve IS-5312 single door PN-1.6	each	2750.00
2529	1604C	80 mm - CI Reflux non return valve IS-5312 single door PN-1.6	each	3208.00
2530	1604D	100 mm - CI Reflux non return valve IS-5312 single door PN-1.6	each	4263.00
2531	1604E	125 mm - CI Reflux non return valve IS-5312 single door PN-1.6	each	5534.00
2532	1604F	150 mm - CI Reflux non return valve IS-5312 single door PN-1.0	each	6599.00
2533	1604G	200 mm - CI Reflux non return valve IS-5312 single door PN-1.0	each	12650.00
2534	1604H	250 mm - CI Reflux non return valve IS-5312 single door PN-1.0	each	18974.00
2535	1604I	300 mm - CI Reflux non return valve IS-5312 single door PN-1.0	each	25986.00
2536	1604J	350 mm - CI Reflux non return valve IS-5312 single door PN-0.6	each	46335.00
2537	1604K	400 mm - CI Reflux non return valve IS-5312 single door PN-0.6	each	57059.00
2538	1604L	500 mm - CI Reflux non return valve IS-5312 single door PN-0.6	each	120305.00
2539	1604M	600 mm - CI Reflux non return valve IS-5312 single door PN-0.6	each	137271.00
2540	1605A	80 mm Ball type nrv valve	each	5932.00
2541	1605AA	50 mm CI foot valve double door	each	15678.00
2542	1605AB	65 mm CI foot valve double door	each	22458.00
2543	1605AC	80 mm CI foot valve double door	each	36441.00
2544	1605AD	100 mm CI foot valve double door	each	50847.00
2545	1605AE	50 mm CI foot valve single door	each	1593.00
2546	1605AF	65 mm CI foot valve single door	each	1864.00
2547	1605AG	80 mm CI foot valve single door	each	2627.00
2548	1605AH	100 mm CI foot valve single door	each	3771.00
2549	1605AI	125 mm CI foot valve single door	each	6271.00
2550	1605AJ	150 mm CI foot valve single door	each	6864.00
2551	1605AK	200 mm CI foot valve single door	each	16780.00
2552	1605AL	250 mm CI foot valve single door	each	20339.00
2553	1605AM	300 mm CI foot valve single door	each	30932.00
2554	1605B	100 mm Ball type nrv valve	each	9831.00
2555	1605C	150 mm Ball type nrv valve	each	14703.00
2556	1605D	200 mm Ball type nrv valve	each	23559.00
2557	1605E	250 mm Ball type nrv valve	each	36186.00
2558	1605F	300 mm Ball type nrv valve	each	53051.00
2559	1605G	350 mm Ball type nrv valve	each	79195.00
2560	1605I	50 mm CI wafer type butterfly valve	each	1398.00
2561	1605J	65 mm CI wafer type butterfly valve	each	1737.00
2562	1605K	80 mm CI wafer type butterfly valve	each	1907.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2563	1605L	100 mm CI wafer type butterfly valve	each	2352.00
2564	1605M	125 mm CI wafer type butterfly valve	each	3458.00
2565	1605N	150 mm CI wafer type butterfly valve	each	4407.00
2566	1605O	200 mm CI wafer type butterfly valve	each	7288.00
2567	1605P	250 mm CI wafer type butterfly valve	each	9746.00
2568	1605Q	300 mm CI wafer type butterfly valve	each	12839.00
2569	1606P	15mm dia. - GI tee equal - IS-1239 part 2	each	30.00
2570	1607P	20mm dia. - GI tee equal - IS-1239 part 2	each	42.00
2571	1609P	32mm dia. - GI tee equal - IS-1239 part 2	each	74.00
2572	1610P	40mm dia. - GI tee equal - IS-1239 part 2	each	119.00
2573	1611P	50mm dia. - GI tee equal - IS-1239 part 2	each	144.00
2574	1612A	80mm dia - GI tee equal - IS-1239 part 2	each	576.00
2575	1616AA	UPVC Pipe-20mm dia. (1 MPa) -	metre	25.00
2576	1616BB	UPVC Pipe-25mm dia. (1 MPa) -	metre	37.50
2577	1616C	UPVC Pipe-32mm dia. (1 MPa) -	metre	61.25
2578	1616D	UPVC Pipe-40mm dia.(1 MPa) -	metre	93.75
2579	1616E	UPVC Pipe-50mm dia. (1 MPa) -	metre	150.00
2580	1616F	UPVC Pipe-63mm dia. (1 MPa) -	metre	231.25
2581	1616G	UPVC Pipe-75mm dia. (1 MPa) -	metre	331.25
2582	1616H	UPVC Pipe-90mm dia.(1 MPa) -	metre	468.75
2583	1616I	UPVC Pipe-110mm dia. (1 MPa) -	metre	700.00
2584	1616J	UPVC Pipe-140mm dia. (1 MPa) -	metre	1125.00
2585	1616K	UPVC Pipe-160 mm dia (1 MPa) -	metre	1462.50
2586	1616L	UPVC Pipe-180 mm dia (1 MPa) -	metre	1887.50
2587	1616M	UPVC Pipe- 200 mm dia(1 MPa) -	metre	2393.75
2588	1617AA	UPVC Pipe-40mm dia. (0.6 MPa) -	metre	61.25
2589	1617BB	UPVC Pipe-50mm dia. (0.6 MPa) -	metre	90.00
2590	1617C	UPVC Pipe-63mm dia. (0.6 MPa) -	metre	137.50
2591	1617D	UPVC Pipe-75mm dia. (0.6 MPa) -	metre	195.00
2592	1617E	UPVC Pipe-90mm dia.(0.6 MPa) -	metre	282.50
2593	1617F	UPVC Pipe-110mm dia. (0.6 MPa) -	metre	412.50
2594	1617G	UPVC Pipe-140mm dia. (0.6 MPa) -	metre	681.25
2595	1617H	UPVC Pipe-160 mm dia (0.6 MPa) -	metre	881.25
2596	1617I	UPVC Pipe-180 mm dia (0.6 MPa) -	metre	1125.00
2597	1617J	UPVC Pipe- 200 mm dia (0.6 MPa) -	metre	1255.00
2598	1617K	UPVC pipe 250mm dia (0.6 Mpa) -	metre	2052.00
2599	1618A	PVC 140mm dia pipe	metre	203.00
2600	1618AA	UPVC Pipe-63mm dia.(0.4 MPa) -	metre	96.25
2601	1618BB	UPVC Pipe-75mm dia. (0.4 MPa) -	metre	137.50
2602	1618C	UPVC Pipe-90mm dia. (0.4 MPa) -	metre	191.25
2603	1618D	UPVC Pipe-110mm dia. (0.4 MPa) -	metre	277.50
2604	1618E	UPVC Pipe-140mm dia. (0.4 MPa) -	metre	456.25
2605	1618F	UPVC Pipe-160mm dia. (0.4 MPa) -	metre	600.00
2606	1618G	UPVC Pipe-180mm dia. (0.4 MPa) -	metre	787.50
2607	1618H	UPVC Pipe-200mm dia. (0.4 MPa) -	metre	962.50
2608	1640b	PVC cowl 140mm dia	no	33.00
2609	1641P	15mm - GI Union IS-1239 part 2	each	47.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2610	1642P	20mm - GI Union IS-1239 part 2	each	64.00
2611	1643P	25mm - GI Union IS-1239 part 2	each	94.00
2612	1644P	32mm - GI Union IS-1239 part 2	each	134.00
2613	1645P	40mm - GI Union IS-1239 part 2	each	153.00
2614	1646P	50mm - GI Union IS-1239 part 2	each	233.00
2615	1647P	65mm - GI Union IS-1239 part 2	each	420.00
2616	1648P	80mm - GI Union IS-1239 part 2	each	610.00
2617	1925	Brass full way valve C.I wheel 15 mm dia	each	125.00
2618	1926	Brass full way valve C.I wheel 20 mm dia	each	137.00
2619	7356P	100mm dia - G.I.pipes of medium class -	metre	1141.00
2620	7357A	125mm dia - G.I.pipes of medium class -	metre	1675.00
2621	7357P	150mm dia - G.I.pipes of medium class -	metre	1893.00
2622	7383P	100mm dia - GI equal tee IS-1239 part 2	each	678.00
2623	7384P	150mm dia - GI equal tee IS-1239 part 2	each	1847.00
2624	7385A	125mm dia - GI equal tee IS-1239 part 2	each	1623.00
2625	7397A	GI check nut 125mm	each	51.00
2626	7398A	125mm - GI Union IS-1239 part 2	each	1780.00
2627	7398P	100mm - GI Union IS-1239 part 2	each	805.00
2628	7399P	150mm - GI Union IS-1239 part 2	each	2966.00
2629	7434	Gun metal NRV vertical type 100mm dia	each	1059.00
2630	7662B	750 mm dia - DI K7	metre	13467.00
2631	7662D	800 mm dia - DI K9 -double flanged pipes	metre	42162.29
2632	7663D	900 mm dia - DI K9 -double flanged pipes	metre	58079.97
2633	7664D	1000 mm dia - DI K9 -double flanged pipes	metre	67766.98
2634	7665AA	80 mm mj collar coupling - Ductile Iron	each	3576.00
2635	7665AB	100 mm mj collar coupling - Ductile Iron	each	4119.00
2636	7665AC	150 mm mj collar coupling - Ductile Iron	each	6873.00
2637	7665AD	200 mm mj collar coupling - Ductile Iron	each	8263.00
2638	7665AE	250 mm mj collar coupling - Ductile Iron	each	12852.00
2639	7665AF	300 mm mj collar coupling - Ductile Iron	each	16434.00
2640	7665AG	350 mm mj collar coupling - Ductile Iron	each	27246.00
2641	7665AH	400 mm mj collar coupling - Ductile Iron	each	29068.00
2642	7665AI	450 mm mj collar coupling - Ductile Iron	each	33220.00
2643	7665AJ	500 mm mj collar coupling - Ductile Iron	each	38983.00
2644	7665AK	600 mm mj collar coupling - Ductile Iron	each	49237.00
2645	7665AL	700 mm mj collar coupling - Ductile Iron	each	92373.00
2646	7665AM	750 mm mj collar coupling - Ductile Iron	each	103390.00
2647	7665AN	800 mm mj collar coupling - Ductile Iron	each	118729.00
2648	7665AO	900 mm mj collar coupling - Ductile Iron	each	138280.00
2649	7665AP	1000 mm mj collar coupling - Ductile Iron	each	155608.00
2650	7666AA	80 mm DI flange adaptor - Ductile Iron	each	2458.00
2651	7666AB	100 mm DI flange adaptor - Ductile Iron	each	3369.00
2652	7666AC	150 mm DI flange adaptor - Ductile Iron	each	5055.00
2653	7666AD	200 mm DI flange adaptor - Ductile Iron	each	6208.00
2654	7666AE	250 mm DI flange adaptor - Ductile Iron	each	8686.00
2655	7666AF	300 mm DI flange adaptor - Ductile Iron	each	10686.00
2656	7666AG	350 mm DI flange adaptor - Ductile Iron	each	17034.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2657	7666AH	400 mm DI flange adaptor - Ductile Iron	each	19492.00
2658	7666AI	450 mm DI flange adaptor - Ductile Iron	each	23305.00
2659	7666AJ	500 mm DI flange adaptor - Ductile Iron	each	28390.00
2660	7666AK	600 mm DI flange adaptor - Ductile Iron	each	37458.00
2661	7667AA	80 mm Dismantling joint - Ductile Iron	each	4703.00
2662	7667AB	100 mm Dismantling joint - Ductile Iron	each	5869.00
2663	7667AC	150 mm Dismantling joint - Ductile Iron	each	8403.00
2664	7667AD	200 mm Dismantling joint - Ductile Iron	each	11208.00
2665	7667AE	250 mm Dismantling joint - Ductile Iron	each	16073.00
2666	7667AF	300 mm Dismantling joint - Ductile Iron	each	19640.00
2667	7667AG	350 mm Dismantling joint - Ductile Iron	each	29294.00
2668	7667AH	400 mm Dismantling joint - Ductile Iron	each	37211.00
2669	7667AI	450 mm Dismantling joint - Ductile Iron	each	44567.00
2670	7667AJ	500 mm Dismantling joint - Ductile Iron	each	54480.00
2671	7667AK	600 mm Dismantling joint - Ductile Iron	each	76163.00
2672	7667AL	700 mm Dismantling joint - Ductile Iron	each	115947.00
2673	7667AM	750 mm Dismantling joint - Ductile Iron	each	131335.00
2674	7667AN	800 mm Dismantling joint - Ductile Iron	each	152970.00
2675	7667AO	900 mm Dismantling joint - Ductile Iron	each	179384.00
2676	7667AP	1000 mm Dismantling joint - Ductile Iron	each	234505.00
2677	7682A	100mm to 300mm - DI specials IS-9523/2000 All socketed specials	Kg	81.00
2678	7682B	350mm to 450mm - DI specials IS-9523/2000 All socketed specials	Kg	103.00
2679	7682C	500mm to 600mm - DI specials IS-9523/2000 All socketed specials	Kg	110.00
2680	7682D	700mm to 800mm - DI specials IS-9523/2000 All socketed specials	Kg	129.00
2681	7682E	900mm - DI specials IS-9523/2000 All socketed specials	Kg	129.00
2682	7682F	1000mm - DI specials IS-9523/2000 All socketed specials	Kg	135.00
2683	7683A	100mm to 300mm - DI specials IS-9523/2000 All flanged specials	Kg	103.00
2684	7683B	350mm to 450mm - DI specials IS-9523/2000 All flanged specials	Kg	127.00
2685	7683C	500mm to 600mm - DI specials IS-9523/2000 All flanged specials	Kg	137.00
2686	7683D	700mm to 800mm - DI specials IS-9523/2000 All flanged specials	Kg	153.00
2687	7683E	900mm - DI specials IS-9523/2000 All flanged specials	Kg	155.00
2688	7683F	1000mm - DI specials IS-9523/2000 All flanged specials	Kg	155.00
2689	7684A	80 mm dia - S&S centrifugally Spun CI pipes IS-1536	metre	956.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2690	7684B	100 mm dia - S&S centrifugally Spun CI pipes IS-1536	metre	1157.00
2691	7684C	125 mm dia - S&S centrifugally Spun CI pipes IS-1536	metre	1498.00
2692	7684D	150 mm dia - S&S centrifugally Spun CI pipes IS-1536	metre	1832.00
2693	7684E	200 mm dia - S&S centrifugally Spun CI pipes IS-1536	metre	2681.00
2694	7684F	250 mm dia - S&S centrifugally Spun CI pipes IS-1536	metre	3613.00
2695	7684G	300 mm dia - S&S centrifugally Spun CI pipes IS-1536	metre	4659.00
2696	7684H	350 mm dia - S&S centrifugally Spun CI pipes IS-1536	metre	5870.00
2697	7684I	400 mm dia - S&S centrifugally Spun CI pipes IS-1536	metre	7142.00
2698	7684J	450 mm dia - S&S centrifugally Spun CI pipes IS-1536	metre	8613.00
2699	7684K	500 mm dia - S&S centrifugally Spun CI pipes IS-1536	metre	10083.00
2700	7684L	600 mm dia - S&S centrifugally Spun CI pipes IS-1536	metre	13437.00
2701	7684M	700 mm dia - S&S centrifugally Spun CI pipes IS-1536	metre	17335.00
2702	7684N	750 mm dia - S&S centrifugally Spun CI pipes IS-1536	metre	19472.00
2703	7684O	800 mm dia - S&S centrifugally Spun CI pipes IS-1536	metre	22189.00
2704	7684P	900 mm dia - S&S centrifugally Spun CI pipes IS-1536	metre	26760.00
2705	7684Q	1000 mm dia - S&S centrifugally Spun CI pipes IS-1536	metre	31625.00
2706	7685A	80mm to 200mm dia - non-standard - S&S centrifugally Spun CI pipes	Kg	68.00
2707	7685B	250mm to 400mm dia - non-standard - S&S centrifugally Spun CI pipes	Kg	79.00
2708	7685C	450mm to 750mm dia - non-standard - S&S centrifugally Spun CI pipes	Kg	87.00
2709	7685D	800mm to 1000mm dia - non-standard - S&S centrifugally Spun CI pipes	Kg	88.00
2710	7686C	450mm to 750mm dia - CI S/S specials - IS-1538	Kg	86.00
2711	7686D	800mm to 1000mm dia - CI S/S specials - IS-1538	Kg	88.00
2712	7687A	80 mm dia - Double flanged CI pipes IS-1537 & IS-7181	metre	1903.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2713	7687B	100 mm dia - Double flanged CI pipes IS-1537 & IS-7181	metre	2364.00
2714	7687C	150 mm dia - Double flanged CI pipes IS-1537 & IS-7181	metre	3847.00
2715	7687D	200 mm dia - Double flanged CI pipes IS-1537 & IS-7181	metre	5504.00
2716	7687E	250 mm dia - Double flanged CI pipes IS-1537 & IS-7181	metre	7399.00
2717	7687F	300 mm dia - Double flanged CI pipes IS-1537 & IS-7181	metre	9491.00
2718	7687G	350 mm dia - Double flanged CI pipes IS-1537 & IS-7181	metre	13605.00
2719	7687H	400 mm dia - Double flanged CI pipes IS-1537 & IS-7181	metre	16612.00
2720	7687I	450 mm dia - Double flanged CI pipes IS-1537 & IS-7181	metre	20271.00
2721	7687J	500 mm dia - Double flanged CI pipes IS-1537 & IS-7181	metre	25171.00
2722	7687K	600 mm dia - Double flanged CI pipes IS-1537 & IS-7181	metre	33833.00
2723	7687L	700 mm dia - Double flanged CI pipes IS-1537 & IS-7181	metre	44291.00
2724	7687M	750 mm dia - Double flanged CI pipes IS-1537 & IS-7181	metre	50244.00
2725	7688A	80mm to 200mm dia - Non-standard double flanged pipes	Kg	110.00
2726	7688B	250mm to 400mm dia - Non-standard double flanged pipes	Kg	117.00
2727	7688C	450mm to 750mm dia - Non-standard double flanged pipes	Kg	125.00
2728	2914A	Adhesive solvent cement	litre	254.00
2729	8021A	20mm (1 MPa) - UPVC moulded equal tee IS-7834	each	15.55
2730	8021B	25mm (1 MPa) - UPVC moulded equal tee IS-7834	each	18.35
2731	8021C	32mm (1 MPa) - UPVC moulded equal tee IS-7834	each	28.26
2732	8021D	40mm (1 MPa) - UPVC moulded equal tee IS-7834	each	48.73
2733	8021E	50mm (1 MPa) - UPVC moulded equal tee IS-7834	each	78.39
2734	8021F	63mm (1 MPa) - UPVC moulded equal tee IS-7834	each	146.91
2735	8021G	75mm (1 MPa) - UPVC moulded equal tee IS-7834	each	233.77
2736	8021H	90mm (1 MPa) - UPVC moulded equal tee IS-7834	each	379.96

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2737	8021I	110mm (1 MPa) - UPVC moulded equal tee IS-7834	each	468.94
2738	8021J	75mm (0.6 MPa) - UPVC moulded equal tee IS-7834	each	99.58
2739	8021K	90mm (0.6 MPa) - UPVC moulded equal tee IS-7834	each	146.18
2740	8021L	110mm (0.6 MPa) - UPVC moulded equal tee IS-7834	each	295.89
2741	8021M	140mm (0.6 MPa) - UPVC moulded equal tee IS-7834	each	437.16
2742	8021N	160mm (0.6 MPa) - UPVC moulded equal tee IS-7834	each	650.42
2743	8022A	63mm x 50mm (0.6 MPa) - UPVC moulded unequal tee IS-7834	each	53.00
2744	8022B	75mm x 50mm (0.6 MPa) - UPVC moulded unequal tee IS-7834	each	59.00
2745	8022C	90mm x 50mm (0.6 MPa) - UPVC moulded unequal tee IS-7834	each	92.00
2746	8022D	90mm X63mm (0.6 MPa) - UPVC moulded unequal tee IS-7834	each	97.00
2747	8022E	90mm x 75mm (0.6 MPa) - UPVC moulded unequal tee IS-7834	each	118.00
2748	8022F	110mm x 50mm (0.6 MPa) - UPVC moulded unequal tee IS-7834	each	156.00
2749	8022G	110mm x 63mm (0.6 MPa) - UPVC moulded unequal tee IS-7834	each	149.00
2750	8022H	110mm x 90mm (0.6 MPa) - UPVC moulded unequal tee IS-7834	each	123.00
2751	8022I	140mm x 50mm (0.6 MPa) - UPVC moulded unequal tee IS-7834	each	226.00
2752	8022J	140mm x 63mm (0.6 MPa) - UPVC moulded unequal tee IS-7834	each	314.00
2753	8022K	140mm x 90mm (0.6 MPa) - UPVC moulded unequal tee IS-7834	each	237.00
2754	8022L	140mm x 110mm (0.6 MPa)-UPVC moulded unequal tee IS-7834	each	252.00
2755	8022M	160mm x 50mm (0.6 MPa)-UPVC moulded unequal tee IS-7834	each	356.00
2756	8022N	160mm x 63mm (0.6 MPa)-UPVC moulded unequal tee IS-7834	each	419.00
2757	8022O	160mm x 90mm (0.6 MPa)-UPVC moulded unequal tee IS-7834	each	301.00
2758	8022P	160mm x 110mm (0.6 MPa)-UPVC moulded unequal tee IS-7834	each	322.00
2759	8022Q	160mm x 140mm (0.6 MPa)-UPVC moulded unequal tee IS-7834	each	616.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2760	8023A	20mm (1 MPa) - UPVC moulded unequal plain coupler IS-7834	each	7.00
2761	8023B	25mm (1 MPa) - UPVC moulded unequal plain coupler IS-7834	each	10.00
2762	8023C	32mm (1 MPa) - UPVC moulded unequal plain coupler IS-7834	each	11.00
2763	8023D	40mm (1 MPa) - UPVC moulded unequal plain coupler IS-7834	each	19.00
2764	8023E	50mm (1 MPa) - UPVC moulded unequal plain coupler IS-7834	each	31.00
2765	8023F	63mm (0.6 MPa)-UPVC moulded unequal plain coupler IS-7834	each	59.00
2766	8023G	75mm (0.6 MPa)-UPVC moulded unequal plain coupler IS-7834	each	76.00
2767	8023H	90mm (0.6 MPa)-UPVC moulded unequal plain coupler IS-7834	each	120.00
2768	8023I	110mm (0.6MPa)-UPVC moulded unequal plain coupler IS-7834	each	144.00
2769	8023J	140mm (0.6MPa)-UPVC moulded unequal plain coupler IS-7834	each	163.00
2770	8023K	160mm (0.6MPa)-UPVC moulded unequal plain coupler IS-7834	each	186.00
2771	8024A	25mm x 20mm(1 MPa) -UPVC moulded reducer coupler IS-7834	each	3.00
2772	8024B	32mm x 25mm(1 MPa) -UPVC moulded reducer coupler IS-7834	each	6.00
2773	8024C	40mm x 32mm(1 MPa) - UPVC moulded reducer coupler IS-7834	each	8.00
2774	8024D	50mm x 40mm(1 MPa) - UPVC moulded reducer coupler IS-7834	each	18.00
2775	8024E	63mm x 40mm(0.6 MPa)-UPVC moulded reducer coupler IS-7834	each	23.00
2776	8024F	63mm x 50mm(0.6 MPa)-UPVC moulded reducer coupler IS-7834	each	29.00
2777	8024G	75mm x 63mm(0.6 MPa)-UPVC moulded reducer coupler IS-7834	each	52.00
2778	8024H	90mm x 63mm(0.6 MPa)-UPVC moulded reducer coupler IS-7834	each	59.00
2779	8024I	90mm x 75mm(0.6 MPa)-UPVC moulded reducer coupler IS-7834	each	63.00
2780	8024J	110mmx75mm(0.6 MPa)-UPVC moulded reducer coupler IS-7834	each	92.00
2781	8024K	110mmx90mm(0.6 MPa)-UPVC moulded reducer coupler IS-7834	each	71.00
2782	8024L	160mmx110mm(0.6 MPa)-UPVC moulded reducer coupler IS-7834	each	178.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2783	8024M	160mmx140mm(0.6 MPa)-UPVC moulded reducer coupler IS-7834	each	183.00
2784	8025A	20mm (1 MPa) - UPVC moulded elbow IS-7834	each	4.00
2785	8025B	25mm (1 MPa) - UPVC moulded elbow IS-7834	each	5.00
2786	8025C	32mm (1 MPa) - UPVC moulded elbow IS-7834	each	7.00
2787	8025D	40mm (1 MPa) - UPVC moulded elbow IS-7834	each	15.00
2788	8025E	50mm (1 MPa) - UPVC moulded elbow IS-7834	each	26.00
2789	8025F	63mm (1 MPa) - UPVC moulded elbow IS-7834	each	42.00
2790	8025G	75mm (1 MPa) - UPVC moulded elbow IS-7834	each	55.00
2791	8025H	90mm (1 MPa) - UPVC moulded elbow IS-7834	each	99.00
2792	8025I	110mm (1 MPa) - UPVC moulded elbow IS-7834	each	197.00
2793	8025J	63mm (0.6 MPa) - UPVC moulded elbow IS-7834	each	17.00
2794	8025K	75mm (0.6 MPa) - UPVC moulded elbow IS-7834	each	28.00
2795	8025L	90mm (0.6 MPa) - UPVC moulded elbow IS-7834	each	43.00
2796	8025M	110mm (0.6 MPa) - UPVC moulded elbow IS-7834	each	73.00
2797	8025N	140mm (0.6 MPa) - UPVC moulded elbow IS-7834	each	136.00
2798	8025O	160mm (0.4 MPa) - UPVC moulded elbow IS-7834	each	199.00
2799	8026A	20X15mm(1 MPa)-UPVC moulded male threaded adopter IS-7834	each	3.00
2800	8026B	25X20mm(1 MPa)-UPVC moulded male threaded adopter IS-7834	each	6.00
2801	8026C	32X25mm(1 Mpa)-UPVC moulded male threaded adopter IS-7834	each	8.00
2802	8026D	40X32mm(1 MPa)-UPVC moulded male threaded adopter IS-7834	each	12.00
2803	8026E	50X40mm(0.6 MPa)-UPVC mou. male threaded adopter IS-7834	each	16.00
2804	8026F	63X50mm(0.6 MPa)-UPVC mou. male threaded adopter IS-7834	each	21.00
2805	8026G	75X63mm(0.6 MPa)-UPVC mou. male threaded adopter IS-7834	each	39.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2806	8026H	90X75mm(0.6 MPa)-UPVC mou. male threaded adopter IS-7834	each	56.00
2807	8026I	110X90mm(0.6 MPa)-UPVC mou. male threaded adopter IS-7834	each	75.00
2808	8027A	20mmX15mm(1 MPa)-UPVC mou.female threaded adopter IS-7834	each	6.00
2809	8027B	25mmX20mm(1 MPa)-UPVC mou.female threaded adopter IS-7834	each	8.00
2810	8027C	32mmX25mm(1 MPa)-UPVC mou.female threaded adopter IS-7834	each	11.00
2811	8027D	75mmX63mm(0.6 MPa)-UPVC mou.female threaded adopter IS-7834	each	47.00
2812	8027E	90mmX63mm(0.6 MPa)-UPVC mou.female threaded adopter IS-7834	each	61.00
2813	8027F	90mmX75mm(0.6 MPa)-UPVC mou.female threaded adopter IS-7834	each	66.00
2814	8028A	20mm (1 MPa) - UPVC end cap (plain/threaded) IS-7834	each	2.00
2815	8028B	25mm (1 MPa) - UPVC end cap (plain/threaded) IS-7834	each	3.00
2816	8028C	32mm (1 MPa) - UPVC end cap (plain/threaded) IS-7834	each	4.00
2817	8028D	40mm (1 MPa) - UPVC end cap (plain/threaded) IS-7834	each	10.00
2818	8028E	50mm (1 MPa) - UPVC end cap (plain/threaded) IS-7834	each	13.00
2819	8028F	63mm (0.6 MPa) - UPVC end cap (plain/threaded) IS-7834	each	16.00
2820	8028G	75mm (0.6 MPa) - UPVC end cap (plain/threaded) IS-7834	each	24.00
2821	8028H	90mm (0.6 MPa) - UPVC end cap (plain/threaded) IS-7834	each	40.00
2822	8028I	110mm (0.6 MPa) - UPVC end cap (plain/threaded) IS-7834	each	44.00
2823	8028J	140mm (0.6 MPa) - UPVC end cap (plain/threaded) IS-7834	each	76.00
2824	8028K	160mm (0.6 MPa) - UPVC end cap (plain/threaded) IS-7834	each	104.00
2825	8028L	180mm (0.6 MPa) - UPVC end cap (plain/threaded) IS-7834	each	153.00
2826	8028M	200mm (0.6 MPa) - UPVC end cap (plain/threaded) IS-7834	each	186.00
2827	8029A	63mm - UPVC moulded tail piecs without flange IS-7834	each	16.00
2828	8029B	75mm - UPVC moulded tail piecs without flange IS-7834	each	26.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2829	8029C	90mm - UPVC moulded tail piecs without flange IS-7834	each	30.00
2830	8029D	110mm - UPVC moulded tail piecs without flange IS-7834	each	39.00
2831	8029E	140mm - UPVC moulded tail piecs without flange IS-7834	each	88.00
2832	8029F	160mm - UPVC moulded tail piecs without flange IS-7834	each	122.00
2833	8029G	180mm - UPVC moulded tail piecs without flange IS-7834	each	200.00
2834	8029H	200mm - UPVC moulded tail piecs without flange IS-7834	each	270.00
2835	8030A	63mm X 20mm - UPVC moulded saddle set 0.6Mpa IS-7834	each	47.00
2836	8030B	75mm x 20mm - UPVC moulded saddle set 0.6Mpa IS-7834	each	50.00
2837	8030C	90mm x 20mm - UPVC moulded saddle set 0.6Mpa IS-7834	each	55.00
2838	8030D	110mmx20mm - UPVC moulded saddle set 0.6Mpa IS-7834	each	68.00
2839	8030E	140mm x 20mm - UPVC moulded saddle set 0.6Mpa IS-7834	each	140.00
2840	8030F	160mmx20mm - UPVC moulded saddle set 0.6Mpa IS-7834	each	175.00
2841	8031A	63mm - UPVC moulded saddle set 0.6Mpa IS-10124	each	23.00
2842	8031B	75mm - UPVC moulded saddle set 0.6Mpa IS-10124	each	35.00
2843	8031C	90mm - UPVC moulded saddle set 0.6Mpa IS-10124	each	56.00
2844	8031D	110mm - UPVC moulded saddle set 0.6Mpa IS-10124	each	81.00
2845	8031E	140mm - UPVC moulded saddle set 0.6Mpa IS-10124	each	145.00
2846	8031F	160mm - UPVC moulded saddle set 0.6Mpa IS-10124	each	172.00
2847	8031G	180mm - UPVC moulded saddle set 0.6Mpa IS-10124	each	242.00
2848	8031H	200mm - UPVC moulded saddle set 0.6Mpa IS-10124	each	279.00
2849	8032A	63mm - UPVC fabricated coupler 0.6Mpa IS-10124	each	32.00
2850	8032B	75mm - UPVC fabricated coupler 0.6Mpa IS-10124	each	45.00
2851	8032C	90mm - UPVC fabricated coupler 0.6Mpa IS-10124	each	64.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2852	8032D	110mm - UPVC fabricated coupler 0.6Mpa IS-10124	each	96.00
2853	8032E	140mm - UPVC fabricated coupler 0.6Mpa IS-10124	each	172.00
2854	8032F	160mm - UPVC fabricated coupler 0.6Mpa IS-10124	each	214.00
2855	8032G	180mm - UPVC fabricated coupler 0.6Mpa IS-10124	each	279.00
2856	8032H	200mm - UPVC fabricated coupler 0.6Mpa IS-10124	each	311.00
2857	8033A	63mm - UPVC fabricated coupler 1.0Mpa IS-10124	each	60.00
2858	8033B	75mm - UPVC fabricated coupler 1.0Mpa IS-10124	each	79.00
2859	8033C	90mm - UPVC fabricated coupler 1.0Mpa IS-10124	each	124.00
2860	8033D	110mm - UPVC fabricated coupler 1.0Mpa IS-10124	each	156.00
2861	8033E	140mm - UPVC fabricated coupler 1.0Mpa IS-10124	each	208.00
2862	8033F	160mm - UPVC fabricated coupler 1.0Mpa IS-10124	each	247.00
2863	8033G	180mm - UPVC fabricated coupler 1.0Mpa IS-10124	each	301.00
2864	8033H	200mm - UPVC fabricated coupler 1.0Mpa IS-10124	each	343.00
2865	8034A	63mm - UPVC fabricated coupler 0.4Mpa IS-10124	each	33.00
2866	8034B	75mm - UPVC fabricated coupler 0.4Mpa IS-10124	each	49.00
2867	8034C	90mm - UPVC fabricated coupler 0.4Mpa IS-10124	each	81.00
2868	8034D	110mm - UPVC fabricated coupler 0.4Mpa IS-10124	each	103.00
2869	8034E	140mm - UPVC fabricated coupler 0.4Mpa IS-10124	each	210.00
2870	8034F	160mm - UPVC fabricated coupler 0.4Mpa IS-10124	each	354.00
2871	8034G	180mm - UPVC fabricated coupler 0.4Mpa IS-10124	each	429.00
2872	8034H	200mm - UPVC fabricated coupler 0.4Mpa IS-10124	each	485.00
2873	8035A	63mm - UPVC fabricated bend 0.6Mpa IS-10124	each	43.00
2874	8035B	75mm - UPVC fabricated bend 0.6Mpa IS-10124	each	64.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2875	8035C	90mm - UPVC fabricated bend 0.6Mpa IS-10124	each	103.00
2876	8035D	110mm - UPVC fabricated bend 0.6Mpa IS-10124	each	140.00
2877	8035E	140mm - UPVC fabricated bend 0.6Mpa IS-10124	each	301.00
2878	8035F	160mm - UPVC fabricated bend 0.6Mpa IS-10124	each	456.00
2879	8035G	180mm - UPVC fabricated bend 0.6Mpa IS-10124	each	569.00
2880	8035H	200mm - UPVC fabricated bend 0.6Mpa IS-10124	each	697.00
2881	8036A	63mm - UPVC fabricated bend 1.0 Mpa IS-10124	each	75.00
2882	8036B	75mm - UPVC fabricated bend 1.0 Mpa IS-10124	each	107.00
2883	8036C	90mm - UPVC fabricated bend 1.0 Mpa IS-10124	each	151.00
2884	8036D	110mm - UPVC fabricated bend 1.0 Mpa IS-10124	each	192.00
2885	8036E	140mm - UPVC fabricated bend 1.0 Mpa IS-10124	each	377.00
2886	8036F	160mm - UPVC fabricated bend 1.0 Mpa IS-10124	each	508.00
2887	8036G	180mm - UPVC fabricated bend 1.0 Mpa IS-10124	each	618.00
2888	8036H	200mm - UPVC fabricated bend 1.0 Mpa IS-10124	each	742.00
2889	8037	Water meter (incl.testing)15mm	each	542.00
2890	8401	150mm - D/F gate valve	each	17388.00
2891	8402	200mm - D/F gate valve	each	28896.00
2892	8403	300mm - D/F gate valve	each	60789.00
2893	8404	400mm - D/F gate valve	each	168262.00
2894	8405	150mm D/F Swing check valves / non return valves	each	36656.00
2895	1556A	Electromagnetic Bulk flow meter - 100 mm dia	each	110381.00
2896	1556AA	Fixing of electromagnetic bulk flow meter - 100mm dia	each	1500.00
2897	1556B	Electromagnetic Bulk flow meter - 200 mm dia	each	164922.00
2898	1556BA	Fixing of electromagnetic bulk flow meter - 200mm dia	each	2500.00
2899	1556C	Electromagnetic Bulk flow meter - 300 mm dia	each	187086.00
2900	1556CA	Fixing of electromagnetic bulk flow meter - 300mm dia	each	3000.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2901	1556D	Electromagnetic Bulk flow meter - 400 mm dia	each	275127.00
2902	1556DA	Fixing of electromagnetic bulk flow meter - 400mm dia	each	4500.00
2903	E0198	copper plate	no	178.00
2904	E1	1.5Sqmm cable	metre	8.00
2905	E110	pendant holder	each	10.00
2906	E117	63A TP main switch	each	1585.00
2907	E118	100A TP main switch	each	3305.00
2908	E124	100A four pole change over switch	each	5993.00
2909	E125	200A four pole change over switch	each	8245.00
2910	E126	400A four pole change over switch	each	13678.00
2911	E172	15W incandescent bulb	each	11.00
2912	E277	8 SWG GI wire	kg	56.00
2913	E278	8 SWG copper wire	kg	438.00
2914	E280	charcoal	kg	17.00
2915	E281	salt	kg	4.00
2916	E289	Drilling of 46 nos,12mm dia.holes on GI pipe	1L.S	110.00
2917	E290	charges for making hole with auger	1L.S	660.00
2918	E3	4 Sqmm cable	metre	19.00
2919	E303	40 x 6mm G.I earth clamp	set	205.00
2920	E312	copper flat 25 x 3	metre	606.00
2921	E318	GI flat 25 x 3	metre	83.00
2922	E381	100Aporcelain fuse	each	259.00
2923	E387	32-100A HRC fuselink	each	313.00
2924	E388	125A HRC fuselink	each	339.00
2925	E403	32/63/100/200A HRC fuse base	each	299.00
2926	E405	400-630A HRc fuse	each	573.00
2927	E413	200A TPN cubical switch	each	5750.00
2928	E419	63A TPN cubical switch	each	1393.00
2929	E420	125A TPN cubical switch	each	3606.00
2930	E421	200A TPN cubical switch DIN	each	3771.00
2931	E436	4x25sqmm cable	metre	181.00
2932	E437	4x50sqmm cable	metre	286.00
2933	E438	3.5 X 95Sq mm cable	metre	434.00
2934	E439	3.5 X 120Sq mm cable	metre	460.00
2935	E440	3.5 X 150Sq mm cable	metre	626.00
2936	E441	3.5 X 185Sq mm cable	metre	689.00
2937	E442	3.5 X 240Sq mm cable	metre	975.00
2938	E443	3.5 X 300Sq mm cable	metre	1192.00
2939	E467	copper gland 4 x 25Sqmm cable	each	59.00
2940	E469	copper gland 4 x 50Sqmm cable	each	97.00
2941	E470	copper gland 3.5x 95Sqmm cable	each	114.00
2942	E471	copper gland 3.5 x 120Sqmm cable	each	126.00
2943	E472	copper gland 3.5 x 150Sqmm cable	each	163.00
2944	E473	copper gland 3.5 x 195Sqmm cable	each	252.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2945	E474	copper gland 3.5 x 240Sqmm cable	each	261.00
2946	E475	copper gland 3.5 x 300 Sqmm cable	each	377.00
2947	E479	25 Sqmm aluminium lug	each	2.00
2948	E481	50 Sqmm aluminium lug	each	4.00
2949	E483	95 Sqmm aluminium lug	each	7.00
2950	E484	120 Sqmm aluminium lug	each	9.00
2951	E485	150 Sqmm aluminium lug	each	12.00
2952	E486	185 Sqmm aluminium lug	each	15.00
2953	E487	240 Sqmm aluminium lug	each	25.00
2954	E488	300 Sqmm aluminium lug	each	35.00
2955	E517	4Sqmm	metre	85.00
2956	E518	6Sqmm	metre	119.00
2957	E519	10Sqmm	metre	195.00
2958	E521	DOL starter 0.5HP-5HP	each	1258.00
2959	E522	4HP to 15HP starter	each	4400.00
2960	E523	20HP starter	each	5183.00
2961	E524	20HP - 25 HP starter	each	7627.00
2962	E525	30HP starter	each	9746.00
2963	E526	35HP starter	each	11864.00
2964	E527	50HP starter	each	17797.00
2965	E528	40 HP oil starter	no	62514.00
2966	E529	50 HP oil starter	no	88103.00
2967	E530	60 HP oil starter	no	95737.00
2968	E531	75 HP oil starter	no	123424.00
2969	E532	100 HP oil starter	no	152322.00
2970	E533	125 HP oil starter	no	164068.00
2971	E534	150 HP oil starter	no	176997.00
2972	E535	Transformer oil	litre	72.00
2973	E549	aerial board	each	164.00
2974	E550	25x6mm pole clamp	each	205.00
2975	E552	Analog ammeter	each	2183.00
2976	E554	Analog voltmeter	each	2297.00
2977	E577	Toggle switch	each	61.00
2978	E583	signal lamp-red,yellow,green,ampour	each	100.00
2979	E584	signal lamp-blue	each	341.00
2980	E7492	Lightening Arrestor	no	3729.00
2981	E87	5/6amps switch one way	no	10.00
2982	EC320	5 HP Monoblock centrifugal pumpset	no	29498.00
2983	EC321	7.5 HP Monoblock centrifugal pumpset	no	31495.00
2984	EC322	10 HP Monoblock centrifugal pumpset	no	42731.00
2985	EC330	15 HP Centrifugal motor pumpset	no	162820.00
2986	EC331	20 HP Centrifugal motor pumpset	no	179756.00
2987	EC332	25 HP Centrifugal motor pumpset	no	206775.00
2988	EC333	30 HP Centrifugal motor pumpset	no	249314.00
2989	EC334	40 HP Centrifugal motor pumpset	no	308058.00
2990	EC335	50 HP Centrifugal motor pumpset	no	342900.00
2991	EC336	60 HP Centrifugal motor pumpset	no	357141.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
2992	EC337	75 HP Centrifugal motor pumpset	no	445659.00
2993	EC338	100 HP Centrifugal motor pumpset	no	535714.00
2994	EG350	30 KVA / 24 KW Generator set (Air cooled)	no	365615.00
2995	EG351	40 KVA / 32 KW Generator set (Air cooled)	no	371801.00
2996	EG352	50 KVA / 40 KW Generator set (Air cooled)	no	478531.00
2997	EG353	62.5 KVA / 50 KW Generator set (Air cooled)	no	507711.00
2998	EG354	75 KVA / 60 KW Generator set (Water cooled)	no	508061.00
2999	EG355	82.5 KVA / 66 KW Generator set (Water cooled)	no	516649.00
3000	EG356	100 KVA / 80 KW Generator Set (Water cooled)	no	599894.00
3001	EG357	125 KVA / 100 KW Generator set (Water cooled)	no	630915.00
3002	EG358	160 KVA / 128 KW Generator set (Water cooled)	no	815808.00
3003	EG359	200 KVA / 160 KW Generator Set (Water cooled)	no	988622.00
3004	EG360	250 KVA / 200 KW Generator Set (Water cooled)	no	1187629.00
3005	EG361	65mm dia exhaust pipe (upto to 40KVA)	job	4568.00
3006	EG362	80mm dia exhaust pipe (from 50KVA to 40KVA)	job	5686.00
3007	EG363	100mm dia exhaust pipe (from 100KVA to 160KVA)	job	7737.00
3008	EG364	125mm dia exhaust pipe (from 200KVA to 250KVA)	job	9508.00
3009	EG365	Aluminium cladding with 50mm thick glass wool	Sqm	1119.00
3010	EG366	Fire extinguisher and fire bucket	job	4456.00
3011	EG367	MS angle frame for genset	no	466.00
3012	EG368	Frame and wall painting	no	186.00
3013	EG369	Transportation and erecton charge for genset upto 50KVA	no	16500.00
3014	EG370	Transportation and erecton charge for genset upto 100KVA	no	19250.00
3015	EG371	Transportation and erecton charge for genset upto 200KVA	no	26400.00
3016	EG372	Transportation and erecton charge for genset ABOVE200KVA	no	33000.00
3017	ES01	C.T Coil 100/5	no	178.00
3018	ES02	Slide lock fuse	each	53.00
3019	ES03	2A fuse link	each	27.00
3020	ES04	Box size 90X30X15 cm	no	1864.00
3021	ES05	Angle frame 30X30X6mm	no	699.00
3022	ES06	Flush type fuse	each	10.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3023	ES07	preventor	no	886.00
3024	ES08	Power capacitor 4KVAR	each	1008.00
3025	ES09	Power capacitor 6KVAR	each	1419.00
3026	ES10	Power capacitor 7.5KVAR	each	1774.00
3027	ES11	Power capacitor 10KVAR	each	2365.00
3028	ES12	Power capacitor 12.5KVAR	each	2936.00
3029	ES13	Power capacitor 15KVAR	each	3546.00
3030	ES14	Power capacitor 20KVAR	each	4734.00
3031	ES15	Power capacitor 25KVAR	each	5912.00
3032	ES16	Fabrication M.S angle frame- power capacitor	LS	140.00
3033	ES17	3.5 X 70Sq mm cable	metre	274.00
3034	ES18	charges for making hole	no	250.00
3035	ES19	pvc columns pipes-50mm dia	metre	361.00
3036	ES20	pvc columns pipes-65mm dia	metre	411.00
3037	ES21	pvc columns pipes-75/80mm dia	metre	566.00
3038	ES22	pvc columns pipes-100mm dia	metre	797.00
3039	ES23	C.I adopter-50mm dia	no	864.41
3040	ES24	C.I adopter-65mm dia	no	1118.64
3041	ES25	C.I adopter-75/80mm dia	no	1525.42
3042	ES26	C.I adopter-100mm dia	no	2203.39
3043	ES27	nylon rope	LS	44.00
3044	ES28	m.s clamp-80/100mm dia	LS	551.00
3045	ES29	wiring	no	661.00
3046	ES30	C.T metering panel board	no	13983.00
3047	ES300	5 HP submersible pumpset	no	38297.00
3048	ES301	5 HP submersible pumpset(Open well)	no	26779.00
3049	ES302	7.5 HP submersible pumpset	no	40406.00
3050	ES303	7.5 HP submersible pumpset(Open well)	no	31214.00
3051	ES304	10 HP submersible pumpset	no	48478.00
3052	ES305	10 HP submersible pumpset(Open well)	no	46031.00
3053	ES306	12.5 HP submersible pumpset	no	56091.00
3054	ES307	15 HP submersible pumpset	no	63731.00
3055	ES308	17.5 HP submersible pumpset	no	69741.00
3056	ES309	20 HP submersible pumpset	no	80718.00
3057	ES31	erection of C.T panel	no	220.00
3058	ES310	25 HP submersible pumpset	no	83456.00
3059	ES311	30 HP submersible pumpset	no	85912.00
3060	ES312	35 HP submersible pumpset	no	90300.00
3061	ES313	40 HP submersible pumpset	no	93562.00
3062	ES32	Fixing charge for 63A cubical switch	LS	550.00
3063	ES33	Transportation charge for cubical switch	LS	330.00
3064	ES34	Fixing charge for 100A cubical switch	LS	1100.00
3065	ES35	Fixing charge for Wall mounting panel board	LS	550.00
3066	ES36	Transportation charge for Wall mounting panel board	LS	165.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3067	ES37	Fixing charge for C.T metering panel board	LS	330.00
3068	ES38	Transportation charge for C.T metering panel board	LS	330.00
3069	ES39	Fixing charge for m.s angle for power capacitor	LS	46.00
3070	ES40	Fabrication M.S angle frame for star delta starter	LS	233.00
3071	ES41	Fixing charge for m.s angle for star delta starter	LS	165.00
3072	ES42	Laying charge for flat cable	metre	7.00
3073	ES421	200A TPNcubical switch DIN	no	4195.00
3074	ES43	600 X900 X150 M.S angle frame for meter board	LS	699.00
3075	ES44	Water proof ply wood 12mm for meter board	LS	280.00
3076	ES45	Fixing charge for meter board	LS	198.00
3077	ES46	Fixing charge for aerial board	LS	66.00
3078	ES47	RCC precast ring	no	144.00
3079	ES48	RCC cover	no	143.00
3080	ES49	Transportation charge for earth pit material	LS	110.00
3081	ES50	Fixing charge for earth pit	LS	220.00
3082	ES51	Fixing charge for CI adopter	LS	39.00
3083	ES52	MS square coupling-50mm dia	no	360.00
3084	ES53	MS square coupling-65mm dia	no	445.00
3085	ES54	MS square coupling-80mm dia	no	551.00
3086	ES55	MS square coupling-100mm dia	no	678.00
3087	ES56	welding charge for square coupling-50mm dia	no	100.00
3088	ES57	welding charge for square coupling-65mm dia	no	200.00
3089	ES58	welding charge for square coupling-80mm dia	no	250.00
3090	ES59	welding charge for square coupling-100mm dia	no	300.00
3091	ES60	Wall mounting panel board1200X750X225mm	no	8856.00
3092	ES61	Wall mounting panel board1300X750X225mm	no	11653.00
3093	ES62	Wall mounting panel board1400X900X250mm	no	16314.00
3094	ES63	Flush type switch	each	10.00
3095	ES64	Supply and fixing of 200mm dia strainer	no	6059.00
3096	ES65	Supply and fixing of 300mm dia strainer	no	6712.00
3097	ES66	Supply and fixing of 400mm dia strainer	no	7458.00
3098	ES67	Providing and fixing of pressure gauge 0-5 kg/cm2	no	2331.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3099	ES68	Fixing charge for 40 HP oil starter	LS	1650.00
3100	ES69	Fixing charge for 50 HP oil starter	LS	1980.00
3101	ES70	Fixing charge for 60 HP oil starter	LS	2420.00
3102	ES71	Fixing charge for 75-150 HP oil starter	LS	2750.00
3103	ES72	cost of Grouting per point	no	116.00
3104	ES73	Drilling charges	no	132.00
3105	ES74	cost for salt,bolt nuts,RCC precast ring and cover	LS	550.00
3106	EV345	2 HP Vacuum pumpset	no	24604.00
3107	EV346	3 HP Vacuum pumpset	no	48843.00
3108	EV347	5 HP Coupled pumpset	no	127926.00
3109	S8700	Cost of earth above water level	Cum	48.00
3110	S8701	Cost of earth work for(second depth)	Cum	74.00
3111	S8702	Cost of earth work open timbering(sewer line)	Cum	54.00
3112	S8703	Cost of earth work second depth (sewer line)	Cum	78.00
3113	S8704	Cost of earth work Third depth (sewer line)	Cum	112.00
3114	S8705	Cost of earth work for(Third depth)	Cum	106.00
3115	1556A	Electromagnetic Bulk flow meter - 100 mm dia	each	110381.00
3116	1556AA	Fixing of electromagnetic bulk flow meter - 100mm dia	each	1500.00
3117	1556B	Electromagnetic Bulk flow meter - 200 mm dia	each	164922.00
3118	1556BA	Fixing of electromagnetic bulk flow meter - 200mm dia	each	2500.00
3119	1556C	Electromagnetic Bulk flow meter - 300 mm dia	each	187086.00
3120	1556CA	Fixing of electromagnetic bulk flow meter - 300mm dia	each	3000.00
3121	1556D	Electromagnetic Bulk flow meter - 400 mm dia	each	275127.00
3122	1556DA	Fixing of electromagnetic bulk flow meter - 400mm dia	each	4500.00
3123	B002	200 mm plain UPVC casing pipe Class 'CM' IS 12818	metre	2469.00
3124	B004	200mm slotted UPVC casing pipe Class RS IS 12818	metre	2913.00
3125	B006	M.S.centering guide 200 mm	metre	127.00
3126	B007	M.S.endcap 200mm	each	1355.93
3127	B011	Pebbles	cum	4000.00
3128	B013	M.S.Top cover	each	635.59
3129	1359	DI Rectangular IC cover 450 x 600 mm rectangular hinged cover with frame	each	4936.00
3130	8002A	Polyethylene water storage tank - upto 2000 litres -ISI	litre	6.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3131	8003A	Polyethylene water storage tank - upto 5000 litres-ISI	litre	6.00
3132	8004A	Polyethylene water storage tank - upto 10000 litres -ISI	litre	7.00
3133	1371	Hydrant (Fire) 2kg	each	1678.00
3134	1371A	Hydrant (Fire) 4.5kg	each	2373.00
New Technologies items				
3137	0030	Generator 250 KVA	per day	4000.00
3138	0031	Steam curing by using boiler /Heater	cum	500.00
3139	0032	Stressing Machine (jack with pump)	per day	11500.00
3140	0034	Cutting saw machine	per day	1350.00
3141	0035	Strands Roller machinery for laying strands	per day	3500.00
3142	0036	Bed master (Pulling strands)	per day	3000.00
3143	0044	Hire charge for crane upto 40 tonne capacity	per day	10000.00
3144	0067	Hire charge for crane upto 80 tonne capacity	per day	15000.00
3145	0070	Generator 100 KVA/125 KVA	per hour	330.00
3146	0072	Hire charge for crane having capacity 50MT	per day	10000.00
3147	0166	Installation charges for fixing of façade at all heights with extruded hollow clay/terracotta ventilated rain screen tiles	sqm	645.00
3148	0246	2mm thick sim pad	each	10.00
3149	0247	5mm thick sim pad	each	15.00
3150	0248	10mm thick sim pad	each	25.00
3151	0993	FY-1860 grade wire strands	quintal	5700.00
3152	1012	Pregalvanized high tensile steel confirming to IS:277-199	kg	90.00
3153	1027	Erection Bolts (Minimum 04 nos for each element)	each	25.00
3154	1217	GI Wire mesh 100x100 mm	kg	75.00
3155	1218	M.S. Shear stud	each	50.00
3156	1223	Steel weld mesh	sqm	150.00
3157	1251	M-60 grade cemetitious grout (Non Shrink)	kg	28.00
3158	5747	Factory made single extruded WPC (Wood Polymer Composite) solid door/window, clerestory windows & other Frames/Chowkhat of frame size 45 x 70 mm	metre	375.00
3159	5748	Factory made single extruded WPC (Wood Polymer Composite) solid door/window, clerestory windows & other Frames/Chowkhat of frame size 45 x 85 mm	metre	525.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3160	5749	Factory made single extruded WPC (Wood Polymer Composite) solid door/window, clerestory windows & other Frames/Chowkhat of frame size 50 x 100 mm	metre	540.00
3161	5750	Factory made single extruded WPC (Wood Polymer Composite) solid door/window, clerestory windows & other Frames/Chowkhat of frame size 50 x 125 mm	metre	630.00
3162	5751	Factory made single extruded WPC (Wood Polymer Composite) solid door/window, clerestory windows & other Frames/Chowkhat of frame size 65 x 100 mm	metre	650.00
3163	5752	Factory made single extruded WPC (Wood Polymer Composite) solid door/window, clerestory windows & other Frames/Chowkhat of frame size 65 x 125 mm	metre	835.00
3164	5753	Factory made single extruded WPC (Wood Polymer Composite) solid door/window, clerestory windows & other Frames/Chowkhat of frame size 65 x 150 mm	metre	1010.00
3165	5754	Factory made single extruded WPC (Wood Polymer Composite) solid plain flush door shutter 30mm thick	sqm	2800.00
3166	5755	Factory made single extruded WPC (Wood Polymer Composite) solid plain flush door shutter 35mm thick	sqm	3250.00
3167	5756	Factory made single extruded WPC (Wood Polymer Composite) solid plain white coloured board of 18mm thick	sqm	1750.00
3168	5757	Factory made single extruded WPC (Wood Polymer Composite) solid plain white coloured board of 25mm thick	sqm	2360.00
3169	5758	Factory made single extruded WPC (Wood Polymer Composite) solid plain white coloured board of 6mm thick	sqm	600.00
3170	5759	Factory made single extruded WPC (Wood Polymer Composite) solid plain white coloured board of 12mm thick	sqm	1020.00
3171	5760	Factory made 18 mm thick single extruded WPC (Wood Polymer Composite) solid plain white colour board Jali	sqm	2260.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3172	5761	PVC laminated foil of minimum thickness of 14 microns of approved design	sqm	125.00
3173	5762	16mm thick extruded terracotta tiles of grey colour of size 300 x 595mm	sqm	2152.80
3174	5763	16mm thick extruded terracotta tiles other than grey colour of size 300 x 595mm	sqm	1991.30
3175	5764	24mm thick extruded terracotta tiles of grey colour of size 309 x 1190 mm and length 1190mm	sqm	2475.00
3176	5765	24mm thick extruded terracotta tiles of grey colour of size 309 x 1190 mm and length 1190mm	sqm	2260.00
3177	7216	Self-Drilling/Self-Tapping Screws M-6 25mm long	each	3.00
3178	7217	SS anchor Fasteners (RCC / Brick) – M-8x75mm/M-10x100mm	each	70.00
3179	7218A	MS Polymer Sealant Adhesive	litre	1200.00
3180	7219	SS Double Clip at intermediate	each	7.00
3181	7220	SS Single clip at top and bottom	each	4.00
3182	7221	Self-Drilling/Self-Tapping Screws 5.5x25 mm long	each	3.00
3183	7222	SS Anchor Fasteners (RCC / Brick) – M-8x100 mm	each	70.00
3184	7336	Lock Bar (E 250) - 10 thick MS Plate	kg	76.00
3185	7912	Hire charges of Drill machine upto 30 mm dia	per day	160.00
3186	7929	Shear loops (6mm dia GI wire rope) (For vertical joints) 6 nos on each side	each	210.00
3187	7930	dowel tubes (Corrugated GI pipes 50 to 80mm dia) (For horizontal joints)	metre	144.00
3188	7931	Hooks for lifting (Alloy steel) having 2.5 tonne capacity	each	270.00
3189	8019	GI sheet 0.8 mm thick confirming to IS 277:1992	kg	90.00
3190	8516	ZMB 60/equivalent	kg	110.00
3191	8517	ZMB thinner	litre	220.00
3192	8518	Zycoprime / equivalent	litre	230.00
3193	8519	Zycosil / equivalent	litre	1800.00
3194	8520	Elastobar / equivalent	kg	300.00
3195	8761A	Scaffolding net made of high density polyethylene UV stabilized having density 100 gm/sqm	sqm	22.00
Additional New basic rates				
3196	0992B	Polycarbonate sheet	sqm	860.50
3197	0040A	Air compressor 600CFM	per hour	6000.00
3198	0040B	Tripod arrangements	per day	1500.00
3199	0040C	Chain pully block	per day	1000.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3200	0157A	Operator	per day	1050.00
3201	B012	Clay balls	cum	2800.00
Basic Rate for Labour				
3202	167	Polisher 1st class	day	977.73
3203	168	Polisher 2nd class	day	889.44
3204	169	Specialized technicians	day	1060.57
Basic Rate for Material				
3205	0244	Factory made light weight composite non asbestos fibre reinforced aerated cement sandwitched wall/roof panel (50mm thick). The outer face on both sides of the panels will be non asbestos fibre cement board (minimum 4mm thick) Type B, Category III as per	sqm	708.50
3206	0245	Factory made light weight non asbestos fibre reinforced aerated cement sandwitched wall/roof panel (75mm thick). The outer face on both sides of the panels will be non asbestos fibre cement board (minimum 5mm thick) Type B, Category III as per IS 14862:2	sqm	937.40
3207	0249	10 mm thick Cement Bonded particle board confirming to IS 14276	sqm	545.00
3208	0251	6mm thick fiber cement board Type A, Category III as per IS: 14862:2000	sqm	265.96
3209	0252	9 mm thick fiber cement board Type A, Category III as per IS: 14862:2000	sqm	333.54
3210	0253	Factory made light weight composite non asbestos fibre reinforced aerated cement sandwitched wall/roof panel (50mm thick). The outer face on both sides of the panels will be non asbestos fibre cement board (minimum 4mm thick) Type A, Category III as per	sqm	786.98
3211	0254	Factory made light weight composite non asbestos fibre reinforced aerated cement sandwitched wall/roof panel (50mm thick). The outer face on both sides of the panels will be non asbestos fibre cement board (minimum 4mm thick) Type A, Category IV as per I	sqm	1103.08

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3212	0255	Factory made light weight non asbestos fibre reinforced aerated cement sandwicheed wall/roof panel (75mm thick). The outer face on both sides of the panels will be non asbestos fibre cement board (minimum 5mm thick) Type A, Category III as per IS 14862:2	sqm	895.98
3213	0256	Factory made light weight non asbestos fibre reinforced aerated cement sandwicheed wall/roof panel (75mm thick). The outer face on both sides of the panels will be non asbestos fibre cement board (minimum 5mm thick) Type A, Category IV as per IS 14862:200	sqm	1291.65
3214	0278	Manufactured sand derived from Recycled Concrete Aggregate (RCA)	cum	1043.13
3215	0279	Recycled Concrete Aggregate (RCA) 20 mm nominal size	cum	1043.13
3216	0280	Recycled Concrete Aggregate (RCA) 12.5 mm nominal size	cum	1043.13
3217	0281	Recycled Concrete Aggregate (RCA) 10 mm nominal size	cum	1043.13
3218	0282	Recycled Aggregate (RA) 40 mm nominal size	cum	425.10
3219	0283	Recycled Aggregate (RA) 20 mm nominal size	cum	457.80
3220	0284	Recycled Aggregate (RA) 10 mm nominal size	cum	490.50
3221	0552	75mm SS fancy handles for kitchen cabinet	10 Nos.	310.65
3222	0553	100mm SS fancy handles for kitchen cabinet	10 Nos	553.72
3223	0554	125mm SS fancy handles for kitchen cabinet	10 Nos	773.90
3224	0837	Acrylic Exterior Primer	litre	87.20
3225	1242	Glass mosaaic tiles (20 mm x 20 mm x 4 mm)	sqm	2474.30
3226	1243	Tile fixing chemical adhesive	kg	13.08
3227	1244	Cement Polymer Grout Compound	kg	17.44
3228	1245	Acid for cleaning tiles	litre	21.80
3229	1252	Cementitious polymer base adhesive confirming to EOTA ETAG 004 (European Technical Approval)	kg	43.60
3230	1253	Polypropylene mechanical fastener with plastic pin confirming to EOTA ETAG 014 (European Technical Approval) having dia 10mm & L=200mm	each	32.70
3231	1254	Moisture cure Polyurethane Foam	750 ml	599.50

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3232	1255	PVC Corner Bead of size 25mmx25mm fixed with glass fibre mesh (100mm x 100mm)	metre	95.92
3233	1256	Cementitious polymer base coat confirming to EOTA ETAG 004 (European Technical Approval)	kg	38.15
3234	1257	Fiberglass mesh with alkali-resistant coating having mass per unit area ≥ 145 g/m ² , mesh size: 3.9x4.0 mm $\pm 10\%$	sqm	76.30
3235	2415	21mm thick clear toughened Laminated glass for fins with holes	sqm	6803.78
3236	2495	18mm thick both sides Pre-laminated cement bonded wood particle board as per IS : 15786:2008	sqm	728.12
3237	2496	6mm thick both sides Pre-laminated cement bonded wood particle board as per IS : 15786:2008	sqm	505.76
3238	2497	19mm thick prelaminated ply	sqm	1667.70
3239	2498	19mm thick both side balancing lamination factory pressed BWP grade marine ply as per IS 710	sqm	1626.28
3240	2752	Double charge vitrified tile polished finish of size 60 x 60 cm	sqm	518.84
3241	2753	Double charge vitrified tile polished finish of size 80 x 80 cm	sqm	582.06
3242	2754	Double charge vitrified tile polished finish of size 60 x 120 cm	sqm	613.67
3243	2755	Double charge vitrified tile polished finish of size 80 x 160 cm	sqm	832.76
3244	2756	Double charge vitrified tile polished finish of size 100 x 100 cm	sqm	781.53
3245	2757	Glazed vitrified tiles polished finish of size 60 x 60 cm	sqm	558.08
3246	2758	Glazed vitrified tiles polished finish of size 60 x 120 cm	sqm	779.35
3247	2759	Glazed vitrified tiles polished finish of size 80 x 80 cm	sqm	727.03
3248	2760	Glazed vitrified tiles polished finish of size 80 x 120 cm	sqm	972.28
3249	2761	Glazed vitrified tiles polished finish of size 120 x 120 cm	sqm	1334.16
3250	2762	Glazed Vitrified tiles Matt/Antiskid finish of size 60 x 60 cm	sqm	529.74
3251	2763	Glazed Vitrified tiles Matt/Antiskid finish of size 60 x 120 cm	sqm	778.26
3252	2764	Glazed Vitrified tiles Matt/Antiskid finish of size 80 x 80 cm	sqm	723.76

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3253	2765	Glazed Vitrified tiles Matt/Antiskid finish of size 80 x 120 cm	sqm	972.28
3254	2766	Glazed Vitrified tiles Matt/Antiskid finish of size 120 x 120 cm	sqm	1556.52
3255	2767	Full body Vitrified tile of size 800 x 2400mm	sqm	2100.00
3256	3051	Aluminium troughed profile sheet 0.56mm thick with center to center pitch of 200 mm, depth of 32 mm, overall profile width1092 mm, cover width 1000mm)	sqm	614.76
3257	3052	Aluminium troughed profile sheet 0.71mm thick with center to center pitch of 200 mm, depth of 32 mm, overall profile width1092 mm, cover width 1000mm	sqm	765.18
3258	3053	Aluminium troughed profile sheet 0.91mm thick with center to center pitch of 200 mm, depth of 32 mm, overall profile width1092 mm, cover width 1000mm	sqm	985.36
3259	3054	Aluminium profile sheet 0.56mm thick with center to center pitch of 175 mm, depth of 46mm, top crest width of 41mm, bottom valley width of 80mm, overall profile width of 1144mm, cover width 1050mm	sqm	810.96
3260	3055	Aluminium profile sheet 0.71mm thick with center to center pitch of 175 mm, depth of 46mm, top crest width of 41mm, bottom valley width of 80mm, overall profile width of 1144mm, cover width 1050mm	sqm	1020.24
3261	3056	Aluminium profile sheet 0.91mm thick with center to center pitch of 175 mm, depth of 46mm, top crest width of 41mm, bottom valley width of 80mm, overall profile width of 1144mm, cover width 1050mm	sqm	1303.64
3262	3057	Aluminium Circular(sinusoidal) profile sheet 0.56mm thick with center to center pitch of 75 mm, depth of 19 mm, overall profile width 1250mm,cover width 1150mm	sqm	582.06
3263	3058	Aluminium Circular(sinusoidal) profile sheet 0.71mm thick with center to center pitch of 75 mm, depth of 19 mm, overall profile width 1250mm,cover width 1150mm	sqm	745.56

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3264	3059	Aluminium Circular(sinusoidal) profile sheet 0.91mm thick with center to center pitch of 75 mm, depth of 19 mm, overall profile width 1250mm,cover width 1150mm	sqm	972.28
3265	3060	Precoated Aluminium troughed profile sheet 0.56mm thcik with center to center pitch of 200 mm, depth of 32 mm, overall profile width1092 mm, cover width 1000mm	sqm	712.86
3266	3061	Precoated Aluminium troughed profile sheet 0.71mm thick with center to center pitch of 200 mm, depth of 32 mm, overall profile width1092 mm, cover width 1000mm	sqm	887.26
3267	3062	Precoated Aluminium troughed profile sheet 0.91mm thick with center to center pitch of 200 mm, depth of 32 mm, overall profile width1092 mm, cover width 1000mm	sqm	1140.14
3268	3063	Aluminium color coated profile sheet 0.56mm thick with center to center pitch of 175 mm, depth of 46mm, top crest width of 41mm, bottom valley width of 80mm, overall profile width of 1144mm, cover width 1050mm	sqm	928.68
3269	3064	Aluminium color coated profile sheet 0.71mm thick with center to center pitch of 175 mm, depth of 46mm, top crest width of 41mm, bottom valley width of 80mm, overall profile width of 1144mm, cover width 1050mm	sqm	1192.46
3270	3065	Aluminium color coated profile sheet 0.91mm thick ith center to center pitch of 175 mm, depth of 46mm, top crest width of 41mm, bottom valley width of 80mm, overall profile width of 1144mm, cover width 1050mm	sqm	1517.28
3271	3066	Aluminium profile sheet 0.56mm thick with center to center pitch of 177.5 mm, depth of 28.5 mm, 987mm overall profile width, cover width 900mm	sqm	747.74
3272	3067	Aluminium profile sheet 0.71mm thick with center to center pitch of 177.5 mm, depth of 28.5 mm, 987mm overall profile width, cover width 900mm	sqm	963.56

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3273	3068	Precoated/Mill finish Aluminium plain ridges 0.71 mm TCT/plain and 500- 600 mm wide	metre	627.84
3274	3069	Precoated/Mill finish Aluminium flashings/aprons 0.50mm TCT/plain and wide upto 600 mm	metre	611.49
3275	3070	Precoated/Mill finish Aluminium plain north light cuves	metre	645.28
3276	3071	Precoated/mill finish aluminium Barge board (Upto 200 mm)	metre	537.37
3277	3072	Precoated/Mill finish Aluminium crimp curve	sqm	603.86
3278	3073	Precoated/Mill finish Aluminium gutter	metre	802.24
3279	3074	Stainless steel self tapping screw of 6x50mm with SS hex cap and 3mm thick EPDM seal	100 Nos	556.99
3280	3075	EPDM washer	100 Nos	44.69
3281	3076	Stainless steel bolts & nuts 10 mm dia and 125 mm long round head with slots	each	44.69
3282	3862	SS pipe 316L grade as per IS 6911:2017 with press fit technology and conforming to EN-10312 standard 15 mm outer dia	metre	376.05
3283	3863	SS pipe 316L grade as per IS 6911:2017 with press fit technology and conforming to EN-10312 standard 22 mm outer dia	metre	610.40
3284	3864	SS pipe 316L grade as per IS 6911:2017 with press fit technology and conforming to EN-10312 standard 28 mm outer dia	metre	790.25
3285	3865	SS pipe 316L grade as per IS 6911:2017 with press fit technology and conforming to EN-10312 standard 35 mm outer dia	metre	1149.95
3286	3866	SS pipe 316L grade as per IS 6911:2017 with press fit technology and conforming to EN-10312 standard 42 mm outer dia	metre	1411.55
3287	3867	SS pipe 316L grade as per IS 6911:2017 with press fit technology and conforming to EN-10312 standard 54 mm outer dia	metre	1831.20
3288	3868	Coupling/Socket fittings for 15 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	261.60
3289	3869	Coupling/Socket fittings for 22 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	327.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3290	3870	Coupling/Socket fittings for 28 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	381.50
3291	3871	Coupling/Socket fittings for 35 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	479.60
3292	3872	Coupling/Socket fittings for 42 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	648.55
3293	3873	Coupling/Socket fittings for 54 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	779.35
3294	3874	Reducer for 22 mm X 15 mm outer Dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	310.65
3295	3875	Reducer for 28 mm X 15 mm outer Dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	376.05
3296	3876	Reducer for 28 mm X 22 mm outer Dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	457.80
3297	3877	Reducer for 35 mm X 22 mm outer Dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	463.25
3298	3878	Reducer for 35 mm X 28 mm outer Dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	572.25
3299	3879	Reducer for 42 mm X 22 mm outer Dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	735.75
3300	3880	Reducer for 42 mm X 28 mm outer Dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	839.30
3301	3881	Reducer for 42 mm X 35 mm outer Dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	877.45
3302	3882	Reducer for 54 mm X 28 mm outer Dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1019.15
3303	3883	Reducer for 54 mm X 35 mm outer Dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1204.45

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3304	3884	Reducer for 54 mm X 42 mm outer Dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1253.50
3305	3885	Sleeve/Slip Coupling / Socket 15 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	457.80
3306	3886	Sleeve/Slip Coupling / Socket 22 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	545.00
3307	3887	Sleeve/Slip Coupling / Socket 28 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	632.20
3308	3888	Sleeve/Slip Coupling / Socket 35 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	703.05
3309	3889	Sleeve/Slip Coupling / Socket 42 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	817.50
3310	3890	Sleeve/Slip Coupling / Socket 54 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1160.85
3311	3891	Elbow 90° for 15 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	370.60
3312	3892	Elbow 90° for 22 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	523.20
3313	3893	Elbow 90° for 28 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	697.60
3314	3894	Elbow 90° for 35 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1144.50
3315	3895	Elbow 90° for 42 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1853.00
3316	3896	Elbow 90° for 54 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	2452.50

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3317	3897	Equal Tee for 15 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	610.40
3318	3898	Equal Tee for 22 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	713.95
3319	3899	Equal Tee for 28 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	877.45
3320	3900	Equal Tee for 35 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1090.00
3321	3901	Equal Tee for 42 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1526.00
3322	3902	Equal Tee for 54 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1831.20
3323	3903	Reducing Tee for 22 mm X 15 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	697.60
3324	3904	Reducing Tee for 28 mm X 15 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	866.55
3325	3905	Reducing Tee for 28 mm X 22 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	872.00
3326	3906	Reducing Tee for 35 mm X 15 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1095.45
3327	3907	Reducing Tee for 35 mm X 22 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1100.90
3328	3908	Reducing Tee for 35 mm X 28 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1111.80
3329	3909	Reducing Tee for 42 mm X 22 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1542.35
3330	3910	Reducing Tee for 42 mm X 28 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1558.70
3331	3911	Reducing Tee for 42 mm X 35 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1569.60

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3332	3912	Reducing Tee for 54 mm X 22 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1831.20
3333	3913	Reducing Tee for 54 mm X 28 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1874.80
3334	3914	Reducing Tee for 54 mm X 35 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1891.15
3335	3915	Reducing Tee for 54 mm X 42 mm outer dia SS pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1912.95
3336	3916	Stainless steel Female thread Tee for 15 mm outer dia X 1/2" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	681.25
3337	3917	Stainless steel Female thread Tee for 22 mm outer dia X 1/2" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	741.20
3338	3918	Stainless steel Female thread Tee for 22 mm outer dia X 3/4" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	839.30
3339	3919	Stainless steel Female thread Tee for 28 mm outer dia X 1/2" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	888.35
3340	3920	Stainless steel Female thread Tee for 28 mm outer dia X 3/4" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	921.05
3341	3921	Stainless steel Female thread Tee for 28 mm outer dia X 1" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1019.15
3342	3922	Stainless steel Female thread Tee for 35 mm outer dia X 1/2" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1024.60
3343	3923	Stainless steel Female thread Tee for 35 mm outer dia X 1-1/4" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1411.55

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3344	3924	Stainless steel Female thread Tee for 42 mm outer dia X 1-1/4" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1640.45
3345	3925	Stainless steel Female thread Tee for 54 mm outer dia X 1-1/2" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	2343.50
3346	3926	Stainless steel Female thread Tee for 54 mm outer dia X 2" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	2812.20
3347	3927	Stainless steel Female threaded Connector/Adapter for 15 mm outer dia X 1/2" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	534.10
3348	3928	Stainless steel Female threaded Connector/Adapter for 22 mm outer dia X 1/2" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	599.50
3349	3929	Stainless steel Female threaded Connector/Adapter for 22 mm outer dia X 3/4" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	703.05
3350	3930	Stainless steel Female threaded Connector/Adapter for 28 mm outer dia X 1" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1160.85
3351	3931	Stainless steel Female threaded Connector/Adapter for 35 mm outer dia X 1-1/4" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1242.60
3352	3932	Stainless steel Female threaded Connector/Adapter for 42 mm outer dia X 1-1/2" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1907.50
3353	3933	Stainless steel Female threaded Connector/Adapter for 54 mm outer dia X 2" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	2926.65

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3354	3934	Stainless steel Male threaded Connector/ Adapter for 15 mm outer dia X 1/2" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	490.50
3355	3935	Stainless steel Male threaded Connector/ Adapter for 22 mm outer dia X 1/2" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	583.15
3356	3936	Stainless steel Male threaded Connector/ Adapter for 22 mm outer dia X 3/4" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	615.85
3357	3937	Stainless steel Male threaded Connector/ Adapter for 28 mm outer dia X 1" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	806.60
3358	3938	Stainless steel Male threaded Connector/ Adapter for 35 mm outer dia X 1-1/4" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1182.65
3359	3939	Stainless steel Male threaded Connector/ Adapter for 42 mm outer dia X 1-1/2" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1722.20
3360	3940	Stainless steel Male threaded Connector/ Adapter for 54 mm outer dia X 2" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	2310.80
3361		Female Threaded Elbow 90°		0.00
3362	3941	SS Female Threaded Elbow 90° for 15 mm outer dia X 1/2" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	779.35
3363	3942	SS Female Threaded Elbow 90° for 22 mm outer dia X 3/4" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1046.40

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3364	3943	SS Female Threaded Elbow 90° for 28 mm outer dia X 1" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1438.80
3365	3944	SS Female Threaded Elbow 90° for 35 mm outer dia X 1-1/4" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	2338.05
3366	3945	SS Female Threaded Elbow 90° for 42 mm outer dia X 1-1/2" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	2545.15
3367	3946	SS Female Threaded Elbow 90° for 54 mm outer dia X 2" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	3934.90
3368	3947	SS Male Threaded Elbow 90° for 15 mm outer dia X 1/2" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	637.65
3369	3948	SS Male Threaded Elbow 90° for 22 mm outer dia X 3/4" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	959.20
3370	3949	SS Male Threaded Elbow 90° for 28 mm outer dia X 1" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1275.30
3371	3950	SS Male Threaded Elbow 90° for 35 mm outer dia X 1-1/4" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1754.90
3372	3951	SS Male Threaded Elbow 90° for 42 mm outer dia X 1-1/2" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	3215.50
3373	3952	SS Male Threaded Elbow 90° for 54 mm outer dia X 2" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	3656.95
3374	3953	Stainless steel Cap for 15 mm outer dia pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	386.95
3375	3954	Stainless steel Cap for 22 mm outer dia pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	501.40

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3376	3955	Stainless steel Cap for 28 mm outer dia pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	626.75
3377	3956	Stainless steel Cap for 35 mm outer dia pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	877.45
3378	3957	Stainless steel Cap for 42 mm outer dia pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1907.50
3379	3958	Stainless steel Cap for 54 mm outer dia pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	2098.25
3380	3959	Stainless steel Pipe Bridge for 15 mm outer dia pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	501.40
3381	3960	Stainless steel Pipe Bridge for 22 mm outer dia pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1351.60
3382	3961	Stainless steel Pipe Bridge for 28 mm outer dia pipe of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1858.45
3383	3962	SS Male Union for 15 mm outer dia X 1/2" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1079.10
3384	3963	SS Male Union for 22 mm outer dia X 1/2" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1090.00
3385	3964	SS Male Union for 22 mm outer dia X 3/4" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1248.05
3386	3965	SS Male Union for 28 mm outer dia X 1" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	2201.80
3387	3966	SS Male Union for 35 mm outer dia X 1-1/4" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	2299.90
3388	3967	SS Male Union for 42 mm outer dia X 1-1/2" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	2594.20

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3389	3968	SS Male Union for 54 mm outer dia X 2" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	4490.80
3390	3969	SS Female Union for 22 mm outer dia X 3/4" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1155.40
3391	3970	SS Female Union for 28 mm outer dia X 1" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1558.70
3392	3971	SS Female Transition Elbow/ FTE for 15 mm outer dia X 1/2" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	790.25
3393	3972	SS Female Transition Elbow/ FTE for 22 mm outer dia X 1/2" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1057.30
3394	3973	SS Female Transition Elbow/ FTE for 22 mm outer dia X 3/4" nominal dia threaded of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard	each	1095.45
3395	5744	EPS blocks	kg	174.40
3396	5745	GI woven mesh of aperture 5.45 mm (with wire of dia 0.90 mm)	kg	70.85
3397	5746	SR adhesive for joining EPS blocks	kg	207.10
3398	5772	Grease	kg	212.55
3399	5773	Shutttering oil	litre	103.55
3400	5774	GP-2 cementitious compound	kg	23.98
3401	5775	Galvanised MS L-shape level adjuster of size 76x25x25x1.6 mm	each	16.35
3402	5776	12x50 mm long dash fastener	each	38.15
3403	5777	Galvanized MS Z Cleat of size 25 x 37 x 25 x 1.6 mm with precut hole on both 25 mm flange	each	14.17
3404	5778	15mm tegular/butt edged without perforation plain/designer light weight calcium silicate Anti-Microbial Bio-Safe coated false ceiling tiles of size 595x595 mm	sqm	964.65
3405	5784	Customized Modular Tunnel Formwork Panel made of minimum 3mm thick hot rolled plain painted/hot dip galvanized M.S. sheets with Accessories etc.	kg	97.01

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3406	5785	Designing, Fabrication and transportation cost	kg	63.22
3407	7226	Sealer	kg	316.10
3408	7227	PU resin top coat	kg	267.05
3409	7368	GFRG Panel of 124 mm thick	sqm	976.64
3410	7589	Ductile Iron double chamber restrained joint (bolt less) fittings class K12 upto 600 mm nominal dia	quintal	22781.00
3411	7590	Ductile Iron double chamber restrained joint (bolt less) fittings class K12 above 600 mm nominal dia	quintal	29430.00
3412	7591	Centrifugally Cast DI class K9 pipe including double chamber restraining arrangements (bolt less) 100 mm nominal dia pipe	metre	1369.04
3413	7592	Centrifugally Cast DI class K9 pipe including double chamber restraining arrangements (bolt less) 150 mm nominal dia pipe	metre	1905.32
3414	7593	Centrifugally Cast DI class K9 pipe including double chamber restraining arrangements (bolt less) 200 mm nominal dia pipe	metre	2394.73
3415	7594	Centrifugally Cast DI class K9 pipe including double chamber restraining arrangements (bolt less) 250 mm nominal dia pipe	metre	3210.05
3416	7596	Centrifugally Cast DI class K9 pipe including double chamber restraining arrangements (bolt less) 350 mm nominal dia pipe	metre	4883.20
3417	7597	Centrifugally Cast DI class K9 pipe including double chamber restraining arrangements (bolt less) 400 mm nominal dia pipe	metre	6077.84
3418	7598	Centrifugally Cast DI class K9 pipe including double chamber restraining arrangements (bolt less) 450 mm nominal dia pipe	metre	7225.61
3419	7599	Centrifugally Cast DI class K9 pipe including double chamber restraining arrangements (bolt less) 500 mm nominal dia pipe	metre	8505.27
3420	7600	Centrifugally Cast DI class K9 pipe including double chamber restraining arrangements (bolt less) 600 mm nominal dia pipe	metre	11139.80
3421	7602	Centrifugally Cast DI class K9 pipe including double chamber restraining arrangements (bolt less) 750 mm nominal dia pipe	metre	15764.67
3422	7603	Centrifugally Cast DI class K9 pipe including double chamber restraining arrangements (bolt less) 800 mm nominal dia pipe	metre	17339.72
3423	7604	Centrifugally Cast DI class K9 pipe including double chamber restraining arrangements (bolt less) 900 mm nominal dia pipe	metre	21608.16

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3424	7605	Centrifugally Cast DI class K9 pipe including double chamber restraining arrangements (bolt less) 1000 mm nominal dia pipe	metre	26154.55
3425	7606	Rubber Gasket of EPDM quality for 100 mm nominal dia DI pipe	each	31.61
3426	7607	Rubber Gasket of EPDM quality for 150 mm nominal dia pipe	each	35.97
3427	7608	Rubber Gasket of EPDM quality for 200 mm nominal dia pipe	each	65.40
3428	7609	Rubber Gasket of EPDM quality for 250 mm nominal dia pipe	each	76.30
3429	7610	Rubber Gasket of EPDM quality for 300 mm nominal dia pipe	each	109.00
3430	7611	Rubber Gasket of EPDM quality for 350 mm nominal dia pipe	each	126.44
3431	7612	Rubber Gasket of EPDM quality for 400 mm nominal dia pipe	each	228.90
3432	7613	Rubber Gasket of EPDM quality for 450 mm nominal dia pipe	each	272.50
3433	7614	Rubber Gasket of EPDM quality for 500 mm nominal dia pipe	each	294.30
3434	7615	Rubber Gasket of EPDM quality for 600 mm nominal dia pipe	each	388.04
3435	7616	Rubber Gasket of EPDM quality for 700 mm nominal dia pipe	each	555.90
3436	7617	Rubber Gasket of EPDM quality for 750 mm nominal dia pipe	each	654.00
3437	7618	Rubber Gasket of EPDM quality for 800 mm nominal dia pipe	each	768.45
3438	7619	Rubber Gasket of EPDM quality for 900 mm nominal dia pipe	each	991.90
3439	7620	Rubber Gasket of EPDM quality for 1000 mm nominal dia pipe	each	1177.20
3440	7776	Concrete paver block of grade M-30 made of C&D waste (60mm thickness)	sqm	327.00
3441	7801	Ceramic Glazed Tiles 1st quality 300 x 300 mm in all shades and designs of White, Ivory, grey, Fume Red brown etc.	sqm	218.00
3442	7802	Ceramic Glazed Tiles 1st quality 300 x 300 mm in all shades designs except White, Ivory, Grey, Fume Red Brown etc.	sqm	381.50
3443	7803	Rectified Ceramic Glazed Tiles 1st quality 300 x 300 mm or more in all shades designs White, Ivory, Grey, Fume Red Brown etc.	sqm	408.75

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3444	7804	Rectified Ceramic Glazed Tiles 1st quality 300 x 300 mm or more in all shades designs except White, Ivory, Grey, Fume Red Brown etc.	sqm	490.50
3445	7900	Modular common burnt clay bricks of class designation 7.5	1000 Nos	4905.00
3446	7901	Machine moulded perforated common burnt clay FPS (non modular) bricks of class designation 12.5	1000 Nos	5450.00
3447	7902	Machine moulded common burnt clay modular perforated bricks of class designation 12.5	1000 Nos	5995.00
3448	7903	Machine moulded common burnt clay FPS (non modular) bricks of class designation 12.5	1000 Nos	5777.00
3449	7904	Machine moulded common burnt clay tile bricks of class designation 12.5	1000 Nos	5668.00
3450	7996	Factory made EPS light weight composite sandwitched wall/roof panel (50mm thick) having core material of EPS granule balls/beads (conforming to IS 4671:1984 and shall have density not less than 15kg per cum). The outer face on both sides of the panels wil	sqm	828.40
3451	7997	Factory made EPS light weight composite sandwitched wall/roof panel (60mm thick) having core material of EPS granule balls/beads (conforming to IS 4671:1984 and shall have density not less than 15kg per cum). The outer face on both sides of the panels wi	sqm	953.75
3452	7998	Factory made EPS light weight composite sandwitched wall/roof panel (75mm thick) having core material of EPS granule balls/beads (conforming to IS 4671:1984 and shall have density not less than 15kg per cum). The outer face on both sides of the panels wil	sqm	1210.99
3453	7999	Factory made EPS light weight composite sandwitched wall/roof panel (90mm thick) having core material of EPS granule balls/beads (conforming to IS 4671:1984 and shall have density not less than 15kg per cum). The outer face on both sides of the panels wil	sqm	1431.17

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3454	8000	Factory made EPS light weight composite sandwitched wall/roof panel (100mm thick) having core material of EPS granule balls/beads (conforming to IS 4671:1984 and shall have density not less than 15kg per cum). The outer face on both sides of the panels wi	sqm	1705.85
3455	8144	Bamboo Mat corrugated sheets 3.5 to 4mm thick conforming to IS 15476:2004	sqm	3151.19
3456	8145	Bamboo Mat Ridge cap 3.5 to 4mm thick conforming to IS 15476:2004	metre	3062.90
3457	8146	3mm thick Bamboo Mat Board conforming to IS 13958:1994	sqm	1867.17
3458	8147	4mm thick Bamboo Mat Board conforming to IS 13958:1994	sqm	2125.50
3459	8148	6mm thick Bamboo Mat Board conforming to IS 13958:1994	sqm	2530.98
3460	8149	9mm thick Bamboo Mat Board conforming to IS 13958:1994	sqm	3195.88
3461	8150	12mm thick Bamboo Mat Board conforming to IS 13958:1994	sqm	3676.57
3462	8151	uPVC extruded range R1 casement window frame size (33mm & above) x (35mm & above)	metre	212.55
3463	8152	uPVC extruded range R1 casement window sash/ window mullion size (33mm & above) x (50mm & above)	metre	321.55
3464	8153	uPVC extruded range R1 glazing bead of appropriate dimension	metre	98.10
3465	8154	uPVC extruded range R2 Sliding window 2.5 track frame size (65mm & above) x (40mm & above)	metre	368.42
3466	8155	uPVC extruded range R2 Sliding fly screen window sash size (18mm & above) x (40mm & above) - for 2.5 Track frame only	metre	150.42
3467	8156	uPVC extruded range R2 Casement french mullion size (39mm & above) x (60mm & above)	metre	372.78
3468	8157	uPVC extruded range R3 2 track sliding window/door frame size (55mm & above) x (40mm & above)	metre	361.88
3469	8158	uPVC extruded range R3 Sliding window 2.5 track frame size (85mm & above) x (40mm & above)	metre	397.85
3470	8159	uPVC extruded range R3 3-track sliding window/door frame size (98mm & above) x (40mm & above)	metre	469.79

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3471	8160	uPVC extruded range R3 sliding window sash size (30mm & above) x (55mm & above)	metre	307.38
3472	8161	uPVC extruded 2 track sliding door sash/ 3 track sliding door sash range R3 size (30mm & above) x (74mm & above)	metre	393.49
3473	8162	uPVC extruded range R3 Sliding fly screen window sash size (20mm & above) x (50mm & above) - 2.5 Track frame only	metre	166.77
3474	8163	uPVC extruded interlock/ inline adaptor of appropriate dimension for range R3 sliding window/ door sash	metre	119.90
3475	8164	uPVC extruded glazing bead of appropriate dimension for range R3 of sliding window/ door sash	metre	98.10
3476	8165	uPVC extruded range R3 casement window frame size (55mm & above) x (45mm & above)	metre	300.84
3477	8166	uPVC extruded range R3 casement door frame size (55mm & above) x (50mm & above)	metre	374.96
3478	8167	uPVC extruded range R3 Casement double rebate frame size (110mm & above) x (45mm & above)	metre	757.55
3479	8168	uPVC extruded range R3 casement window sash/ door fly screen sash/window mullion/door mullion size (55mm & above) x (65mm & above)	metre	488.32
3480	8169	uPVC extruded range R3 casement door sash size (55mm & above) x (85mm & above)	metre	591.87
3481	8170	uPVC extruded range R3 casement window fly screen sash size (30mm & above) x (55mm & above)	metre	257.24
3482	8171	uPVC extruded range R3 Casement french mullion size (55mm & above) x (60mm & above)	metre	501.40
3483	8172	uPVC extruded glazing bead of appropriate dimension for range R3 casement window/ door	metre	135.16
3484	8173	uPVC extruded range R4 Casement french mullion size (64mm & above) x (60mm & above)	metre	539.55
3485	8227	Stainless steel fancy handle	10 Nos	1253.50
3486	8228	Soft closing stainless steel hinges	10 Sets	1907.50
3487	8229	Stainless steel telescopic drawer channels 500mm long	set	648.55

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3488	8230	Stainless steel (Grade-304) basket (readymade)	kg	337.90
3489	8306	PPR Union 20 mm	each	41.42
3490	8307	PPR Union 25 mm	each	55.59
3491	8308	PPR Union 32 mm	each	109.00
3492	8309	PPR Union 40 mm	each	215.82
3493	8310	PPR Union 50 mm	each	398.94
3494	8311	PPR Union 63 mm	each	499.22
3495	8312	PPR Union 75 mm	each	1090.00
3496	8562	Expanded Polystyrene insulation board 120 mm thick confirming to IS 4671-1984, Fire retardant property self-extinguishing type as per EN 13501-1	sqm	959.20
3497	8570	GI Main T ceiling section 30x25x0.3 mm (3 metre long)	each	261.60
3498	8571	GI Perimeter wall angle 25x25x0.4 mm (3 metre long)	each	218.00
3499	8572	GI Intermediate cross T section 25x25x0.3 mm (1.2 metre long)	each	98.10
3500	8573	GI Intermediate cross T section 25x25x0.3 mm (0.6 metre long)	each	49.05
3501	8658	Precast C&D waste concrete block	1000 Nos	32809.00
3502	8701	SS pipe 304 grades with press fit technology as per JIS 3448 standard 48.60 mm outer dia	metre	739.02
3503	8757	Stainless steel friction hinges (SS-304 grade) size 300 x 19 x 1.9 mm for uPVC window	each	325.91
3504	8760	Glass panes of required thickness having 60 minutes of fire resistance both integrity and radiation control (EI 60) and minimum 20 minutes of insulation (EI 20)	sqm	26051.00
3505	8979	Uni Axial Woven polyester geogrid of minimum tensile strength 40KN/m in the Longitudinal direction and 20 KN/m in the Transverse direction.	sqm	173.31
3506	8980	Uni Axial Woven polyester geogrid of minimum tensile strength 60KN/m in the Longitudinal direction and 20 KN/m in the Transverse direction	sqm	201.65
3507	8981	Uni Axial Woven polyester geogrid of minimum tensile strength 80 KN/m in the Longitudinal direction and 30 KN/m in the Transverse direction.	sqm	256.15

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3508	8982	Uni Axial Woven polyster geogrid of minimum tensile strength 100KN/m in the Longitudinal direction and 30KN/m in the Transverse direction.	sqm	296.48
3509	8983	Uni Axial Woven polyster geogrid of minimum tensile strength 120KN/m in the Longitudinal direction and 30KN/m in the Transverse direction.	sqm	318.28
3510	8984	Uni Axial Woven polyster geogrid of minimum tensile strength 150KN/m in the Longitudinal direction and 30 KN/m in the Transverse direction.	sqm	398.94
3511	8985	Uni Axial Woven polyster geogrid of minimum tensile strength 200KN/m in the Longitudinal direction and 30 KN/m in the Transverse direction.	sqm	469.79
3512	8986	Uni Axial Woven polyster geogrid of minimum tensile strength 250KN/m in the Longitudinal direction and 30KN/m in the Transverse direction.	sqm	573.34
3513	8987	Uni Axial Woven polyster geogrid of minimum tensile strength 300KN/m in the Longitudinal direction and 30KN/m in the Transverse direction.	sqm	662.72
3514	8988	Bi Axial Woven polyster geogrid of minimum tensile strength 20KN/m in both Longitudinal and Transverse direction.	sqm	142.79
3515	8989	Bi Axial Woven polyster geogrid of minimum tensile strength 40KN/m in both Longitudinal and Transverse direction.	sqm	215.82
3516	8990	Bi Axial Woven polyster geogrid of minimum tensile strength 60KN/m in both Longitudinal and Transverse direction.	sqm	279.04
3517	8994	G.I binding wire	sqm	71.94
3518	8995	Single panel (Weight not less than 4.05 kg/sqm)	sqm	906.88
3519	8996	125 mm / 165 mm wide Stay in Place Wallform 2.50 mm thick of extruded Unplasticised Poly Vinyl Chloride (uPVC).	kg	174.40
3520	HDPE01	63mm dia HDPE Pipe- PE-100, 6kg/sq.cm	metre	111.20
3521	HDPE02	75mm dia HDPE Pipe- PE-100, 6kg/sq.cm	metre	158.90
3522	HDPE03	90mm dia HDPE Pipe- PE-100, 6kg/sq.cm	metre	225.50
3523	HDPE04	110mm dia HDPE Pipe- PE-100, 6kg/sq.cm	metre	341.70
3524	HDPE05	125mm dia HDPE Pipe- PE-100, 6kg/sq.cm	metre	434.80
3525	HDPE06	140mm dia HDPE Pipe- PE-100, 6kg/sq.cm	metre	544.60

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3526	HDPE07	160mm dia HDPE Pipe- PE-100, 6kg/sq.cm	metre	714.00
3527	HDPE08	180mm dia HDPE Pipe- PE-100, 6kg/sq.cm	metre	898.60
3528	HDPE09	200mm dia HDPE Pipe- PE-100, 6kg/sq.cm	metre	1110.50
3529	HDPE10	225mm dia HDPE Pipe- PE-100, 6kg/sq.cm	metre	1404.20
3530	HDPE100	Equal TEE - 6 kg/sq.cm-450mm dia	no	23436.50
3531	HDPE101	Equal TEE - 6 kg/sq.cm-500mm dia	no	36804.50
3532	HDPE102	Equal TEE - 6 kg/sq.cm-560mm dia	no	50607.70
3533	HDPE103	Equal TEE - 6 kg/sq.cm-630mm dia	no	70078.30
3534	HDPE11	250mm dia HDPE Pipe- PE-100, 6kg/sq.cm	metre	1731.40
3535	HDPE12	280mm dia HDPE Pipe- PE-100, 6kg/sq.cm	metre	2160.80
3536	HDPE13	315mm dia HDPE Pipe- PE-100, 6kg/sq.cm	metre	2723.70
3537	HDPE134	90 degree bend - 10kg/sq.cm-63mm dia	no	98.30
3538	HDPE135	90 degree bend - 10kg/sq.cm-75mm dia	no	163.80
3539	HDPE136	90 degree bend - 10kg/sq.cm-90mm dia	no	309.20
3540	HDPE137	90 degree bend - 10kg/sq.cm-110mm dia	no	545.80
3541	HDPE138	90 degree bend - 10kg/sq.cm-125mm dia	no	774.10
3542	HDPE139	90 degree bend - 10kg/sq.cm-140mm dia	no	1135.40
3543	HDPE14	355mm dia HDPE Pipe- PE-100, 6kg/sq.cm	metre	3459.00
3544	HDPE140	90 degree bend - 10kg/sq.cm-160mm dia	no	1602.50
3545	HDPE141	90 degree bend - 10kg/sq.cm-180mm dia	no	1994.70
3546	HDPE142	90 degree bend - 10kg/sq.cm-200mm dia	no	2726.60
3547	HDPE143	90 degree bend - 10kg/sq.cm-225mm dia	no	3909.70
3548	HDPE144	90 degree bend - 10kg/sq.cm-250mm dia	no	5361.50
3549	HDPE145	90 degree bend - 10kg/sq.cm-280mm dia	no	7411.30
3550	HDPE146	90 degree bend - 10kg/sq.cm-315mm dia	no	10745.30
3551	HDPE147	90 degree bend - 10kg/sq.cm-355mm dia	no	15108.00
3552	HDPE148	90 degree bend - 10kg/sq.cm-400mm dia	no	22372.30
3553	HDPE149	90 degree bend - 10kg/sq.cm-450mm dia	no	31577.00
3554	HDPE15	400mm dia HDPE Pipe- PE-100, 6kg/sq.cm	metre	4399.40
3555	HDPE150	90 degree bend - 10kg/sq.cm-500mm dia	no	41479.80
3556	HDPE151	90 degree bend - 10kg/sq.cm-560mm dia	no	57581.80
3557	HDPE152	90 degree bend - 10kg/sq.cm-630mm dia	no	85401.60
3558	HDPE153	Equal TEE - 10 kg/sq.cm- 63mm dia	no	147.60
3559	HDPE154	Equal TEE - 10 kg/sq.cm- 75mm dia	no	250.20
3560	HDPE155	Equal TEE - 10 kg/sq.cm- 90mm dia	no	427.50
3561	HDPE156	Equal TEE - 10 kg/sq.cm- 110mm dia	no	734.40
3562	HDPE157	Equal TEE - 10 kg/sq.cm- 125mm dia	no	831.00
3563	HDPE158	Equal TEE - 10 kg/sq.cm- 140mm dia	no	1224.00
3564	HDPE159	Equal TEE - 10 kg/sq.cm- 160mm dia	no	1792.80
3565	HDPE16	450mm dia HDPE Pipe- PE-100, 6kg/sq.cm	metre	5707.40
3566	HDPE160	Equal TEE - 10 kg/sq.cm- 180mm dia	no	2492.10
3567	HDPE161	Equal TEE - 10 kg/sq.cm-200mm dia	no	3409.70
3568	HDPE162	Equal TEE - 10 kg/sq.cm-225mm dia	no	4852.10
3569	HDPE163	Equal TEE - 10 kg/sq.cm-250mm dia	no	6600.80
3570	HDPE164	Equal TEE - 10 kg/sq.cm-280mm dia	no	9223.30
3571	HDPE165	Equal TEE - 10 kg/sq.cm-315mm dia	no	13069.80
3572	HDPE166	Equal TEE - 10 kg/sq.cm-355mm dia	no	19050.50

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3573	HDPE167	Equal TEE - 10 kg/sq.cm-400mm dia	no	27360.70
3574	HDPE168	Equal TEE - 10 kg/sq.cm-450mm dia	no	38749.50
3575	HDPE169	Equal TEE - 10 kg/sq.cm-500mm dia	no	57397.40
3576	HDPE17	500mm dia HDPE Pipe- PE-100, 6kg/sq.cm	metre	7041.60
3577	HDPE170	Equal TEE - 10 kg/sq.cm-560mm dia	no	86110.00
3578	HDPE171	Equal TEE - 10 kg/sq.cm-630mm dia	no	128101.00
3579	HDPE18	560mm dia HDPE Pipe- PE-100, 6kg/sq.cm	metre	9074.00
3580	HDPE19	630mm dia HDPE Pipe- PE-100, 6kg/sq.cm	metre	11461.00
3581	HDPE20	710mm dia HDPE Pipe- PE-100, 6kg/sq.cm	metre	13053.60
3582	HDPE21	800mm dia HDPE Pipe- PE-100, 6kg/sq.cm	metre	15734.70
3583	HDPE22	900mm dia HDPE Pipe- PE-100, 6kg/sq.cm	metre	19935.90
3584	HDPE23	1000 mm dia HDPE Pipe - PE-100, 6kg/sq.cm	metre	24582.60
3585	HDPE24	63mm dia HDPE Pipe- PE-100, 10kg/sq.cm	metre	167.90
3586	HDPE25	75mm dia HDPE Pipe- PE-100, 10kg/sq.cm	metre	238.10
3587	HDPE26	90mm dia HDPE Pipe- PE-100, 10kg/sq.cm	metre	341.10
3588	HDPE27	110mm dia HDPE Pipe- PE-100, 10kg/sq.cm	metre	500.40
3589	HDPE28	125mm dia HDPE Pipe- PE-100, 10kg/sq.cm	metre	646.80
3590	HDPE29	140mm dia HDPE Pipe- PE-100, 10kg/sq.cm	metre	807.00
3591	HDPE30	160mm dia HDPE Pipe- PE-100, 10kg/sq.cm	metre	1058.70
3592	HDPE31	180mm dia HDPE Pipe- PE-100, 10kg/sq.cm	metre	1340.10
3593	HDPE32	200mm dia HDPE Pipe- PE-100, 10kg/sq.cm	metre	1648.30
3594	HDPE33	225mm dia HDPE Pipe- PE-100, 10kg/sq.cm	metre	2092.10
3595	HDPE34	250mm dia HDPE Pipe- PE-100, 10kg/sq.cm	metre	2571.10
3596	HDPE35	280mm dia HDPE Pipe- PE-100, 10kg/sq.cm	metre	3230.10
3597	HDPE36	315mm dia HDPE Pipe- PE-100, 10kg/sq.cm	metre	4084.40
3598	HDPE37	355mm dia HDPE Pipe- PE-100, 10kg/sq.cm	metre	5178.90
3599	HDPE38	400mm dia HDPE Pipe- PE-100, 10kg/sq.cm	metre	6599.80
3600	HDPE39	450mm dia HDPE Pipe- PE-100, 10kg/sq.cm	metre	8700.80
3601	HDPE40	500mm dia HDPE Pipe- PE-100, 10kg/sq.cm	metre	10417.50
3602	HDPE41	560mm dia HDPE Pipe- PE-100, 10kg/sq.cm	metre	14130.00
3603	HDPE42	630mm dia HDPE Pipe- PE-100, 10kg/sq.cm	metre	17261.10
3604	HDPE43	710mm dia HDPE Pipe- PE-100, 10kg/sq.cm	metre	20057.40
3605	HDPE44	800mm dia HDPE Pipe- PE-100, 10kg/sq.cm	metre	24174.90
3606	HDPE45	900mm dia HDPE Pipe- PE-100, 10kg/sq.cm	metre	24462.00
3607	HDPE46	1000mm dia HDPE Pipe- PE-100, 10kg/sq.cm	metre	27484.20
3608	HDPE47	63mm dia HDPE pipe- for all classes	metre	102.30
3609	HDPE48	75mm dia HDPE pipe- for all classes	metre	122.10
3610	HDPE49	90mm dia HDPE pipe- for all classes	metre	149.30
3611	HDPE50	110mm dia HDPE pipe- for all classes	metre	179.50
3612	HDPE51	125mm dia HDPE pipe- for all classes	metre	204.60
3613	HDPE52	140mm dia HDPE pipe- for all classes	metre	229.60
3614	HDPE53	160mm dia HDPE pipe- for all classes	metre	260.90
3615	HDPE54	180mm dia HDPE pipe- for all classes	metre	300.60
3616	HDPE55	200mm dia HDPE pipe- for all classes	metre	333.00
3617	HDPE56	225mm dia HDPE pipe- for all classes	metre	376.80
3618	HDPE57	250mm dia HDPE pipe- for all classes	metre	418.50

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3619	HDPE58	280mm dia HDPE pipe- for all classes	metre	466.60
3620	HDPE59	315mm dia HDPE pipe- for all classes	metre	526.10
3621	HDPE60	355mm dia HDPE pipe- for all classes	metre	591.80
3622	HDPE61	400mm dia HDPE pipe- for all classes	metre	668.00
3623	HDPE62	450mm dia HDPE pipe- for all classes	metre	750.50
3624	HDPE63	500mm dia HDPE pipe- for all classes	metre	834.00
3625	HDPE64	560mm dia HDPE pipe- for all classes	metre	964.40
3626	HDPE65	630mm dia HDPE pipe- for all classes	metre	1102.20
3627	HDPE66	90 degree bend - 6kg/sq.cm-63mm dia	no	65.50
3628	HDPE67	90 degree bend - 6kg/sq.cm-75mm dia	no	113.30
3629	HDPE68	90 degree bend - 6kg/sq.cm-90mm dia	no	218.70
3630	HDPE69	90 degree bend - 6kg/sq.cm-110mm dia	no	403.20
3631	HDPE70	90 degree bend - 6kg/sq.cm-125mm dia	no	556.90
3632	HDPE71	90 degree bend - 6kg/sq.cm-140mm dia	no	766.60
3633	HDPE72	90 degree bend - 6kg/sq.cm-160mm dia	no	1111.10
3634	HDPE73	90 degree bend - 6kg/sq.cm-180mm dia	no	1277.60
3635	HDPE74	90 degree bend - 6kg/sq.cm-200mm dia	no	1742.90
3636	HDPE75	90 degree bend - 6kg/sq.cm-225mm dia	no	2502.90
3637	HDPE76	90 degree bend - 6kg/sq.cm-250mm dia	no	3444.50
3638	HDPE77	90 degree bend - 6kg/sq.cm-280mm dia	no	4763.30
3639	HDPE78	90 degree bend - 6kg/sq.cm-315mm dia	no	6900.20
3640	HDPE79	90 degree bend - 6kg/sq.cm-355mm dia	no	9670.80
3641	HDPE80	90 degree bend - 6kg/sq.cm-400mm dia	no	14293.70
3642	HDPE81	90 degree bend - 6kg/sq.cm-450mm dia	no	20235.40
3643	HDPE82	90 degree bend - 6kg/sq.cm-500mm dia	no	26598.30
3644	HDPE83	90 degree bend - 6kg/sq.cm-560mm dia	no	36262.50
3645	HDPE84	90 degree bend - 6kg/sq.cm-630mm dia	no	56632.70
3646	HDPE85	Equal TEE - 6 kg/sq.cm- 63mm dia	no	99.30
3647	HDPE86	Equal TEE - 6 kg/sq.cm-75mm dia	no	165.60
3648	HDPE87	Equal TEE - 6 kg/sq.cm-90mm dia	no	302.40
3649	HDPE88	Equal TEE - 6 kg/sq.cm-110mm dia	no	513.00
3650	HDPE89	Equal TEE - 6 kg/sq.cm-125mm dia	no	573.80
3651	HDPE90	Equal TEE - 6 kg/sq.cm-140mm dia	no	786.20
3652	HDPE91	Equal TEE - 6 kg/sq.cm-160mm dia	no	1159.70
3653	HDPE92	Equal TEE - 6 kg/sq.cm-180mm dia	no	1648.40
3654	HDPE93	Equal TEE - 6 kg/sq.cm-200mm dia	no	2194.90
3655	HDPE94	Equal TEE - 6 kg/sq.cm-225mm dia	no	3098.20
3656	HDPE95	Equal TEE - 6 kg/sq.cm-250mm dia	no	4209.20
3657	HDPE96	Equal TEE - 6 kg/sq.cm-280mm dia	no	5851.90
3658	HDPE97	Equal TEE - 6 kg/sq.cm-315mm dia	no	8071.20
3659	HDPE98	Equal TEE - 6 kg/sq.cm-355mm dia	no	11287.30
3660	HDPE99	Equal TEE - 6 kg/sq.cm-400mm dia	no	16508.30
3661	1818A	110mm PVC-O pipe PN12.5 Class 500	meter	798.25
3662	1818B	160mm PVC-O pipe PN12.5 Class 500	meter	1184.50
3663	1818C	200mm PVC-O pipe PN12.5 Class 500	meter	1548.09
3664	1818D	250mm PVC-O pipe PN12.5 Class 500	meter	2066.18
3665	1818E	315mm PVC-O pipe PN12.5 Class 500	meter	2646.07

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3666	1818F	400mm PVC-O pipe 12.5 Class 500	meter	4035.54
3667	1819A	110mm PVC-O pipe PN16 Class 500	meter	896.10
3668	1819B	160mm PVC-O pipe PN16 Class 500	meter	1359.60
3669	1819C	200mm PVC-O pipe PN16 Class 500	meter	1799.41
3670	1819D	250mm PVC-O pipe PN16 Class 500	meter	2387.54
3671	1819E	315mm PVC-O pipe PN16 Class 500	meter	2774.82
3672	1819F	400mm PVC-O pipe PN16 Class 500	meter	4630.88
3673	8080A	90 degree PVC-O ELBOW - 110MM dia PN 16	per no	2942.71
3674	8080B	90 degree PVC-O ELBOW - 160MM dia PN 16	per no	4365.14
3675	8080C	90 degree PVC-O ELBOW - 200MM dia PN 16	per no	7889.80
3676	8080D	90 degree PVC-O ELBOW - 250MM dia PN 16	per no	14419.08
3677	8080E	90 degree PVC-O ELBOW - 315MM dia PN 16	per no	19205.38
3678	8080F	90 degree PVC-O ELBOW - 400MM dia PN 16	per no	25764.42
3679	8080G	45 degree PVC-O ELBOW - 110MM dia PN 16	per no	2139.31
3680	8080H	45 degree PVC-O ELBOW - 160MM dia PN 16	per no	3357.80
3681	8080I	45 degree PVC-O ELBOW - 200MM dia PN 16	per no	5922.50
3682	8080J	45 degree PVC-O ELBOW - 250MM dia PN 16	per no	8497.50
3683	8080K	45 degree PVC-O ELBOW - 315MM dia PN 16	per no	10816.03
3684	8080L	45 degree PVC-O ELBOW - 400MM dia PN 16	per no	19190.96
3685	8080M	22.5 degree PVC-O ELBOW - 110MM dia PN 16	per no	1759.24
3686	8080N	22.5 degree PVC-O ELBOW - 160MM dia PN 16	per no	2532.77
3687	8080O	22.5 degree PVC-O ELBOW - 200MM dia PN 16	per no	3778.04
3688	8080P	22.5 degree PVC-O ELBOW - 250MM dia PN 16	per no	6455.01
3689	8080Q	22.5 degree PVC-O ELBOW - 315MM dia PN 16	per no	9083.57
3690	8080R	22.5 degree PVC-O ELBOW - 400MM dia PN 16	per no	15193.53
3691	8080S	11.25 degree PVC-O ELBOW - 110MM dia PN 16	per no	1726.28
3692	8080T	11.25 degree PVC-O ELBOW - 160MM dia PN 16	per no	2416.38

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3693	8080U	11.25 degree PVC-O ELBOW - 200MM dia PN 16	per no	3584.40
3694	8080V	11.25 degree PVC-O ELBOW - 315MM dia PN 16	per no	6122.32
3695	8080W	11.25 degree PVC-O ELBOW - 315MM dia PN 16	per no	8922.89
3696	8080X	11.25 degree PVC-O ELBOW - 400MM dia PN 16	per no	14663.08
3697	8081A	PVC-O SLIDING COUPLER - 110mm dia PN 16	per no	1560.45
3698	8081B	PVC-O SLIDING COUPLER - 160mm dia PN 16	per no	2782.03
3699	8081C	PVC-O SLIDING COUPLER - 200mm dia PN 16	per no	4021.12
3700	8081D	PVC-O SLIDING COUPLER - 250mm dia PN 16	per no	7525.18
3701	8081E	PVC-O SLIDING COUPLER - 315mm dia PN 16	per no	14266.53
3702	8081F	PVC-O SLIDING COUPLER - 400mm dia PN 16	per no	19238.34
3703	8082A	PVC-O FLANGE SOCKET- 110MM	per no	2365.05
3704	8082B	PVC-O FLANGE SOCKET- 160MM	per no	3268.19
3705	8082C	PVC-O FLANGE SOCKET - 200 MM	per no	3940.78
3706	8082D	PVC-O FLANGE SOCKET - 250 MM	per no	4898.68
3707	8082E	PVC-O FLANGE SOCKET - 315 MM	per no	6152.19
3708	8082F	PVC-O FLANGE SOCKET - 400 mm	per no	10279.40
3709	8083A	PVC-O AIR TEE 110MM X 40MM SIZE	per no	2938.59
3710	8083B	PVC-O AIR TEE 160MM X 40MM SIZE	per no	3453.59
3711	8083C	PVC-O AIR TEE 200MM X 50MM SIZE	per no	4527.88
3712	8083D	PVC-O AIR TEE 250MM X 50MM SIZE	per no	5612.47
3713	8083E	PVC-O AIR TEE 315MM X 80MM SIZE	per no	6980.31
3714	8083F	PVC-O AIR TEE 400MM X 100MM SIZE	per no	11413.43
3715	8084A	PVC-O REDUCER 110MM X90MM SIZE	per no	1802.50
3716	8084B	PVC-O REDUCER 160MM X110MM SIZE	per no	2655.34
3717	8084C	PVC-O REDUCER 200MM X160MM SIZE	per no	4454.75
3718	8084D	PVC-O REDUCER 250MM X200 MM SIZE	per no	7028.72
3719	8084E	PVC-O REDUCER 315MM X250 MM SIZE	per no	12733.89
3720	8084F	PVC-O REDUCER 400MM X315 MM SIZE	per no	19417.56
3721	8085A	PVC-O EQUAL TEE 110MM X110MM	per no	4709.16
3722	8085B	PVC-O EQUAL TEE 160MM X160MM	per no	7045.20
3723	8085C	PVC-O EQUAL TEE 200MM X200MM	per no	9461.58
3724	8085D	PVC-O EQUAL TEE 250MM X250MM	per no	12125.16
3725	8085E	PVC-O EQUAL TEE 315MM X315MM	per no	15451.03
3726	8085F	PVC-O EQUAL TEE 400MM X400MM	per no	20579.40
3727	SS302	7.5 HP submersible pumpset SS impeller	no	31842.00
3728	SS303	10 HP submersible pumpset SS impeller	no	38925.00
3729	SS304	12.5 HP submersible pumpset SS impeller	no	44528.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
3730	SS305	15 HP submersible pumpset SS impeller	no	51621.00
3731	SS306	20 HP submersible pumpset SS impeller	no	65987.00
3732	SS307	25 HP submersible pumpset SS impeller	no	67398.00
BASIC RATES FOR ROAD WORK				
HIRE CHARGES FOR PLANTS				
1	0300	H/C for Power road roller 8-10 T	per hour	756.00
2	0300A	H/C Smooth 3 - wheeled steel roller	per hour	756.00
3	0300B	H/C for Tandem road roller	per hour	1200.00
4	0304	H/C for Hot mix plant 6 -10 TPM	per hour	1210.00
5	0304A	H/C Batch mix HMP 100-120 TPH @75 tonne /hour output	per hour	2200.00
6	0305	Hire charge for heat master oil fed 1500 lit.	per hour	303.00
7	0306	Hire charge for Tipper 5 T capacity	per hour	525.00
8	0306A	Hire charge for Ripper	per hour	25.00
9	0306B	Hire charge for Blade	per hour	15.00
10	0306C	H/C Disc with Harrows	per hour	21.00
11	0309	Hire charge for tractor 40-50 hp	per hour	363.00
12	0316	Hire charge for motor grader 75-120 hp	per hour	2035.00
13	0317	Hire charge for bulldozer (above 80 hp)	per hour	3000.00
14	0320	Hire charge for tractor 35 hp and above	per hour	327.50
15	0321	Hire charge for tipper lorry 10t capacity	per hour	550.00
16	0321A	H/C Tractor with Rotavator	per hour	366.00
17	0322	Hire charge for front end loader 1cum cap.	per hour	1100.00
18	0323	H/C Back Hoe loader (JCB)	per hour	1100.00
19	0335	H/c for concrete mixer 10-7 cft	per hour	515.00
20	0335A	H/c for concrete mixer 10-7 cft	per day	515.00
21	0337	H/c for pin vibrator (needle)	per hour	112.00
22	0337A	H/c for pin vibrator (needle)	per day	900.00
23	0357	H/c for air compressor 300-340 cfm	per day	275.00
24	0359	H/C for steel cribs 6'x2'x2'	per hour	60.00
25	0361	H/C for Shovel	per hour	30.00
26	0362	H/c for water tanker	per hour	450.00
27	0363	H/c for vibratory roller	per hour	1650.00
28	0364	H/C for base mix plant (Pug mill)	per hour	1045.00
29	0365	H/c for hot mix plant - 40tonne to 60 tonne	per hour	1650.00
30	0365A	H/C for hot mix plant 120 - TPH capacity	per hour	2200.00
31	0365B	H/C for hot mix plant 100 - TPH capacity	per hour	2200.00
32	0366	H/C Pnumatic roller	per hour	1650.00
33	0366A	H/C Sensar Paver finisher	per hour	3300.00
34	0377	H/c for batching plant	per day	14400.00
35	0600	H/C Farm tractor with ripper	per hour	388.00
36	0601	H/c for Air Compressor 250 cfm	per hour	275.00
37	0602	H/C Joint cutting machine with 2-3 blades	per hour	155.00
38	0603	H/C Truck 10 tonne capacity	per hour	550.00
39	0604	H/C Light crane 3 tonne capacity	per hour	341.00
40	0605	H/C Crane 5 tonne capacity	per hour	341.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
41	0606	H/C Wet mix plant @ 75 tonne	per hour	1787.00
42	0607	H/C Electric generating set 125 KVA	per hour	737.00
43	0608	H/C Rotavator	per hour	15.00
44	0609	H/C Excavator	per hour	1550.00
45	0609A	H/C Mechanical broom hydraulic	per hour	300.00
46	0610	H/C Hydraulic self propelled chips spreader	per hour	2013.00
47	0611	H/C Bitumen pressure distributor	per hour	687.00
48	0612	H/C Plate compactor	per hour	70.00
49	0613	H/C Earth vibratory compactor	per hour	1100.00
50	0614	H/C Mastic cooker	per hour	70.00
51	0709	H/C Road marking machine	per hour	250.00
52	0800	H/C Kerb casting machine	per hour	300.00
53	0852	H/C Texturing machine	per hour	50.00
		Note: 1. Above hire - charges include cost of services of operating staff, Cost of lubricating oil, diesel / petrol/kerosene oil, other consumables for running the plant and machinery . 2.The hire - charges of plant machinery on per day basis are for single shift of eight working hours.		
LABOUR				
54	0001	Mate	per day	970.00
55	0002	Mazdoor	per day	870.00
56	0003	Blacksmith I class	per day	1100.00
57	0004	Blacksmith II class	per day	1050.00
58	0005	Carpentar I class	per day	1100.00
59	0006	Carpentar II class	per day	1050.00
60	0007	Mason I class	per day	1000.00
61	0008	Mason II class	per day	970.00
62	0009	Painter I class	per day	970.00
63	0010	Painter II class	per day	870.00
64	0011	Blacksmith (average)	per day	1075.00
65	0012	Carpentar (average)	per day	1075.00
66	0013	Mason (average)	per day	1000.00
67	0014	Painter (average)	per day	920.00
68	0015	Driller	per day	870.00
69	0016	Blaster	per day	870.00
70	0017	Chiseller	per day	870.00
71	0018	Breaker	per day	870.00
72	0019	Dresser	per day	870.00
73	0020	Skilled dresser	per day	900.00
74	0021	Skilled mazdoor	per day	900.00
75	0022	Semi skilled mazdoor	per day	870.00
76	0023	Sprayer	per day	970.00
77	0024	Hot mazdoor	per day	970.00
78	0025	Tarring mate	per day	970.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
79	0026	Spreader	per day	970.00
80	0027	Bucket man	per day	970.00
81	0028	Bhisthi	per day	970.00
82	0029	Stone dresser	per day	900.00
83	0030	Mali	per day	870.00
84	0032	Animal cart attendant	per day	870.00
85	0033	Ploughing Mazdoor	per day	870.00
86	0034	Bhandani	per day	970.00
87	0038	Welder I class	per day	1100.00
88	0061	Operatar (Pile)	per day	1200.00
89	0062	Mechanic (Pile)	per day	970.00
MATERIALS FOR ROAD WORK				
		Note: These rates are at site of work and are exclusive of GST & Contractors profit		
90	0100	Sand	Cum	1800.00
91	0100A	Selected earth for refilling	Cum	605.00
92	0100C	Flyash conforming to IS:3812 (Part II)	cum	632.50
93	0101	Portland cement (OPC/PPC - average)	Tonne	6015.63
94	0101B	Cement (SRPC)	Tonne	7600.00
95	0101C	Portland Slag cement	Tonne	7600.00
96	0101A	Filler (Quary dust)	tonne	1200.00
97	0102	Mild steel	Tonne	6552.54
98	0103	Tor steel bars	Tonne	6552.54
99	0103A	TMT - Rods	Tonne	6552.54
100	0103B	Steel TMT - Rods (ISI brand approved make)	Tonne	6552.54
101	0103C	HYSD steel reinforcement including dowel bars	tonne	6552.54
102	0106	Bitumen - VG 10	Tonne	42507.59
103	0106A	Bitumen 85/25 or 30/40	Tonne	42507.59
104	0106B	Bitumen - VG 30	tonne	43007.59
105	0106C	Bitumen - CRMB	Tonne	44576.59
106	0106D	Bitumen emulsion	Tonne	47514.09
107	0107	Gravel	Cum	729.00
108	0109	ISS HBG metal-20mm	Cum	1690.00
109	0110	ISS HBG metal-40mm	Cum	1660.00
110	0111	IRC HBG metal-11.2mm	Cum	1660.00
111	0112	IRC HBG metal-13.2mm	Cum	1660.00
112	0113B	IRC HBG Metal - 19mm nominal size	Cum	1690.00
113	0113	HBG metal 22.4mm nominal size(IRC)	Cum	1690.00
114	0114	HBG metal 26.5mm nominal size(IRC)	Cum	1690.00
115	0114A	Crushed stone	Cum	1200.00
116	0114C	IRC HBG Metal 26.5mm - 2.8mm	Cum	1600.00
117	0115	HBG metal 93mm nominal size (IRC)	Cum	1090.00
118	0115B	HBG metal 63mm nominal size (IRC)	Cum	1150.00
119	0115D	IRC HBG Metal 63mm - 2.8mm	Cum	1684.55
120	0117	HBG metal 53mm nominal size (IRC)	Cum	1400.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
121	0118	IRC HBG metal-45mm	Cum	1660.00
122	0118B	IRC HBG Metal 45mm -2.8mm	Cum	1574.55
123	0119	HBG metal 6.75mm nominal size (IRC)	Cum	1550.00
124	0121	Bricks (Clay burnt bricks)	1000 no	8197.00
125	0123	Mango wood planks	Cum	22000.00
126	0124	Bond stone	Cum	1210.00
127	0125	Rough stone for RR work	Cum	1210.00
128	0125A	10mm thick flamed granite tile	sqm	1800.00
129	0126	Bajri (20mm nominal size)	Cum	880.00
130	0127	Gravel (22.4mm - 90 mm)	Cum	729.00
131	0128	Gravel (5.6mm - 22.4mm)	Cum	729.00
132	0129	WBM grade I metal (90mm - 45mm)	Cum	1325.00
133	0130	WBM grade II metal (63mm - 45mm)	Cum	1403.33
134	0131	WBM grade III metal (53mm - 22.4mm)	Cum	1620.00
135	0132	Borrow area sand	Cum	1800.00
136	0133	HBG metal 5.75mm nominal size(IRC)	Cum	1550.00
137	0133A	IRC HBG Metal below 5.6mm	Cum	1200.00
138	0133B	IRC HBG Metal below 5mm	Cum	1200.00
139	0133C	IRC HBG Metal below 4.75mm	Cum	1200.00
140	0133E	IRC HBG Metal 2.36 - 75 micron	Cum	1200.00
141	0135	IRC HBG metal 26.5mm - 11.2mm	Cum	1678.00
142	0136	IRC HBG metal 22.4mm - 2.8mm	Cum	1587.14
143	0136A	IRC HBG Metal (13.2mm - 10mm)	Cum	1660.00
144	0136B	IRC HBG Metal (13.2mm - 5.6mm)	Cum	1632.50
145	0136C	IRC HBG Metal (13.2mm - 0.09mm)	Cum	1447.14
146	0136D	IRC HBG Metal 22.4mm - 2.36mm	Cum	1538.75
147	0137	IRC HBG Metal (11.2mm - 2.8mm)	Cum	1517.50
148	0138	IRC HBG metal 2.8mm	Cum	1200.00
149	0138A	IRC HBG Metal below 2.36mm	Cum	1200.00
150	0138B	Supply and mixing of waste plastic chips of 4.35mm size	kg	22.00
151	0139	IRC HBG metal 53mm - 26.5mm	Cum	1602.50
152	0140	IRC HBG metal 22.4mm - 11.2mm	Cum	1675.00
153	0140A	IRC HBG Metal 20mm-10mm	Cum	1675.00
154	0141	Ballies 125mm dia	metre	57.00
155	0144	Annealed steel wire	Kg	71.20
156	0145	RCC pipe NP3 with collar 1200mm dia	metre	4980.00
157	0145A	Perforated pipe of cement concrete 100mm dia	metre	130.00
158	0147	RCC pipe NP3 with collar 900mm dia	metre	3526.00
159	0150	Spall	Cum	770.00
160	0151	Fillter media 40mm HBG metal	Cum	1660.00
161	0152	Joint sealing compound 25mm deep	Kg	95.00
162	0153	Joint filler 10cm wide 12.5cm deep	sq.cm	110.00
163	0154	Premixed primer	Litre	121.00
164	0155	Premixed paint I class	Litre	243.00
165	0156	Road marking paint	Litre	275.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
166	0157	Screened manure	Cum	75.00
167	0158	De-oiled neem cake	Qtl	805.00
168	0159	Sludge	Cum	36.00
169	0160	Farm yard manure	Cum	150.00
170	0160A	Seeds	Kg	50.00
171	0160B	Pesticide	kg	50.00
172	0161	Hedge plant	Each	10.00
173	0161A	Sapling 2m high 25mm dia	Each	25.00
174	0161B	Sapling 1 to 1.5m high 2cm dia stem	Each	20.00
175	0162	Plants	Each	15.00
176	0163	Shrubs	Each	15.00
177	0164	Fertiliser	qtl	600.00
178	0165	Empty bitumen drum	Each	173.00
179	0166	M.S rivets 6mm x 10mm	Each	67.00
180	0167	M.S flats	Qtl	6552.54
181	0168	M.S angle	Qtl	6552.54
182	0171	M.S angle,tee,channel,flat (average)	Qtl	6552.54
183	0172	G.I barbed wire min 9.3kg/rm	Qtl	8500.00
184	0173	Special gelatine 80%	Kg	60.00
185	0174	Detonators	Each	81.00
186	0175	Safety fuse wire	Coil	40.00
187	0194	M.S plate	Kg	71.00
188	0200	Premoulded joint filler 20mm th.12m x 0.25m	Sqm	29.00
189	0210A	Welded steel wire fabric 75 x 50mm mesh @4kg/sqm	Kg	63.00
190	0211A	Epoxy primer	kg	121.00
191	0211B	Epoxy compound with accessories for preparing epoxy mortar	kg	300.00
192	0212	Digging plant ,carriage and planting	each	75.00
193	0217B	Nuts and bolts	kg	65.00
194	0219	Admixture	Litre	110.00
195	0382	Enamel paint	Litre	222.00
196	0383	Road Refector	each	450.00
197	0383A	S/F TATA BP Solar powered studs uni directional	each	4000.00
198	0384	Stone 15 x 15x 19cm with 30cm chisel dressed	each	75.00
199	0387	Ready mixed paint	Litre	243.00
200	0400	HBG metal 10mm nominal size	Cum	1660.00
201	0401	Bentonite	tonne	7500.00
202	0402	Diesel	litre	90.28
203	0403	Linsed oil	litre	280.00
204	0404	Aluminium plate - 2 mm thick	sqm	1120.00
205	0407	Conversion charges such as computerised designing	sqm	650.00
206	0408	M.S.pipe - 'C' class 100 mm dia	metre	740.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
207	0409	M.S. 'c' bend 100 mm dia	each	400.00
208	0410	M.S.dummy plate 100 mm dia	each	25.00
209	0411	M.S.pipe 32 mm dia 125 mm long with joint plate bolt and nut	each	45.00
210	0411A	Steel pipe 50mm dia external	metre	210.00
211	0412	M.S pipe C class 80 mm dia	metre	550.00
212	0413	Speed bump of ABSmaterial-750x250x75mm-white/yellow/black	each	4153.00
213	0416	Solarpanel&yellowblinker with battery suitable for24X7(opr)	job	36440.00
214	0417	Labour+crane charges for the pipes in to the pit	job	1900.00
215	0418	Fabricated class I 4" pipe staggered to 3" dia+transport charge	job	9650.00
216	0419	Plastering all the 5 sides+Painting	job	350.00
217	0420	Crane charges for fixing aspect and solar panel	job	2400.00
218	0421	Corrugated sheet, 3mm tk "W" beam, 4.5m length	kg	60.00
219	0500A	IRC HBG Metal (53mm - 9.5mm)	Cum	1453.33
220	0500C	IRC HBG Metal 53mm - 2.8mm	Cum	1740.91
221	0501	IRC HBG Metal (9.5mm - 2.36mm)	Cum	1402.50
222	0502	Cost of water	Kl.	120.00
223	0503	IRC HBG Metal (26.5mm - 9.5mm)	Cum	1675.00
224	0504	IRC HBG Metal (9.5mm - 4.75mm)	Cum	1586.67
225	0504A	IRC HBG Metal (10mm - 5mm)	Cum	1470.00
226	0504B	IRC HBG Metal 10mm -4.75mm	Cum	1470.00
227	0504C	IRC HBG Metal 11.2mm - 0.09mm	Cum	1411.67
228	0504D	IRC HBG Metal 11.2mm - 2.36mm	Cum	1454.00
229	0505	IRC HBG Metal (4.75mm - 2.36mm)	Cum	1316.67
230	0505C	IRC HBG Metal 4.75mm - 75 micron	Cum	1058.33
231	0506	IRC HBG Metal (53mm - 26.5mm)	Cum	1602.50
232	0507	IRC HBG Metal (26.5mm - 4.75mm)	Cum	1643.75
233	0508	Slaked lime	tonne	720.00
234	0509	IRC HBG Metal (37.5mm - 9.5mm)	Cum	1672.86
235	0510	IRC HBG Metal (45mm - 22.4mm)	Cum	1675.00
236	0511	Tile size - 300x300mm - 25mm thick	Nos.	45.00
237	0512	RCC pipe 200mm dia with collar	Rmt.	850.00
238	0513	IRC HBG Metal (22.5mm - 5.6mm)	Cum	1651.67
239	0514	Compensation for earth	Cum	605.00
240	0515	IRC HBG Metal (37.5mm - 25mm)	Cum	1680.00
241	0516	IRC HBG Metal (25mm - 10mm)	Cum	1677.14
242	0306G	Tipper 10 tonne capacity(450 tonne x 147.24)	job	66258.00
243	0306I	Tipper 10 tonne capacity(104 tonnex147.24)	job	66258.00
244	0306K	Tipper (450 cum or 990 t) for 20 Km lead	job	15312.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
245	0306L	Tipper 10 t capacity (1050 cum or 2415 t) for 20 km lead	job	15312.00
246	0306M	Tipper 10 t capacity (10 cum) for 20 km lead	job	4668.00
247	0307A	Fly ash conveyance	job	42306.00
248	0307B	Conveyance of concrete from batch mix plant site to work site	tonne	612.00
249	0700	90 cm equilateral triangle sign board	each	770.00
250	0701	60 cm equilateral triangle sign board	each	343.00
251	0702	60 cm circular sign board	each	621.00
252	0703	80 cm X 60 cm rectangular sign board	each	1056.00
253	0704	60 cm X 45 cm rectangular sign board	each	594.00
254	0705	60 cm X 60 cm square sign board	each	792.00
255	0706	90 cm high octagon sign board	each	1261.00
256	0707	Alumi.sheet -encapsulated lens-reflective sheet(diamond gr.)	sqm	8875.00
257	0707A	Aluminium sheet encapsulated lens with high intensity grade	sqm	4875.00
258	0708	Al.alloy/ galvanised steel+ 5% wastage(1.05+1%to f. nut + 15% fab.	tonne	39600.00
259	0708A	Alumi.sheet -encapsulated lens with high intensity grade	sqm	4875.00
260	0708B	Aluminium plate 2.0mm thick	sqm	1526.00
261	0710	Hot applied thermoplastic compound	litre	160.00
262	0711	Reflectorising glass beads	kg	45.00
263	0712	Delineators(including installation)	each	1025.00
264	0713	Stone spall	cum	770.00
265	0714	RCC pipe NP-4/prestressed concrete pipe with collar at site	Metre	5335.00
266	0715	Doob grass	kg	3.00
267	0715A	Fine grass	kg	3.00
268	0716	P/L soft Korean grass turfing & maintaining for 3 months	sqm	697.00
269	0777A	Lime stone dust	Tonne	175.00
270	0843	Paints-ready mixed for steel work	litre	222.00
271	0851	Jute netting , open weave, 2.5sq.cm opening	sqm	15.00
272	0853	Separation membrane impermeable plastic sheeting 125 micron tk	sqm	30.00
273	0854	Plastic sheath 1.25mm tk for dowel bars	sqm	50.00
274	0855	Joint sealent	kg	350.00
275	0856	Sealant primer	kg	75.00
276	0857	Curing compound	litre	100.00
277	0979	Earth	cum	240.00
278	0979A	Soil	cum	240.00
279	0979B	RBI grade -81	tonne	32000.00
280	0979C	RBI Additive	tonne	10000.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
281	1002	Steel Mild steel round bar 12mm dia & below	kg	65.53
282	1006	M.S.square bars	kg	65.53
283	1007A	Structurals such as tees, angles, channels above 75 mm depth	kg	65.53
284	1009	Steel flats exceeding 10mm thickness	kg	65.53
285	1013	Steel mild steel sheets for tanks	kg	71.00
286	9999	Sundries	LS	1.66
BASIC RATES FOR BRIDGE WORKS				
		Note: These rates are at site of work and are exclusive of GST & Contractors profit		
1	0001	Mate	Each	970.00
2	0002	Mazdoor	Each	870.00
3	0003	Blacksmith I class	Each	1100.00
4	0004	Blacksmith II class	Each	1050.00
5	0005	Carpentar I class	Each	1100.00
6	0006	Carpentar II class	Each	1050.00
7	0007	Mason I class	Each	1000.00
8	0008	Mason II class	Each	970.00
9	0009	Painter I class	Each	970.00
10	0010	Painter II class	Each	870.00
11	0011	Blacksmith (average)	Each	1075.00
12	0012	Carpentar (average)	Each	1075.00
13	0013	Mason (average)	Each	1000.00
14	0014	Painter (average)	Each	920.00
15	0015	Driller	Each	870.00
16	0016	Blaster	Each	870.00
17	0017	Chiseller	Each	870.00
18	0023	Sprayer	Each	970.00
19	0028	Bhisthi	Each	970.00
20	0037	Fitter (average)	Each	1035.00
21	0040	Welder (average)	Each	1035.00
22	0042	Well sinker I class	Each	1150.00
23	0044	Well sinker (average)	Each	1100.00
24	0047	Mechanic (average)	Each	1035.00
25	0053A	Work supervisor	Each	1200.00
26	0054A	Operation engineer	Each	1200.00
27	0055	Operator	Each	1200.00
28	0056	Mastic labour	Each	900.00
29	0057	Skilled labour	Each	900.00
30	0058	Semi skilled labour	Each	870.00
31	0100	Sand	Cum	1800.00
32	0100A	Sand for filling	cum	605.00
33	0101	Cement	Tonne	6015.63
34	0101B	Cement (SRPC)	Tonne	7600.00
35	0101C	Portland Slag Cement	tonne	7600.00
36	0102	Mild steel	Tonne	65525.40

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
37	0103	Tor steel	Tonne	65525.40
38	0103A	TMT - Rods	Tonne	65525.40
39	0103B	Steel TMT (ISI brand approved make)	Tonne	65525.40
40	0106	Bitumen - VG10	Tonne	42507.59
41	0107	Gravel	Cum	729.00
42	0108	ISS HBG metal-10mm	Cum	1660.00
43	0109	ISS HBG metal-20mm	Cum	1690.00
44	0110	ISS HBG metal-40mm	Cum	1660.00
45	0111A	IRC HBG metal 9.5mm	Cum	1660.00
46	0120	Bricks	1000 no	8197.00
47	0124	Bond stone	Cum	1210.00
48	0125	Rough stone for RR work	Cum	1210.00
49	0133	IRC HBG metal 5.6mm	Cum	1550.00
50	0137	IRC HBG metal 11.2mm - 2.8mm	Cum	1517.50
51	0139	IRC HBG metal 53mm - 26.5mm	Cum	1602.50
52	0144	Annealed steel wire	Kg	71.20
53	0150	Spall	Cum	770.00
54	0151	Filter media stone aggregate 40mm HBG metal	Cum	1660.00
55	0151A	Filtermedia stone aggregate conforming clause 2504.2.2MoRT&H	cum	1660.00
56	0155A	Anticorrosive coating for 20mm to 32mm dia. bars	Tonne	9000.00
57	0155B	Anticorrosive coating for 8mm to 16mm dia. bars	Tonne	12500.00
58	0156	Road marking paint	Litre	275.00
59	0167	M.S flats	Qtl	6552.54
60	0170	M.S channel	Qtl	6552.54
61	0171	M.S angle, tee, channel, flat (average)	tonne	65525.40
62	0174	Detonators	Each	81.00
63	0175	Safety fuse wire	Coil	40.00
64	0176	Drilling equipment	Day	500.00
65	0177	A.c collar 100mm dia	Each	35.00
66	0178	Blasting materials	Kg	40.00
67	0179	M.S bolts & nuts	Kg	60.00
68	0180	Gelatine and detonators @ 0.1kg/cum	Kg	100.00
69	0180A	Gelatine & detonators @ 0.5kg/cum	Kg	100.00
70	0181	Drill bits	Each	175.00
71	0182	Bentonite	Mt	7500.00
72	0183	Diesel	Litre	90.28
73	0184	Oil	Litre	270.00
74	0185	C.I shoes @ 80kg/pile	Kg	50.00
75	0186	M.S shoes @ 35kg/pile	Kg	55.00
76	0187	C.I rocker	Kg	43.00
77	0188	M.S anchor bolts	Kg	43.00
78	0189	Forged steel roller	Kg	43.00
79	0190	M.S matrix	Kg	43.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
80	0191	Stainless steel	Kg	250.00
81	0192	Ptfe nodeles	Sq.cm	43.00
82	0193	Neoprene	Kg	250.00
83	0194	M.S plate	Kg	71.00
84	0194A	Elastomeric slab with m.S.plates insertion	Cu.cm	20.00
85	0194B	Edge beams of steel	Kg	150.00
86	0195	Chloroprene	Cc	20.00
87	0196	A.c pipe 100mm dia	Rm	35.00
88	0196A	PVC pipe 110mm dia 6kg / sq.cm	metre	205.00
89	0197	M.S holder bat clamp 100mm dia	Each	18.00
90	0198	Copper plate	Kg	195.00
91	0199	Fibre board	Sqm	202.00
92	0200	Premoulded joint filler 20mm th.12m x 0.25m	Sqm	28.00
93	0202	Chloroprene strip	Rm	440.00
94	0203	Anchor plate	No	50.00
95	0203A	Anchorage set	No	60.00
96	0204	Anchor loops 14mm - 20mm	No	30.00
97	0205	H.t steel wire @ 9.42kg/m	Qtl	15000.00
98	0206	Sheathing duct zd 66mm	Rm	50.00
99	0207	Chequered c.c tiles	Sqm	550.00
100	0208	M.S grating 260mm x 26mm	No	28.00
101	0209	G.I pipe 100mm class b	Rm	1032.00
102	0209A	Hdpe pipe	Metre	45.00
103	0210	G.I wire mesh 10cm x 10cm size 3mm thick	Kg	60.00
104	0210A	4mm GI wire crates woven in mesh size of 100mm x 100mm	sqm	235.00
105	0211	Epoxy	Kg	337.00
106	0211A	Quick setting compound	kg	200.00
107	0214	G.I wire mesh 150mm x 150mm x 4mm dia	Kg	60.00
108	0215	Cast iron steel	Kg	55.00
109	0217A	Steel inserts with stainless steel bolts&nuts	Kg	250.00
110	0219	Admixture	Litre	110.00
111	0220	Lime stone dust	Cum	175.00
112	0221	Pigment	Kg	55.00
113	0222	Nipple	Kg	29.00
114	0223	Quartz sand	Kg	6.00
115	0224	Initial & routine test	tonne	700.00
116	0225	For lateral load testing	tonne	700.00
117	0304	Hire charge for hot mix plant 6-10 tpm	Hr.	1210.00
118	0306	Hire charge for tipper 5 tonne capacity	Hr.	525.00
119	0309	Hire charge for tractor 40-50 hp	Hr.	363.00
120	0322	Hire charge for front end loader 1cum cap.	Hr.	1100.00
121	0330	H/c for paver finisher	Hr.	900.00
122	0331	H/c for crane 3 MT	Hr.	341.00
123	0332	H/c for crane 5 mt	Day	2728.00

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
124	0332A	H/C for Crane 20 tonne	hour	1250.00
125	0332B	H/C for Crane 40 tonne	hour	1250.00
126	0332C	H/C for Crane 50 tonne	hour	1250.00
127	0335	H/c for concrete mixer 10-7 cft	Hr.	515.00
128	0337	H/c for pin vibrator (needle)	Hr.	112.00
129	0341	H/c for pumpset 10-20 hp	Hr.	85.00
130	0352	H/c for screed vibrator	Hr.	150.00
131	0355	H/c for air compressor 145-170 cfm	Hr.	375.00
132	0356	H/c for air compressor 250 cfm	Day	2200.00
133	0357	H/c for air compressor 300-340 cfm	Hr.	275.00
134	0362	H/c for water tanker	Hr.	450.00
135	0363	H/c for vibratory roller	Hr.	1650.00
136	0366	H/c for pneumatic roller	Hr.	1650.00
137	0377	H/c for batching plant	Hr.	1800.00
138	0378	H/c for transit mixer	Hr.	1155.00
139	0379	H/c for concrete pump	Day	250.00
140	0380	H/c for grouting pump	Day	250.00
141	0381	H/c for mastic cooker	Day	560.00
142	0396	H/C piling rig with power unit & Bentonite pump	hour	3525.00
143	0396A	H/C of piling rig with double acting pile driving hammer	hour	3525.00
144	0396B	Vibrating pile driving hammer with power unit	hour	3525.00
145	0401	Bentonite	Tonne	7500.00
146	0407	Steel helmet and cushion block on top of casing head during	Kg	150.00
147	0502	Cost of water	KL	100.00
148	0607	H/C for electric gen set	hour	737.00
149	0607A	H/C for Electric gen set 33 KVA	hour	240.00
150	0607B	H/C for Electric gen set 63 KVA	hour	340.00
151	0607C	H/C for Electric gen set 100 KVA	hour	450.00
152	0609	Excavator	hour	1550.00
153	0610	Shotcreting equipment	Hr	100.00
154	0612	H/C for plate compactor	hour	70.00
155	1013	Structural steel	MT	65525.40
156	1013A	Corrosion resistant structural steel	Kg	70.00
157	1024A	GI pipe 100 mm dia	metre	1932.00
158	1025A	GI bolt 10 mm dia	each	6.50
159	1331A	Galvanised MS flat clamp	each	22.00
160	7316	Accelerating Admixture	kg	32.00
161	7317	Retarding Admixture	kg	70.00
162	9999A	M30 grade cover block	no	2.00
163	2394	Coupler 16mm dia	each	90.45
164	2395	Coupler 20mm dia	each	118.80
165	2396	Coupler 25mm dia	each	175.50
166	2397	Coupler 28mm dia	each	259.20

Sl.No.	Code.No.	Description	Unit	Rate in Rs.
167	2398	Coupler 32mm dia	each	311.85

LEAD

CARRIAGE OF MATERIALS BY MECHANICAL TRANSPORT INCLUDING LOADING, UNLOADING AND STACKING
FOR THE YEAR 2024-2025 (MAHE REGION)

Code	Materials	Unit	Incidental Charges to be adopted initially	Rate								Loading charge	Unloading charge
				1Km	2Km	3Km	4Km	5Km	Beyond 5Km upto 10 Km per Km	Beyond 10Km upto 20 Km per Km	Beyond 20Km per Km		
1	2	3	4	4	5	6	7	8	9	10	11	12	13
1.1.1	a) Lime moorum, building rubbish, earth, manure or sludge and excavated rocks:												
	i) Lime, Moorum, Gravel Surki, building rubbish and brick jelly	cum	28.50	84.46	97.18	109.79	121.97	133.84	10.79	9.15	7.76	28	28
	ii) Earth	cum	15.83	105.58	121.48	137.23	152.46	167.30	13.48	11.44	9.70	32	32
	iii) Manure or Sludge	cum	28.50	91.80	105.63	119.33	132.57	145.48	11.72	9.95	8.43	28	28
	iv) Excavated rocks	cum	57.00	168.92	194.36	219.57	243.94	267.68	21.57	18.31	15.51	56	56
	a) Sand, stone aggregate and soling stone												
	i) Sand	cum	19.00	84.46	97.18	109.79	121.97	133.84	10.79	9.15	7.76	32	32
	ii) Stone aggregate below 40mm nominal size	cum	190.00	84.46	97.18	109.79	121.97	133.84	10.79	9.15	7.76	42.4	42.4
	iii) Stone aggregate 40mm and above	cum	190.00	91.80	105.63	119.33	132.57	145.48	11.72	9.95	8.43	42.4	42.4
	iv) Soling stone and masonry stone	cum	142.50	99.36	114.33	129.16	143.49	157.46	12.69	10.77	9.13	32	32
1.1.2	Bricks	1000nos	142.50	225.23	259.15	292.76	325.25	356.91	28.76	24.41	20.68	48	48
1.1.3	Tiles	1000nos	66.50	135.14	155.49	175.66	195.15	214.15	17.26	14.64	12.41	20	20

1	2	3	4	4	5	6	7	8	9	10	11	12	13
1.1.4	Cement,Stone blocks G.I.,C.I.,A.C.,and CC. pipes below 100mm dia.,other heavy materials rice and wheat.	tonne	66.50	75.08	86.38	97.59	108.42	118.97	9.59	8.14	6.89	80	80
1.1.5	Steel and Iron works	tonne	66.50	75.08	86.38	97.59	108.42	118.97	9.59	8.14	6.89	80	80
1.1.6	Timber	cum	28.50	96.53	111.06	125.47	139.39	152.96	12.33	10.46	8.86	28	28
1.1.7	Tar,Bitumen	tonne	142.50	84.46	97.18	109.79	121.97	133.84	10.79	9.15	7.76	60	60
1.1.7A	Solvent	qtl	14.25	8.45	9.72	10.98	12.20	13.38	1.08	0.92	0.78	6	6
1.1.8	Steam coal	tonne	28.50	96.53	111.06	125.47	139.39	152.96	12.33	10.46	8.86	28	28
1.1.9	S.W.pipes-												
	(a)100mm dia.	100 m	77.58	112.61	129.58	146.38	162.62	178.46	14.38	12.20	10.34	93.33	93.33
	(b)150mm dia.	100 m	155.17	225.23	259.15	292.76	325.25	356.91	28.76	24.41	20.68	186.67	186.67
	(c)200mm dia.	100 m	258.61	375.38	431.92	487.93	542.08	594.85	47.93	40.68	34.47	311.11	311.11
	(d)230mm dia.	100 m	369.44	536.25	617.02	697.05	774.40	849.79	68.48	58.11	49.25	444.44	444.44
	(e)250mm dia.	100 m	443.33	643.50	740.43	836.46	929.28	1019.74	82.17	69.73	59.10	533.33	533.33
	(f)300mm dia.	100 m	554.17	804.38	925.54	1045.57	1161.60	1274.68	102.71	87.17	73.87	666.67	666.67
	(g)350mm dia.	100 m	775.83	1126.13	1295.75	1463.80	1626.23	1784.55	143.80	122.03	103.42	933.33	933.33
	(h)400mm dia.	100 m	1108.33	1608.76	1851.07	2091.14	2323.19	2549.36	205.43	174.33	147.74	1333.33	1333.33
	(i)450mm dia.	100 m	1410.61	2047.52	2355.91	2661.45	2956.79	3244.64	261.45	221.88	188.03	1696.97	1696.97
	(j)500mm dia.	100 m	1551.67	2252.27	2591.50	2927.60	3252.47	3569.10	287.60	244.07	206.83	1866.67	1866.67
	(k)600mm dia.	100 m	1939.58	2815.33	3239.38	3659.50	4065.58	4461.38	359.50	305.08	258.54	2333.33	2333.33
1.1.10	R.C.C.pipes,A.C.pipes Steel cylinder,R.C.Pipes, C.I.Pipes and Unrein- forced cement pipes												
	(a)100 mm dia	100 m	127.19	184.61	212.42	239.97	266.60	292.55	23.57	20.01	16.95	153.01	153.01
	(b)125 mm dia	100 m	169.89	246.60	283.74	320.54	356.11	390.78	31.49	26.72	22.65	204.38	204.38
	(c)150 mm dia	100 m	211.98	307.69	354.03	399.95	444.33	487.58	39.29	33.34	28.26	255.01	255.01
	(d)200 mm dia	100 m	344.81	500.50	575.89	650.58	722.77	793.13	63.91	54.24	45.96	414.81	414.81
	(e)250 mm dia	100 m	490.00	711.24	818.37	924.51	1027.09	1127.08	90.82	77.07	65.32	589.47	589.47
	(f)300 mm dia	100 m	605.65	879.10	1011.51	1142.70	1269.50	1393.09	112.26	95.26	80.73	728.6	728.6
	(g)350 mm dia	100 m	717.26	1041.11	1197.92	1353.28	1503.45	1649.82	132.94	112.82	95.61	862.87	862.87
	(h)400 mm dia	100 m	1156.23	1678.29	1931.07	2181.52	2423.60	2659.54	214.31	181.87	154.12	1390.96	1390.96
	(i)450,500 mm dia	100 m	1413.18	2051.24	2360.20	2666.30	2962.17	3250.55	261.93	222.28	188.37	1700.06	1700.06
	(j)600,700,750 and 800 mm dia.	100 m	2119.76	3076.87	3540.30	3999.45	4443.26	4875.82	392.90	333.42	282.56	2550.09	2550.09

Note:

1. The above rates includes stacking charges.
2. For Code No. 1.1.1 the rates will be applicable to net quantities after deduction of prescribed percentage for voids mentioned in the C.P.W.D. specification under Sub-Head "Carriage of Materials".

BUILDING WORK

2 . Earth Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
2.1.1	Earth work in surface excavation not exceeding 30cm in depth but exceeding 1.5m in width as well as 10 sqm on plan including getting out and disposal of excavated earth up to 50m and lift up to 1.5m, as per direction of Engineer-in-charge - All kinds of soil	sqm	153.47
2.2.1	Earth work by mechanical / manual means in rough excavation , banking excavated earth in layers not exceeding 20 cm in depth, breaking clods, watering,rolling each layer with 1/2 tonne roller or wooden or steel rammers,and rolling every 3rd and top-most layer with power roller of minimum 8 tonnes and dressing up in embankments for roads, flood banks, marginal banks and guide banks or filling up ground depressions , lead upto 50m and for all lift - all kinds of soil	cum	484.39
2.3.1	Banking excavated earth by mechanical / manual means in layers not exceeding 20cm in depth, breaking clods, watering, rolling each layer with 1/2 tonne roller, or wooden or steel rammers , and rolling every 3rd and top-most layer with power roller of minimum 8 tonnes and dressing up, in embankments for roads,flood banks,marginal banks,and guide banks etc.,lead upto 50m and for all lift - all kinds of soil	cum	287.02
2.4	Deduct for not rolling with power rollder of minimum 8 tonnes for banking excavated earth in layers not exceeding 20cm in depth	cum	8.51
2.5	Deduct for not watering the excavated earth for banking	cum	25.61
2.6.1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30 cm in depth, 1.5m in width as well as 10sqm on plan) including getting out and disposal of excavated earth, lead upto 50m and for all lift as per direction of Engineer-in-charge by in charge - all kinds of soil	cum	226.08
2.7.1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30 cm in depth, 1.5m in width as well as 10sqm on plan) including getting out and disposal of excavated earth , lead upto 50m and lift upto 1.5m as per direction of Engineer-in-charge by in charge - ordinary rock	cum	679.03

2 . Earth Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
2.7.2	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30 cm in depth, 1.5m in width as well as 10sqm on plan) including getting out and disposal of excavated earth , lead upto 50m and lift upto 1.5m as per direction of Engineer-in-charge by in charge- hard rock (requiring blasting)	cum	1179.11
2.7.3	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30 cm in depth, 1.5m in width as well as 10sqm on plan) including getting out and disposal of excavated earth , lead upto 50m and lift upto 1.5m as per direction of Engineer-in-charge by in charge - hard rock (blasting prohibited)	cum	1999.20
2.8.1	Earthwork in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, for all lift, including getting out the excavated soil and disposal of surplus excavated soil as per direction of Engineer-in-charge , within a lead of 50m - all kinds of soil	cum	332.21
2.9.1	Excavation work by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5m, including getting out the excavated soil and disposal of surplus excavated soils as per direction of Engineer-in-charge, within a lead of 50m - ordinary rock	cum	854.53
2.9.2	Excavation work by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5m, including getting out the excavated soil and disposal of surplus excavated soils as per direction of Engineer-in-charge, within a lead of 50m - hard rock (requiring blasting)	cum	1390.71
2.9.3	Excavation work by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5m, including getting out the excavated soil and disposal of surplus excavated soils as per direction of Engineer-in-charge, within a lead of 50m - hard rock (blasting prohibited)	cum	2117.15

2 . Earth Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
2.10.1.1	Excavating trenches by mechanical / manual means of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, for all depth, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as per direction of Engineer-in-charge, within a lead of 50 m - all kinds of soil - pipes,cables etc , not exceeding 80mm dia	metre	266.29
2.10.1.2	Excavating trenches by mechanical / manual means of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, for all depth, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as per direction of Engineer-in-charge, within a lead of 50 m - all kinds of soil - pipes,cables etc , exceeding 80mm dia but not exceeding 300 mm dia	metre	434.93
2.10.1.3	Excavating trenches by mechanical / manual means of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, for all depth, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as per direction of Engineer-in-charge, within a lead of 50 m - all kinds of soil - pipes,cables etc , exceeding 300mm dia but not exceeding 600 mm	metre	679.02
2.13.1.1	Excavating trenches of required width for pipes, cables , etc, including excavation for sockets, depth upto 1.5m including getting out the excavated materials , returning the soil as required in layers not exceeding 20cm in depth, including consolidating each deposited layers by ramming ,watering etc., stacking serviceable material for measurements and disposal of unserviceable material as per direction of Engineer-in-charge, within a lead of 50m - ordinary rock - pipes,cables etc. not exceeding 80mm dia	metre	526.84
2.13.1.2	Excavating trenches of required width for pipes, cables , etc, including excavation for sockets, depth upto 1.5m including getting out the excavated materials , returning the soil as	metre	1304.54

2 . Earth Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	required in layers not exceeding 20cm in depth, including consolidating each deposited layers by ramming ,watering etc., stacking serviceable material for measurements and disposal of unserviceable material as per direction of Engineer-in-charge, within a lead of 50m - ordinary rock - pipes,cables etc.exceeding 80mm dia but not exceeding 300 mm dia		
2.13.1.3	Excavating trenches of required width for pipes, cables , etc, including excavation for sockets, depth upto 1.5m including getting out the excavated materials , returning the soil as required in layers not exceeding 20cm in depth, including consolidating each deposited layers by ramming ,watering etc., stacking serviceable material for measurements and disposal of unserviceable material as per direction of Engineer-in-charge, within a lead of 50m - ordinary rock - pipes,cables etc. exceeding 300 mm dia but not exceeding 600 mm dia	metre	1501.09
2.13.2.1	Excavating trenches of required width for pipes, cables , etc, including excavation for sockets, depth upto 1.5m including getting out the excavated materials , returning the soil as required in layers not exceeding 20cm in depth, including consolidating each deposited layers by ramming ,watering etc., stacking serviceable material for measurements and disposal of unserviceable material as per direction of Engineer-in-charge, within a lead of 50m - hard rock (requiring blasting) - pipes,cables etc. not exceeding 80mm dia	metre	783.62
2.13.2.2	Excavating trenches of required width for pipes, cables , etc, including excavation for sockets, depth upto 1.5m including getting out the excavated materials , returning the soil as required in layers not exceeding 20cm in depth, including consolidating each deposited layers by ramming ,watering etc., stacking serviceable material for measurements and disposal of unserviceable material as per direction of Engineer-in-charge, within a lead of 50m - hard rock (requiring blasting) - pipes,cables etc. exceeding 80mm dia but not exceeding 300mm dia	metre	1940.37
2.13.2.3	Excavating trenches of required width for pipes, cables , etc, including excavation for sockets, depth upto 1.5m including getting out the excavated materials , returning the soil as required in layers not exceeding 20cm in depth, including consolidating each deposited layers by ramming ,watering etc., stacking serviceable material for measurements and disposal of unserviceable material as per direction of Engineer-in-charge, within a lead of 50m - hard rock (requiring blasting) -	metre	2232.61

2 . Earth Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	pipes,cables etc. exceeding 300 mm dia but not exceeding 600mm dia		
2.13.3.1	Excavating trenches of required width for pipes, cables , etc, including excavation for sockets, depth upto 1.5m including getting out the excavated materials , returning the soil as required in layers not exceeding 20cm in depth, including consolidating each deposited layers by ramming ,watering etc., stacking serviceable material for measurements and disposal of unserviceable material as per direction of Engineer-in-charge, within a lead of 50m - hard rock (blasting prohibited) - pipes,cables etc. not exceeding 80mm dia	metre	1126.86
2.13.3.2	Excavating trenches of required width for pipes, cables , etc, including excavation for sockets, depth upto 1.5m including getting out the excavated materials , returning the soil as required in layers not exceeding 20cm in depth, including consolidating each deposited layers by ramming ,watering etc., stacking serviceable material for measurements and disposal of unserviceable material as per direction of Engineer-in-charge, within a lead of 50m - hard rock (blasting prohibited) - pipes,cables etc. exceeding 80mm dia but not exceeding 300mm dia	metre	2790.31
2.13.3.3	Excavating trenches of required width for pipes, cables , etc, including excavation for sockets, depth upto 1.5m including getting out the excavated materials , returning the soil as required in layers not exceeding 20cm in depth, including consolidating each deposited layers by ramming ,watering etc., stacking serviceable material for measurements and disposal of unserviceable material as per direction of Engineer-in-charge, within a lead of 50m - hard rock (blasting prohibited) - pipes,cables etc. exceeding 300 mm dia but not exceeding 600mm dia	metre	3210.86
2.14.1.1	Extra for excavating trenches for pipes, cables, etc.in ordinary/hard rock exceeding 1.5 m in depth but not exceeding 3 m (Rate is over corresponding basic item depth upto 1.5 metres) - Ordinary rock- Pipes, cables etc. exceeding 80 mm dia but not exceeding 300 mm dia)	metre length	953.32
2.14.1.2	Extra for excavating trenches for pipes, cables, etc.in ordinary/hard rock exceeding 1.5 m in depth but not exceeding 3 m (Rate is over corresponding basic item depth upto 1.5 metres) - Ordinary rock- Pipes, cables etc. exceeding 300 mm	metre length	1133.07

2 . Earth Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	dia but not exceeding 600 mm dia)		
2.14.2.1	Extra for excavating trenches for pipes, cables, etc.in ordinary/hard rock exceeding 1.5 m in depth but not exceeding 3 m (Rate is over corresponding basic item depth upto 1.5 metres) - hard rock (requiring blasting) Pipes, cables etc. exceeding 80 mm dia but not exceeding 300 mm dia)	metre length	1417.97
2.14.2.2	Extra for excavating trenches for pipes, cables, etc.in ordinary/hard rock exceeding 1.5 m in depth but not exceeding 3 m (Rate is over corresponding basic item depth upto 1.5 metres) - hard rock (requiring blasting) Pipes, cables etc. exceeding 300 mm dia but not exceeding 600 mm dia)	metre length	1685.44
2.14.3.1	Extra for excavating trenches for pipes, cables, etc.in ordinary/hard rock exceeding 1.5 m in depth but not exceeding 3 m (Rate is over corresponding basic item depth upto 1.5 metres) - hard rock (blasting prohibited) Pipes, cables etc. exceeding 80 mm dia but not exceeding 300 mm dia)	metre lenth	2039.07
2.14.3.2	Extra for excavating trenches for pipes, cables, etc.in ordinary/hard rock exceeding 1.5 m in depth but not exceeding 3 m (Rate is over corresponding basic item depth upto 1.5 metres) - hard rock (blasting prohibited) Pipes, cables etc. exceeding 300 mm dia but not exceeding 600 mm dia)	metre length	2423.40
2.15.1.1	Extra for excavating trenches for pipes, cables, etc. in ordinary / hard rock exceeding 3m in depth but not exceeding 4.5 m (rate is over corresponding basic item for depth upto 1.5 metre) - ordinary rock - Pipes, cables exceeding 300 mm dia but not exceeding 600 mm dia)	metre length	3071.67
2.16.1	Close timbering in trenches including strutting, shoring and packing cavities (wherever required) complete (measurements to be taken of the face area timbered) . Depth not exceeding 1.5m	sqm	121.65
2.16.2	Close timbering in trenches including strutting, shoring and packing cavities (wherever required) complete (measurements to be taken of the face area timbered) . Depth exceeding 1.5m but not exceeding 3m	sqm	139.98
2.16.3	Close timbering in trenches including strutting, shoring and packing cavities (wherever required) complete (measurements	sqm	181.20

2 . Earth Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	to be taken of the face area timbered) . Depth exceeding 3m but not exceeding 4.5m		
2.17.1	Close timbering in case of shafts ,wells,cesspits,manholes and the like including strutting,shoring and packing cavities (wherever required) etc. complete (measurements to be taken of the face area timbered). Depth not exceeding 1.5m	sqm	136.96
2.17.2	Close timbering in case of shafts ,wells,cesspits,manholes and the like including strutting,shoring and packing cavities (wherever required) etc. complete (measurements to be taken of the face area timbered). Depth exceeding 1.5m but not exceeding 3m	sqm	176.09
2.17.3	Close timbering in case of shafts ,wells,cesspits,manholes and the like including strutting,shoring and packing cavities (wherever required) etc. complete (measurements to be taken of the face area timbered). Depth exceeding 3m but not exceeding 4.5m	sqm	217.43
2.18.1	Close timbering over areas including strutting,shoring and packing cavities (where ever required) etc. complete (measurements to be taken of the face area timbered) . Depth not exceeding 1.5m	sqm	111.97
2.18.2	Close timbering over areas including strutting,shoring and packing cavities (whwerever required) etc. complete (measurements to be taken of the face area timbered) . Depth exceeding 1.5m but not exceeding 3m	sqm	134.32
2.18.3	Close timbering over areas including strutting,shoring and packing cavities (whwerever required) etc. complete (measurements to be taken of the face area timbered) . Depth exceeding 3m but not exceeding 4.5m	sqm	157.23
2.19	Extra for planking, strutting and packing materials for cavities (in close timbering) if required to be left permanently in position (face area of timber permanently left to be measured)	sqm	1382.45
2.20.1	Open timbering in trenches including strutting and shoring complete (measurements to be taken of the face area timbered) . Depth not exceeding 1.5m	sqm	60.83

2 . Earth Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
2.20.2	Open timbering in trenches including strutting and shoring complete (measurements to be taken of the face area timbered) . Depth exceeding 1.5m but not exceeding 3m	sqm	72.37
2.20.3	Open timbering in trenches including strutting and shoring complete (measurements to be taken of the face area timbered) . Depth exceeding 3m but not exceeding 4.5m	sqm	91.32
2.21.1	Open timbering in case of shafts , wells, cesspits,manholes and the like including strutting and shoring complete (Measurements to be taken of the face area timbered). Depth not exceeding 1.5m	sqm	61.21
2.21.2	Open timbering in case of shafts , wells, cesspits,manholes and the like including strutting and shoring complete (Measurements to be taken of the face area timbered). Depth exceeding 1.5m but not exceeding 3m	sqm	79.65
2.21.3	Open timbering in case of shafts , wells, cesspits,manholes and the like including strutting and shoring complete (Measurements to be taken of the face area timbered). Depth exceeding 3m but not exceeding 4.5m	sqm	104.10
2.22.1	Open timbering over areas including strutting, shoring etc.complete (measurements to be taken of the face area timbered). Depth not exceeding 1.5m	sqm	44.12
2.22.2	Open timbering over areas including strutting, shoring etc.complete (measurements to be taken of the face area timbered). Depth exceeding 1.5m but not exceeding 3m	sqm	56.16
2.22.3	Open timbering over areas including strutting, shoring etc.complete (measurements to be taken of the face area timbered). Depth exceeding 3m but not exceeding 4.5m	sqm	75.82
2.23	Extra for planking and strutting in open timbering if required to be left permanently in position (Face area of the timber permanently left to be measured)	sqm	688.67
2.24.1	Extra rates for quantities of works, executed: In or underwater and / or liquid mud, including pumping out water as required. Extra Due to slow progress and dewatering 20% of the rate of the item.- Note 20% of the rate of the item. The extra percentage	1 metre depth	0.00

2 . Earth work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead upto 50m and all lift	cum	231.36
2.25.1	Extra rates for quantities of works executed: In or under foul position, including pumping out water as required. Extra Due to slow progress and dewatering 25% of the rate of the item.- Note 25% of the rate of the item. This pertains to only such Pumping	1 metre depth	0.00
2.26.1	Extra for every additional lift of 1.5m or part there of in excavation / banking excavated or stacked materials - all kinds of soil	cum	149.95
2.26.2	Extra for every additional lift of 1.5m or part there of in excavation / banking excavated or stacked materials - ordinary or hard rock	cum	268.95
2.27	Supplying and filling in plinth with river sand under floors, including watering ,ramming consolidating and dressing complete	cum	6590.32
2.27A.1	Supplying and filling with gravel (excluding rock) in trenches , plinth, sides of foundations etc . In layers not exceeding 20 cm in depth consolidating each deposited layers by ramming and watering etc .complete including all lead and lift	cum	1327.99
2.27B	Supplying and filling with red earth (excluding rock) including cost and conveyance to the work site and stacking to the departmental gauge , spreading in layers not exceeding 20cm in depth , watering and consolidation using 0.5 tonne roller , or wooden or steel rammers etc. complete for making play fields , running tracks and court yards	cum	1151.58
2.27C.1	Supplying and filling with gravel (excluding rock) in layers not exceeding 20cm in depth , breaking clods , watering , rolling each layer with 1/2 tonne roller , or wooden or steel rammers and rolling every 3rd and top-most layer with power roller of minimum 8 tonnes capacity including all leads and lift (Payment will be made based on level measurement)	cum	1341.84
2.27D.1	Supplying and filling with gravel (excluding rock) in layers not	cum	1334.15

2 . Earth Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	exceeding 20cm in depth , breaking clods, watering , rolling each layer with 1/2 tonne roller , or wooden or steel rammers , including all leads and lift etc., complete for making play fields , running trees and court yards		
2.28.1	Surface dressing of the ground including removing vegetation and in - equalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50m and lift upto 1.5m - all kinds of soil	sqm	40.35
2.29.1	Ploughing the existing ground to a depth of 15cm to 25cm and watering the same - all kinds of soil	sqm	40.94
2.30.1	Excavating holes more than 0.10cum and upto 0.50cum including getting out the excavated soil, then returning the soil as required in layers not exceeding 20cm in depth, including consolidating each deposited layer by ramming, watering etc, disposing of surplus excavated soil; as per direction of Engineer-in-charge within a lead of 50m and lift upto 1.5m - all kinds of soil	holes	103.51
2.30.2	Excavating holes more than 0.10cum and upto 0.50cum including getting out the excavated soil, then returning the soil as required in layers not exceeding 20cm in depth, including consolidating each deposited layer by ramming, watering etc, disposing of surplus excavated soil; as per direction of Engineer-in-charge within a lead of 50m and lift upto 1.5m - ordinary rock	holes	260.21
2.30.3	Excavating holes more than 0.10cum and upto 0.50cum including getting out the excavated soil, then returning the soil as required in layers not exceeding 20cm in depth, including consolidating each deposited layer by ramming, watering etc, disposing of surplus excavated soil; as per direction of Engineer-in-charge within a lead of 50m and lift upto 1.5m - hard rock (requiring blasting)	holes	421.06
2.30.4	Excavating holes more than 0.10cum and upto 0.50cum including getting out the excavated soil, then returning the soil as required in layers not exceeding 20cm in depth, including consolidating each deposited layer by ramming, watering etc, disposing of surplus excavated soil; as per direction of Engineer-in-charge within a lead of 50m and lift upto 1.5m - hard rock (blasting prohibited)	holes	638.99

2 . Earth Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
2.31	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth upto 30cm measured at a height of 1m above ground level and removal of rubbish upto a distance of 50 m outside the periphery of the area cleared.	sqm	20.79
2.32	Clearing grass and removal of the rubbish upto a distance of 50m outside the periphery of the area cleared.	sqm	10.57
2.33.1	Felling trees of the girth (measured at a height of 1m above ground level) including cutting of trunks and branches , removing the roots and stacking of serviceable material and disposal of unserviceable material - beyond 30cm girth upto and including 60cm girth.	each	626.60
2.33.2	Felling trees of the girth (measured at a height of 1m above ground level) including cutting of trunks and branches , removing the roots and stacking of serviceable material and disposal of unserviceable material - beyond 60cm girth upto and including 120cm girth.	each	2800.35
2.33.3	Felling trees of the girth (measured at a height of 1m above ground level) including cutting of trunks and branches , removing the roots and stacking of serviceable material and disposal of unserviceable material - beyond 120cm girth upto and including 240cm girth.	each	13018.72
2.33.4	Felling trees of the girth (measured at a height of 1m above ground level) including cutting of trunks and branches , removing the roots and stacking of serviceable material and disposal of unserviceable material - above 240cm girth.	each	26068.14
2.34.1	Supplying chemical emulsion in sealed containers including delivery as specified - Chlorpyrifos / lindane emulsifiable concentrate of 20%	litre	388.38
2.35.1.1	Diluting and injecting chemical emulsion for POST - CONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion) - along external wall where the apron is not provided using chemical emulsion @ 7.5 litres / sqm of the vertical surface of the substructure to a depth of 300mm including excavation channel along the wall and rodding etc.complete - with chlorpyrifos / lindane E.C. 20% with 1% concentration	metre	44.69

2 . Earth Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
2.35.2.1	Diluting and injecting chemical emulsion for POST - CONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion) - along the external wall below concrete or masonry apron using chemical emulsion @ 2.25 litres per linear metre including drilling and plugging holes etc. - with chlorpyrifos lindane E.C.20% with 1% concentration.	metre	59.72
2.35.3.1	Diluting and injecting chemical emulsion for POST - CONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion) - treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300mm apart including drilling 12mm diameter holes and plugging with cement mortar 1:2 (1 cement : 2 fine aggregate) to match the existing floor - with Chlorpyrifos / lindane E.C. 20% with 1% concentration -	sqm	363.05
2.35.4.1	Diluting and injecting chemical emulsion for POST - CONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion) - Treatment of existing masonry using chemical emulsion @ one litre per hole at 300mm interval including drilling holes at 45 degree and plugging them with cement mortar 1:2 (1 cement : 2 fine aggregate) to the full depth of the hole - with chlorpyrifos / lindane E.C. 20% with 1% concentration	metre	49.13
2.35.5	Diluting and injecting chemical emulsion for POST - CONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion) - treatment at points of contact of wood work by chemical emulsion Chlorpyrifos / Lindane (in oil or kerosene based solution) @ 0.5 litres per hole by drilling 6mm dia holes at downward angle of 45 degree at 150mm centre to centre and sealing the same	metre	312.47
2.36	Extra for levelling and neatly dressing of disposed soil completely as per direction of Engineer-in-charge	cum	110.06
2.37	Supply and stacking of fly ash conforming to IRC -58 at site, including carriage, loading, unloading & stacking upto any lead (measured stacks will be reduced by 20% for payment)	cum	899.83
2.38	Filling with available fly ash and earth (excluding rock) in trenches or embankment in layers (each layer should not exceed 15cm) , with intermediate layer of compacted earth (soil density of 98%) after every four layers of compacted	cum	364.62

2 . Earth Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	depth of fly ash , sides & top layer of filling shall be done with earth having total minimum compacted thickness 30cm or as decided by the Engineer in charge, including compacting each layer by rolling / ramming watering , all complete as per drawing and direction of Engineer -in-charge.		

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
4.1.2	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20mm nominal size)	cum	10249.82
4.1.2A	Providing and laying cement concrete of specified grade excluding the cost of centering and shuttering - All work upto plinth level 1:1.5:3 (1 cement: 1.5 coarse sand (zone -III) including manufactured sand dervied from recycled concrete aggregate (RCA) upto 25% : 3 graded stone aggregate 20mm nominal size including recycled concrete aggregate (RCA) upto 25%)	cum	9943.57
4.1.3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20mm nominal size)	cum	9715.11
4.1.3A	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:2:4 (1 cement : 2 coarse sand including manufactured sand derived from recycled concrete aggregate (RCA) upto 25% : 4 graded stone aggregate 20mm nominal size including recycled concrete aggregate (RCA) upto 25%)	cum	9393.65
4.1.4	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 40mm nominal size)	cum	9599.23
4.1.5	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:3:6 (1 cement : 3 fine aggregate : 6 graded stone aggregate 20mm nominal size)	cum	9040.48
4.1.5A	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:3:6 (1 cement : 3 manufactured sand derived from recycled concrete aggregate (RCA) : 6 graded stone aggregate 20 mm nominal size recycled concrete aggregate (RCA)	cum	7679.60
4.1.5B	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work	cum	6908.01

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	upto plith level - 1:3:6 (1 cement : 3 manufactured sand derived from recycled concrete aggregate (RCA) : 6 graded stone aggregate 20 mm nominal size recycled concrete aggregate (RA)		
4.1.6	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:3:6 (1 cement : 3 fine aggregate : 6 graded stone aggregate 40mm nominal size)	cum	8902.76
4.1.6A	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:3:6 (1 cement : 3 manufactured sand derived from recycled concrete aggregate (RCA) : 6 graded stone aggregate 40 mm nominal size recycled aggregate (RA)	cum	6492.72
4.1.8	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:4:8 (1 cement : 4 fine aggregate : 8 graded stone aggregate 40mm nominal size)	cum	8474.86
4.1.8A	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:4:8 (1 cement : 4 manufactured sand derived from recycled concrete aggregate (RCA) ; 8 graded stone aggregate 40 mm nominal size recycled aggregate (RA)	cum	6406.15
4.1.10	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40mm nominal size)	cum	8132.53
4.1.10A	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:5:10 (1 cement : 5 manufactured sand derived from Recycled Concrete Aggregate (RCA) : 10 graded stone aggregate 40 mm nominal size Recycled Aggregate(RA))	cum	6063.81
4.1.11	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :1:5:10 (1cement:5 fine sand :10 graded stone aggregate 40mm nominal size)	cum	8119.58
4.1.11A	Providing and laying in position cement concrete of specified	cum	7160.58

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	grade excluding the cost of centering and shuttering - all work upto plith level - 1:5:10 (1 cement : 5 fine aggregate : 10 graded brick aggregate 40mm nominal size)		
4.1.12	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:2:3.5:9 (1 ordinary portland cement :2 fly ash :3.5 fine aggregate : 9 graded stone aggregate 40mm nominal size)	cum	8409.98
4.1.12A	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:2:3.5:9 (1 cement : 2 fly ash: 3.5 manufactured sand derived from recycled concrete aggregate (RCA) : 9 graded stone aggregate 40mm nominal size recycled aggregate (RA)	cum	6791.26
4.1.13	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:2.5:4:11 (1 ordinary portland cement : 2.5 fly ash : 4 fine aggregate : 11 graded stone aggregate 40mm nominal size)	cum	7990.82
4.1.13A	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:2.5:4:11 (1 ordinary portland cement : 2.5 fly ash : 4 manufactured sand from recycled concrete aggregate (RCA) : 11 graded stone aggregate 40mm nominal size recycled aggregate (RA))	cum	6062.08
4.2.2	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns,piers, abutments, pillars, posts,struts, buttresses, string or lacing courses, parapets, coping,bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc. upto floor five level, excluding the cost of centering ,shuttering and finishing - 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20mm nominal size)	cum	12519.63
4.2.2A	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns,piers, abutments, pillars, posts,struts, buttresses, string or lacing courses, parapets, coping,bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc. upto floor five level, excluding the cost of centering ,shuttering and finishing -	cum	12213.38

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	1:1.5:3 (1 cement : 1.5 fine aggregate including manufactured sand from recycled concrete (RCA) upto 25% : 3 graded stone aggregate 20mm nominal size including recycled concrete aggregate (RCA) upto 25%)		
4.2.3	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns,piers, abutments, pillars, posts,struts, buttresses, string or lacing courses, parapets, coping,bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc. upto floor five level, excluding the cost of centering ,shuttering and finishing - 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20mm nominal size)	cum	11984.92
4.2.3A	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns,piers, abutments, pillars, posts,struts, buttresses, string or lacing courses, parapets, coping,bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc. upto floor five level, excluding the cost of centering ,shuttering and finishing - 1:2:4 (1 cement : 2 fine aggregate including manufactured sand recycled concrete (RCA) upto 25% : 4 graded stone aggregate 20mm nominal size including recycled concrete aggregate (RCA) upto 25%)	cum	11663.45
4.2.5	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns,piers, abutments, pillars, posts,struts, buttresses, string or lacing courses, parapets, coping,bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc. upto floor five level, excluding the cost of centering ,shuttering and finishing - 1:3:6 (1 cement : 3 fine aggregate : 6 graded stone aggregate 20mm nominal size)	cum	11310.28
4.2.5A	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns,piers, abutments, pillars, posts,struts, buttresses, string or lacing courses, parapets, coping,bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc. upto floor five level, excluding the cost of centering ,shuttering and finishing - 1:3:6 (1 cement : 3 manufactured sand derived from recycled concrete aggregate (RCA) : 6 graded stone aggregate 20mm nominal size recycled concrete aggregate (RCA)	cum	9949.41
4.2.5B	Providing and laying cement concrete in retaining walls, return	cum	8744.63

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc. upto floor five level, excluding the cost of centering, shuttering and finishing - 1:3:6 (1 cement : 3 manufactured sand derived from recycled concrete aggregate (RCA) : 6 graded stone aggregate 20mm nominal size recycled aggregate (RA)		
4.2.8	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc. upto floor five level, excluding the cost of centering, shuttering and finishing - 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40 mm nominal size)	cum	10378.67
4.2.8A	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc. upto floor five level, excluding the cost of centering, shuttering and finishing - 1:5:10 (1 cement : 5 manufactured sand from recycled concrete aggregate (RCA) : 10 graded stone aggregate 40 mm nominal size recycled aggregate (RA)	cum	8309.97
4.3.1	Centring and shuttering including strutting, propping etc. and removal of form work for - foundations, footings, bases for columns	sqm	462.52
4.3.2	Centring and shuttering including strutting, propping etc. and removal of form work for - retaining walls, return walls, walls (any thickness) including attached pilasters, buttresses, plinth and string courses fillets, kerbs and steps etc.	sqm	1010.17
4.3.3	Centring and shuttering including strutting, propping etc. and removal of form work for - columns, piers, abutments, pillars, posts and struts	sqm	1110.29
4.4.1	Providing and laying cement concrete in kerbs, steps and the like at or near ground level excluding the cost of centering, shuttering and finishing - 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20 mm nominal size)	cum	10249.81

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
4.4.1A	Providing and laying cement concrete in kerbs, steps and the like at or near ground level excluding the cost of centering, shuttering and finishing - 1:1.5:3 (1cement : 1.5 coarse sand including manufactured sand from recycled concrete aggregate (RCA) upto 25% : 3 graded stone aggregate 20 mm nominal size including recycled concrete aggregate (RCA) upto 25%)	cum	9943.56
4.5.1	Providing and fixing upto floor five level precast cement concrete string or lacing courses , copings, bed plates, anchor blocks, plain window sills, shelves , louvers, steps, stair cases, etc. including hoisting and setting in position with cement mortar 1:3 (1 cement : 3 fine aggregate), cost of required centering , shuttering complete - 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20mm nominal size)	cum	12270.92
4.5.1A	Providing and fixing upto floor five level precast cement concrete string or lacing courses , copings, bed plates, anchor blocks, plain window sills, shelves , louvers, steps, stair cases, etc. including hoisting and setting in position with cement mortar 1:3 (1 cement : 3 fine aggregate), cost of required centering , shuttering complete - 1:1.5:3 (1 cement : 1.5 coarse sand including manufactured sand from recycled concrete aggregate (RCA) upto 25% : 3 graded stone aggregate 20mm nominal size including recycled concrete aggregate (RCA) upto 25%)	cum	11964.67
4.6.1	Providing and fixing at or near ground level precast cement concrete in kerbs, edgings etc. as per approved pattern and setting in position with cement mortar 1:3 (1 cement : 3 fine aggregate), including the cost of required centering , shuttering complete - 1:1.5:3 (1 cement :1.5 fine aggregate: 3 graded stone aggregate 20 mm nominal size)	cum	10667.85
4.6.1A	Providing and fixing at or near ground level precast cement concrete in kerbs, edgings etc. as per approved pattern and setting in position with cement mortar 1:3 (1 cement : 3 fine aggregate), including the cost of required centering , shuttering complete - 1:1.5:3 (1 cement :1.5 coarse sand including manufactured sand from recycled concrete aggregate (RCA) upto 25%: 3 graded stone aggregate 20 mm nominal size including recycled concrete aggregate (RCA) upto 25%)	cum	10361.60
4.7.1	Providing and fixing upto floor five level precast cement concrete solid block, including hoisting and setting in position	cum	21465.01

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	with cement mortar 1:3 (1 cement : 3 fine aggregate) cost of required centering,shuttering complete - 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20mm nominal size)		
4.7.1A	Providing and fixing upto floor five level precast cement concrete solid block, including hoisting and setting in position with cement mortar 1:3 (1 cement : 3 fine aggregate) cost of required centering,shuttering complete - 1:1.5:3 (1 cement : 1.5 coarse sand including manufactured sand from recycled concrete aggregate (RCA) upto 25% : 3 graded stone aggregate 20mm nominal size including (Recycled Concrete Aggregate (RCA) upto 25%)	cum	21158.76
4.8.1	Providing and fixing upto floor five level precast cement concrete hollow block,including hoisting and setting in position with cement mortar 1:3 (1 cement :3 fine aggregate) cost of required centering,shuttering complete - 1:1.5:3 (1 cement :1.5 fine aggregate : 3 graded stone aggregate 20mm nominal size)	cum	16856.80
4.8.1A	Providing and fixing upto floor five level precast cement concrete hollow block,including hoisting and setting in position with cement mortar 1:3 (1 cement :3 fine aggregate) cost of required centering,shuttering complete - 1:1.5:3 (1 cement :1.5 coarse sand including manufactured sand from recycled concrete aggregate (RCA) upto 25% : 3 graded stone aggregate 20mm nominal size including (recycled concrete aggregate (RCA) upto 25%)	cum	16716.20
4.9	Precasting and placing in position 125mm dia bollards 600mm high of required shape, including providing M.S.Pipe sleeve 50mm dia 300mm long in the bollard and M.S.pipes 40mm dia and 450 mm long with 150x150x6mm M.S.plate welded at bottom and embedded 150 mm in cement concrete 1:3:6 (1 cement :3 fine aggregate : 6 graded stone aggregate 20 mm nominal size), including necessary excavation of size 250x250x450 mm deep for the same in bitumen / concrete pavement at specified spacing.	each	1085.16
4.9A	Precasting and placing in position 125mm dia bollards 600mm high of required shape, including providing M.S.Pipe sleeve 50mm dia 300mm long in the bollard and M.S.pipes 40mm dia and 450 mm long with 150x150x6mm M.S.plate welded at bottom and embedded 150 mm in cement concrete 1:3:6 (1 cement :3 manufactured sand from recycled concrete aggregate (RCA) : 6 graded stone aggregate 20 mm nominal size (	each	1042.61

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	Recycled Concrete Aggregate (RCA)), including necessary excavation of size 250x250x450 mm deep for the same in bitumen / concrete pavement at specified spacing.		
4.9B	Precasting and placing in position 125mm dia bollards 600mm high of required shape, including providing M.S.Pipe sleeve 50mm dia 300mm long in the bollard and M.S.pipes 40mm dia and 450 mm long with 150x150x6mm M.S.plate welded at bottom and embedded 150 mm in cement concrete 1:3:6 (1 cement :3 manufactured sand from recycled concrete aggregate (RCA) : 6 graded stone aggregate 20 mm nominal size (Recycled Aggregate (RA)), including necessary excavation of size 250x250x450 mm deep for the same in bitumen / concrete pavement at specified spacing.	each	1019.47
4.10	Providing and laying damp - proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size)	sqm	498.40
4.10A	Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand (zone-III) including manufactured sand derived from Recycled Concrete Aggregate (RCA) upto 25% : 4 graded stone aggregate 12.5mm nominal size including (Recycled Concrete Aggregate (RCA) upto 25%)	sqm	486.26
4.11	Providing and laying damp-proof course 50mm thick with cement concrete 1:2:4 (1 cement :2 fine aggregate : 4 graded stone aggregate 20mm nominal size)	sqm	601.71
4.11A	Providing and laying damp-proof course 50mm thick with cement concrete 1:2:4 (1 cement :2 coarse sand including manufactured sand recycled concrete aggregate (RCA) upto 25% : 4 graded stone aggregate 20mm nominal size (recycled concrete aggregate (RCA) upto 25%)	sqm	585.63
4.12	Extra for providing and mixing water proofing material in cement concrete work in doses by weight of cement as per manufacture's specification.	per bag	17.47
4.13	Providing & applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.7 kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in	sqm	176.54

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	kerosene oil.		
4.14	Extra for concrete work in superstructure above floor V level for each four floors of part thereof by mechanical means	cum	880.26
4.15	Extra for laying concrete in or under water and /or liquid mud including cost of pumping or bailing out water and removing slush etc. complete	cum per metre depth	1293.08
4.16	Extra for laying concrete in or under foul positions	cum	551.12
4.17	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 fine aggregate : 6 graded stone aggregate 20mm nominal size) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine aggregate, including necessary excavation, levelling and dressing & finishing the top smooth.	sqm	899.10
4.17A	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 manufactured sand from recycled concrete aggregate (RCA) : 6 graded stone aggregate 20mm nominal size recycled concrete aggregate (RCA) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine aggregate, including necessary excavation, levelling and dressing & finishing the top smooth.	sqm	831.59
4.17B	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 manufactured sand from recycled concrete aggregate (RCA) : 6 graded stone aggregate 20mm nominal size recycled concrete aggregate (RA) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine aggregate, including necessary excavation, levelling and dressing & finishing the top smooth.	sqm	793.01
4.18	Extra for addition of synthetic polyester triangular fibre of length 12mm , effective diameter 10-40 microns and specific gravity of 1.34 to 1.40 in cement concrete /RCC/ flooring / water retaining structures by using 125grams of synthetic polyester triangular fibre for 50kgs cement used as per direction of Engineer-in-charges of Engineer-in-charge.	per bag	88.92

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
4.20.1.1	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate , Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS:9103 to accelerate / retard setting of concrete , to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works upto plinth level - concrete of M10 grade with minimum cement content of 220kg /cum (Note:Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)	cum	10122.84
4.20.1.2	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate , Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS:9103 to accelerate / retard setting of concrete , to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works upto plinth level - concrete of M15 grade with minimum cement content of 240kg /cum (Note:Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)	cum	10303.22
4.20.1.3	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate , Portland Pozzolana / Ordinary Portland / Portland Slag cement,, admixtures in recommended proportions as per IS:9103 to accelerate / retard setting of concrete , to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works upto plinth level - concrete of M 20 grade with minimum cement content of	cum	10573.85

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	270kg /cum (Note:Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)		
4.20.1.4	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate , Portland Pozzolana / Ordinary Portland / Portland Slag cement,t, admixtures in recommended proportions as per IS:9103 to accelerate / retard setting of concrete , to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works upto plinth level - concrete of M 25 grade with minimum cement content of 300 kg /cum (Note:Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)	cum	10844.46
4.20.2.1	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate , Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS:9103 to accelerate / retard setting of concrete , to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works above plinth level - concrete of M 10 grade with minimum cement content of 220 kg /cum (Note:Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)	cum	10307.78
4.20.2.2	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate , Portland	cum	10488.17

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS:9103 to accelerate / retard setting of concrete , to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works above plinth level - concrete of M 15 grade with minimum cement content of 240 kg /cum (Note:Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)		
4.20.2.3	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate , Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS:9103 to accelerate / retard setting of concrete , to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works above plinth level - concrete of M 20 grade with minimum cement content of 270 kg /cum (Note:Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)	cum	10758.80
4.20.2.4	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate , Portland Pozzolana / Ordinary Portland / Portland Slag cement,, admixtures in recommended proportions as per IS:9103 to accelerate / retard setting of concrete , to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works above plinth level - concrete of M 25 grade with minimum cement content of 300 kg /cum (Note:Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more	cum	11029.40

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)		
4.20A.1.1	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate and recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate within the permissible utilization, Portland Pozzolana / Ordinary Portland / Portland Slag cement,, admixtures in recommended proportions as per IS:9103 to accelerate/ retard setting of concrete to improve durability and workability without impacting strength; including pumping of concrete to site of laying, curing, carriage of all leads: but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works upto plinth level - concrete of M10 grade with minimum cement content of 220 kg / cum (Note: The permissible utilization of recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate is 100% each) - (Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)	cum	8825.47
4.20A.1.2	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate and recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate within the permissible utilization, Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS:9103 to accelerate/ retard setting of concrete to improve durability and workability without impacting strength; including pumping of concrete to site of laying, curing, carriage of all leads: but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works upto plinth level - concrete of M15 grade with minimum cement content of 240 kg / cum (Note: The permissible utilization of recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate is 25% each) - (Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)	cum	10000.70

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
4.20A.1.3	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate and recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate within the permissible utilization, Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS:9103 to accelerate/ retard setting of concrete to improve durability and workability without impacting strength; including pumping of concrete to site of laying, curing, carriage of all leads: but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works upto plinth level - concrete of M20 grade with minimum cement content of 270 kg / cum (Note: The permissible utilization of recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate is 25% each) - (Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)	cum	10271.31
4.20A.1.4	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate and recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate within the permissible utilization, Portland Pozzolana / Ordinary Portland / Portland Slag cement,, admixtures in recommended proportions as per IS:9103 to accelerate/ retard setting of concrete to improve durability and workability without impacting strength; including pumping of concrete to site of laying, curing, carriage of all leads: but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works upto plinth level - concrete of M25 grade with minimum cement content of 300 kg / cum (Note: The permissible utilization of recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate is 25% each) - (Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)	cum	10541.93
4.20A.2.1	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work;	cum	9010.42

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	using coarse aggregate and fine aggregate and recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate within the permissible utilization, Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS:9103 to accelerate/ retard setting of concrete to improve durability and workability without impacting strength; including pumping of concrete to site of laying, curing, carriage of all leads: but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works above plinth level and upto floor V level - concrete of M10 grade with minimum cement content of 220 kg / cum (Note: The permissible utilization of recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate is 100% each) - (Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)		
4.20A.2.2	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate and recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate within the permissible utilization, Portland Pozzolana / Ordinary Portland / Portland Slag cement,, admixtures in recommended proportions as per IS:9103 to accelerate/ retard setting of concrete to improve durability and workability without impacting strength; including pumping of concrete to site of laying, curing, carriage of all leads: but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works above plinth level and upto floor V level- concrete of M15 grade with minimum cement content of 240 kg / cum (Note: The permissible utilization of recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate is 25% each) - (Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)	cum	10185.65
4.20A.2.3	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate and recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate within the permissible utilization, Portland	cum	10456.26

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS:9103 to accelerate/ retard setting of concrete to improve durability and workability without impacting strength; including pumping of concrete to site of laying, curing, carriage of all leads: but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works above plinth level and upto floor V level- concrete of M20 grade with minimum cement content of 270 kg / cum (Note: The permissible utilization of recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate is 25% each) - (Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)		
4.20A.2.4	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate and recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate within the permissible utilization, Portland Pozzolana / Ordinary Portland / Portland Slag cement,, admixtures in recommended proportions as per IS:9103 to accelerate/ retard setting of concrete to improve durability and workability without impacting strength; including pumping of concrete to site of laying, curing, carriage of all leads: but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works above plinth level upto floor V level - concrete of M25 grade with minimum cement content of 300 kg / cum (Note: The permissible utilization of recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate is 25% each) - (Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)	cum	10726.86

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
5.1.2	Providing and laying in position specified grade of reinforced cement concrete , excluding the cost of centering , shuttering , finishing and reinforcement - All work upto plinth level 1:1.5:3 (1cement : 1.5 fine aggregate : 3 graded stone aggregate 20 mm nominal size)	cum	11083.34
5.1.2A	Providing and laying in position specified grade of reinforced cement concrete , excluding the cost of centering , shuttering , finishing and reinforcement - All work upto plinth level 1:1.5:3 (1cement : 1.5 coarse sand including manufactured sand from recycled concrete aggregate (RCA) upto 20% : 3 graded stone aggregate 20 mm nominal size of recycled concrete aggregate (RCA) upto 20%)	cum	10837.77
5.1.3	Providing and laying in position specified grade of reinforced cement concrete , excluding the cost of centering , shuttering , finishing and reinforcement - All work upto plinth level 1:2:4 (1cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size)	cum	10548.64
5.1.3A	Providing and laying in position specified grade of reinforced cement concrete , excluding the cost of centering , shuttering , finishing and reinforcement - All work upto plinth level 1:2:4 (1cement : 2 coarse sand including manufactured sand from recycled concrete aggregate (RCA) upto 20% : 4 graded stone aggregate 20 mm nominal size of recycled concrete aggregate (RCA) upto 20%)	cum	10301.12
5.2.2	Reinforced cement concrete work in walls (any thickness) , including attached pilasters, buttresses , plinth and sting courses , fillets , columns , pillars , piers , abutments , posts and struts etc. upto floor five level excluding cost of centering , shuttering , finishing and reinforcement - 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20mm nominal size)	cum	13168.79
5.2.2A	Reinforced cement concrete work in walls (any thickness) , including attached pilasters, buttresses , plinth and sting courses , fillets , columns , pillars , piers , abutments , posts and struts etc. upto floor five level excluding cost of centering , shuttering , finishing and reinforcement - 1:1.5:3 (1 cement : 1.5 coarse sand including manufactured sand from recycled concrete aggregate (RCA) upto 20% : 3 graded stone aggregate 20mm nominal size including recycled concrete aggregate (RCA) upto 20%)	cum	12923.20

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
5.3	Reinforced cement concrete work in beams, suspended floors , roofs having slope up to 15degree landings , balconies , shelves , chajjas , lintels , bands , plain window sills , staircases and spiral stair cases above plinth level up to floor five level excluding the cost of centering ,shuttering, finishing and reinforcement , with 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20mm nominal size)	cum	14044.91
5.3A	Reinforced cement concrete work in beams, suspended floors , roofs having slope up to 15degree landings , balconies , shelves , chajjas , lintels , bands , plain window sills , staircases and spiral stair cases above plinth level up to floor five level excluding the cost of centering ,shuttering, finishing and reinforcement , with 1:1.5:3 (1 cement : 1.5 coarse sand including manufactured sand from recycled concrete aggregate (RCA) upto 20% : 3 graded stone aggregate 20mm nominal sizeincluding recycled concrete aggregate (RCA) upto 20%)	cum	13799.35
5.4	Providing and laying reinforced cement concrete in kerbs , steps and the like at near ground level excluding the cost of centering , shuttering , finishing and reinforcement with 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20 mm nominal size)	cum	10816.87
5.4A	Providing and laying reinforced cement concrete in kerbs , steps and the like at near ground level excluding the cost of centering , shuttering , finishing and reinforcement with 1:1.5:3 (1 cement : 1.5 coarse sand including manufactured sand from recycled concrete (RCA) upto 20% : 3 graded stone aggregate 20 mm nominal size including recycled concrete aggregate (RCA) upto 20%)	cum	10785.25
5.5	Reinforced cement concrete work in arches , archribs , domes , vaults , shells , folded plate and roofs having slope more than 15 degree upto floor five level excluding the cost of centering , shuttering , finishing and reinforcement with 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20mm nominal size)	cum	14858.20
5.5A	Reinforced cement concrete work in arches , archribs , domes , vaults , shells , folded plate and roofs having slope more than 15 degree upto floor five level excluding the cost of centering , shuttering , finishing and reinforcement with 1:1.5:3 (1 cement : 1.5 coarse sand including manufactured sand from recycled	cum	14612.63

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	concrete aggregate (RCA) upto 20% : 3 graded stone aggregate 20mm nominal size including recycled concrete aggregate (RCA) upto 20%)		
5.6	Reinforced cement concrete work in chimneys , shafts , upto floor five level excluding the cost of centering , shuttering , finishing and reinforcement with 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20mm nominal size)	cum	13490.59
5.6A	Reinforced cement concrete work in chimneys , shafts , upto floor five level excluding the cost of centering , shuttering , finishing and reinforcement with 1:1.5:3 (1 cement : 1.5 coarse sand including manufactured sand from recycled concrete aggregate (RCA) upto 20% : 3 graded stone aggregate 20mm nominal size recycled concrete aggregate (RCA) upto 20%)	cum	13245.00
5.7	Reinforced cement concrete work in well - steining excluding the cost of centering , shuttering , finishing and reinforcement , with 1:1.5:3 (1cement : 1.5 fine aggregate : 3 graded stone aggregate 20 mm nominal size)	cum	10348.82
5.7A	Reinforced cement concrete work in well - steining excluding the cost of centering , shuttering , finishing and reinforcement , with 1:1.5:3 (1cement : 1.5 coarse sand including manufactured sand from recycled concrete aggregate (RCA) upto 20% : 3 graded stone aggregate 20 mm nominal size including recycled concrete aggregate (RCA) upto 20%)	cum	10103.27
5.8	Reinforced cement concrete work in vertical and horizontal fins individually or forming box louvers , facias and eaves boards above plinth level upto floor five level excluding the cost of centering , shuttering , finishing and reinforcement , with 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20 mm nominal size)	cum	13909.77
5.8A	Reinforced cement concrete work in vertical and horizontal fins individually or forming box louvers , facias and eaves boards above plinth level upto floor five level excluding the cost of centering , shuttering , finishing and reinforcement , with 1:1.5:3 (1 cement : 1.5 coarse sand including manufactured sand from recycled concrete aggregate (RCA) upto 20% : 3 graded stone aggregate 20 mm nominal size including recycled concrete aggregate (RCA) upto 20%)	cum	13664.19

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
5.9.1	Centering and shuttering including strutting , propping etc and removal of form for - foundations, footings, bases of columns etc for mass concrete	sqm	462.52
5.9.2	Centering and shuttering including strutting , propping etc and removal of form for - Walls (any thickness) including attached pilasters , butteresses , plinth and string courses etc.	sqm	1010.17
5.9.3	Centering and shuttering including strutting , propping etc and removal of form for - Suspended floors , roofs , landings , balconies and access platform	sqm	1069.86
5.9.4	Centering and shuttering including strutting , propping etc and removal of form for - Shelves (cast in situ)	sqm	1069.86
5.9.5	Centering and shuttering including strutting , propping etc and removal of form for - Lintels , beams , plinth beams , girders , bressumers and catilevers	sqm	836.50
5.9.6	Centering and shuttering including strutting , propping etc and removal of form for - Columns , Pillars , Piers , Abutments , Posts and Struts	sqm	1110.29
5.9.7	Centering and shuttering including strutting , propping etc and removal of form for - Stairs , (excluding landings) except spiral -staircases	sqm	862.81
5.9.8	Centering and shuttering including strutting , propping etc and removal of form for - Spiral staircases (including landing)	sqm	932.50
5.9.9	Centering and shuttering including strutting , propping etc and removal of form for - Arches , domes, vaults upto 6m span	sqm	2401.91
5.9.10	Centering and shuttering including strutting , propping etc and removal of form for - Extra for arches , domes , vaults exceeding 6 m span	sqm	490.98
5.9.11	Centering and shuttering including strutting , propping etc and removal of form for - Chimneys and shafts	sqm	964.72
5.9.12	Centering and shuttering including strutting , propping etc and removal of form for - Well steining	sqm	199.70

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
5.9.13	Centering and shuttering including strutting , propping etc and removal of form for - Vertical and horizontal fins individually or forming box louvers band, facias and eaves boards	sqm	1504.71
5.9.15	Centering and shuttering including strutting , propping etc and removal of form for - Small lintels not exceeding 1.5 m clear span , moulding as in cornices , window sills , string courses , bands , copings , bed plates , anchor blocks and the like	sqm	462.54
5.9.16.1	Centering and shuttering including strutting , propping etc and removal of form for - Edges of slabs and breaks in floors and walls - under 20 cm wide	metre	217.69
5.9.16.2	Centering and shuttering including strutting , propping etc and removal of form for - Edges of slabs and breaks in floors and walls - above 20 cm wide	sqm	906.70
5.9.17	Centering and shuttering including strutting , propping etc and removal of form for - Cornices and mouldings	sqm	855.63
5.9.18	Centering and shuttering including strutting , propping etc and removal of form for - Small surfaces such as cantilever ends , brackets and ends of steps , caps and bases to pilasters and columns and the like	sqm	1094.45
5.9.19	Centering and shuttering including strutting , propping etc and removal of form for -Weather shade , Chajjas, corbels etc., including edges	sqm	1073.88
5.9.20	Centering and shuttering including strutting , propping etc and removal of form for - Suspended floors , roofs , landings, balconies and access platform with water proof ply 12mm thick	sqm	1227.80
5.9.21	Centering and shuttering including strutting , propping etc and removal of form for - Lintels , beams , plinth beams , girders, bressumers and cantilevers with water proof ply 12 mm thick	sqm	1001.65
5.10.1	Providing and fixing tie bolt , spring coil and plastic cone in wall shuttering complete as per the direction of Engineer-in-charge - 12 mm dia & 100 mm length	set	222.17
5.10.2	Providing and fixing tie bolt , spring coil and plastic cone in wall shuttering complete as per the direction of Engineer-in-	sets	245.07

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	charge- 12 mm dia & 150 mm length		
5.10.3	Providing and fixing tie bolt , spring coil and plastic cone in wall shuttering complete as per the direction of Engineer-in-charge - 20 mm dia & 150 mm length	sets	269.83
5.10.4	Providing and fixing tie bolt , spring coil and plastic cone in wall shuttering complete as per the direction of Engineer-in-charge-20 mm dia & 225 mm length	sets	285.62
5.11.1	Extra for additional height in centering , shuttering where ever required width adequate bracing , propping etc. including cost of de - shuttering and decentering at all levels , over a height of 3.5m, for every additional height of 1metre or part thereof (plan area to be measured) - Suspended floors, roofs, landing , beams and balconies (Plan area to be measured)	sqm	455.10
5.12	Providing , hoisting and fixing above plinth level upto floor five level precast reinforced cement concrete work in string courses, bands, copings, bed plates, anchor blocks, plain window sills and the like, including the cost of required centering, shuttering but excluding cost of reinforcement , with 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20mm nominal size)	cum	12837.99
5.12A	Providing , hoisting and fixing above plinth level upto floor five level precast reinforced cement concrete work in string courses, bands, copings, bed plates, anchor blocks, plain window sills and the like, including the cost of required centering, shuttering but excluding cost of reinforcement , with 1:1.5:3 (1 cement : 1.5 coarse sand including manufactured sand from recycled concrete aggregate (RCA) upto 20% : 3 graded stone aggregate 20mm nominal size recycled concrete aggregate (RCA) upto 20%)	cum	12840.95
5.13	Providing , hoisting and fixing upto floor five level precast reinforced cement concrete in small lintels not exceeding 1.5 m clear span upto floor five level , including the cost of required centering , shuttering but excluding the cost of reinforcement , with 1:1.5:3 (1cement : 1.5 fine aggregate : 3 graded stone aggregate 20 mm nominal size)	cum	17312.22
5.13A	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in small lintels not exceeding 1.5m	cum	17059.44

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	clear span up to floor five level, including the cost of required centering, shuttering but excluding the cost of reinforcement, with 1:1.5:3 (1 cement :1.5 coarse sand including manufactured sand from Recycled concrete aggregate (RCA) upto 20%: 3 graded stone aggregate 20 mm nominal size including Recycled Concrete Aggregate (RCA) upto 20%)		
5.14	Providing , hoisting and fixing above plinth level to floor five level precast reinforced cement concrete in mouldings as in cornices , windows sills etc. including setting in cement mortar 1:3 (1 cement : 3 fine aggregate) cost of required centering , shuttering but excluding the cost of reinforcement, with 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20mm nominal size)	cum	21746.37
5.14A	Providing, hoisting and fixing above plinth level up to floor five level precast reinforced cement concrete in mouldings as in cornices, windows sills etc. including setting in cement mortar 1:3 (1 cement : 3 coarse sand) cost of required centering, shuttering but excluding the cost of reinforcement, with 1:1.5:3 (1 cement :1.5 coarse sand including manufactured sand from Recycled concrete aggregate (RCA) upto 20% : 3 graded stone aggregate 20 mm nominal size including Recycled concrete aggregate (RCA) upto 20%)	cum	21714.73
5.15	Providing , transporting, hoisting and fixing above plinth level upto floor five level precast reinforced cement concrete in lintels, beams, and bressumers including setting in cement mortar 1:3 (1 cement : 3 fine aggregate) , cost of required centering and shuttering but excluding the cost of reinforcement with 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20 mm nominal size)	cum	16459.46
5.15A	Providing, transporting, hoisting and fixing above plinth level up to floor five level precast reinforced cement concrete in lintels, beams and bressumers including setting in cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centering and shuttering but excluding the cost of reinforcement with, 1:1.5:3 (1 cement : 1.5 coarse sand including manufactured sand from Recycled Concrete Aggregate (RCA) upto 20% : 3 graded stone aggregate 20 mm nominal size including Recycled Concrete Aggregate (RCA) upto 20%).	cum	16427.85
5.16	Providing ,transporting, hoisting and fixing upto floor five	cum	23286.48

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	level precast reinforced cement concrete in shelves including setting in cement mortar 1:3 (1 cement : 3 fine aggregate) , cost of required centering , shuttering and finishing with neat cement punning on exposed surfaces but excluding the cost of reinforcement , with 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20 mm nominal size)		
5.16A	Providing, transporting, hoisting and fixing above plinth level up to floor five level precast reinforced cement concrete in shelevs including setting in cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centering and shuttering and finishing with neat cement punny on exposed surfaces but excluding the cost of reinforcement with, 1:1.5:3 (1 cement : 1.5 coarse sand incuding manufactured sand from Recycled Concrete Aggregate (RCA) upto 20% : 3 graded stone aggregate 20 mm nominal size including Recycled Concrete Aggregate (RCA) upto 20%).	cum	23254.81
5.17	Providing ,transporting, hoisting and fixing above plinth level upto floor five level precast reinforced cement concrete in vertical and horizontal fins individually or forming box louvers setting in cement mortar 1:2 (1 cement : 2 fine aggregate) , including the cost of required centering , shuttering but excluding the cost of reinforcement , with 1:1.5:3 (1cement : 1.5 fine aggregate : 3 graded stone aggregate 20mm nominal size)	cum	14462.68
5.17A	Providing, transporting, hoisting and fixing above plinth level up to floor five level precast reinforced cement concrete in vertical and horizontal fins individually or forming box louvers setting in cement mortar 1:2 (1 cement : 2 coarse sand),including the cost of required centering and shuttering but excluding the cost of reinforcement with, 1:1.5:3 (1 cement : 1.5 coarse sand incuding manufactured sand from Recycled Concrete Aggregate (RCA) upto 20% : 3 graded stone aggregate 20 mm nominal size including Recycled Concrete Aggregate (RCA) upto 20%).	cum	14431.07
5.18.1	Providing precast cement concrete jali 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 6mm nominal size) reinforced with 1.6 mm dia mild steel wire including centering and shuttering, roughening cleaning , fixing and finishing in cement mortar 1:3 (1 cement : 3 fine aggregate) etc. complete excluding plastering of the jambs, sills and soffits - 50mm thick	sqm	1985.97

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
5.18.2	Providing precast cement concrete jali 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 6mm nominal size) reinforced with 1.6 mm dia mild steel wire including centering and shuttering, roughening cleaning , fixing and finishing in cement mortar 1:3 (1 cement : 3 fine aggregate) etc. complete excluding plastering of the jambs, sills and soffits - 40 mm thick	sqm	1840.50
5.18.3	Providing precast cement concrete jali 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 6mm nominal size) reinforced with 1.6 mm dia mild steel wire including centering and shuttering, roughening cleaning , fixing and finishing in cement mortar 1:3 (1 cement : 3 fine aggregate) etc. complete excluding plastering of the jambs, sills and soffits - 25 mm thick	sqm	1685.28
5.19	Encasing rolled steel sections, in beams and columns, with cement concrete 1:1.5:3 (1 cement :1.5 fine aggregate : 3 graded stone aggregate 20 mm nominal size) including centering and shuttering complete but excluding cost of reinforcement	cum	19030.64
5.19A	Encasing rolled steel sections, in beams and columns, with cement concrete 1:1.5:3 (1 cement : 1.5 coarse sand incuding manufactured sand from Recycled Concrete Aggregate (RCA) upto 20%: 3 graded stone aggregate 20 mm nominal size Recycled Concrete Aggregate (RCA) upto 20%) including centering and shuttering complete but excluding cost of reinforcement.	cum	18998.96
5.20	Encasing rolled steel section in grillages with cement concrete 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20mm nominal size) , including centering and shuttering but excluding cost of expanded metal and hangers	cum	11772.87
5.20A	Encasing rolled steel section in grillages with cement concrete 1:1.5:3 (1 cement : 1.5 coarse sand incuding manufactured sand derived from Recycled Concrete Aggregate (RCA) upto 20% : 3 graded stone aggregate 20 mm nominal size Recycled Concrete Aggregate (RCA) upto 20%), including centering and shuttering but excluding cost of expanded metal and hangers.	cum	11741.26
5.21	Extra for providing and fixing expanded metal mesh of size 20x60 mm and strands 3.25 mm wide 1.6 mm thick weighing 3.64 kg per sqm for encasing of rolled steel sections in beams , columns and grillages excluding cost of hangers	sqm	790.92

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
5.22.1	Steel reinforcement for R.C.C.work including straightening , cutting , bending , placing in position and binding all complete upto plinth level - Mild steel and Medium Tensile steel bars	kg	128.91
5.22.2	Steel reinforcement for R.C.C.work including straightening , cutting , bending , placing in position and binding all complete upto plinth level - Hard drawn steel wire	kg	118.42
5.22.3	Steel reinforcement for R.C.C.work including straightening , cutting , bending , placing in position and binding all complete upto plinth level - Cold twisted bars	kg	128.91
5.22.4	Steel reinforcement for R.C.C.work including straightening , cutting , bending , placing in position and binding all complete upto plinth level - Hot rolled deformed bars	kg	128.91
5.22.5	Steel reinforcement for R.C.C.work including straightening , cutting , bending , placing in position and binding all complete upto plinth level - Hard drawn steel wire fabric	kg	157.59
5.22.6	Steel reinforcement for R.C.C.work including straightening , cutting , bending , placing in position and binding all complete upto plinth level - Thermo -Mechanically treated bars Fe - 500D or more	kg	128.91
5.22.8	Providing anticorrosive treatment to HYSD reinforcement with fusion bonded epoxy coating the rate includes cost of anticorrosive coating including cost of powder , sand blasting, cleaning , induction , heating , depreciation of machinery etc, wastage in cut length of bars , provision of wooden battens between rows of coated bars , cover to work bush pins / bar bending machines etc - for bars of 20mm to 32 mm diameter - conforming to IS 13620 -1993	tonne	16132.70
5.22.9	Providing anticorrosive treatment to HYSD reinforcement with fusion bonded epoxy coating the rate includes cost of anticorrosive coating including cost of powder , sand blasting, cleaning , induction , heating , depreciation of machinery etc, wastage in cut length of bars , provision of wooden battens between rows of coated bars , cover to work bush pins / bar bending machines etc - for bars of 8mm to 16 mm diameter - conforming to IS 13620 -1993	tonne	23302.79
5.22.10	Providing and placing M30 grade cover block for RCC work	no	2.85

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	all levels		
5.22A.1	Steel reinforcement for R.C.C.work including straightening , cutting , bending , placing in position and binding all complete above plinth level - Mild steel and Medium Tensile steel bars	kg	128.91
5.22A.2	Steel reinforcement for R.C.C.work including straightening , cutting , bending , placing in position and binding all complete above plinth level - Hard drawn steel wire	kg	118.42
5.22A.3	Steel reinforcement for R.C.C.work including straightening , cutting , bending , placing in position and binding all complete above plinth level - Cold twisted bars	kg	128.91
5.22A.4	Steel reinforcement for R.C.C.work including straightening , cutting , bending , placing in position and binding all complete above plinth level - Hot rolled deformed bars	kg	128.91
5.22A.5	Steel reinforcement for R.C.C.work including straightening , cutting , bending , placing in position and binding all complete above plinth level - Hard drawn steel wire fabric	kg	157.59
5.22A.6	Steel reinforcement for R.C.C.work including straightening , cutting , bending , placing in position and binding all complete above plinth level - Thermo - Mechanically Treated bars Fe - 500D or more	kg	128.91
5.22C.1	Steel reinforcement for R.C.C work ready to use "cut and bend" rebars of approved make from factory / workshop to construction site including placing in position and binding all complete above plinth level - Thermo- mechanically treated bars of grade Fe-500D or more	kg	117.40
5.23	Smooth finishing of the exposed surface of RCC work with 6mm thick cement mortar 1:3 (1 cement : 3 fine aggregate)	sqm	358.84
5.24	Extra for rendering smooth the top of suspended floors , landings and staircases (treads and risers) with cement mortar 1:2 (1cement : 2 fine aggregate) including a floating coat of neat cement and protecting the surface with a layer of 7.5 cm of earth laid over 15 mm of fine aggregate in case of suspended floor and bricks laid in mud mortar in case of landings and steps including subsequent removal and cleanig of the same	sqm	185.20

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
5.25	Providing and fixing in position copper plate as per design for expansion joints	kg	475.22
5.26	Providing and filling in position , blown bitumen in expansion joints	cum	84348.49
5.27	Providing and filling in position bitumen mix filler of proportion 80 kg of hot bitumen , 1 kg of cement and 0.25 cubic metre of fine aggregate for expansion joints	cum	34362.89
5.28	Providing and fixing in position 12 mm thick bitumen impregnated fibre board conforming to IS : 1838 , including cost of primer , sealing compound in expansion joints	per cm depth per 100 m	785.58
5.29.1.1	Providing and fixing sheet covering over expansion joints with iron screws as per design - non- asbestos 6mm thick fibre cement board, type-A, category-III as per IS : 14862 - 2000 - 150mm wide	metre	284.07
5.29.1.2	Providing and fixing sheet covering over expansion joints with iron screws as per design - non- asbestos fibre cement board 6mm thick as per IS : 14862 - 200 mm wide	metre	382.32
5.29.2.1	Providing and fixing sheet covering over expansion joints with iron screws as per design - Aluminium fluted strips 3.15mm thick - 150mm wide	metre	673.74
5.29.2.2	Providing and fixing sheet covering over expansion joints with iron screws as per design - Aluminium fluted strips 3.15mm thick - 200 mm wide	metre	849.12
5.29.3.1	Providing and fixing sheet covering over expansion joints with iron screws as per design - cement bonded wood particle board 6mm thick as per IS : 14276 - 150mm wide	metre	301.22
5.29.3.2	Providing and fixing sheet covering over expansion joints with iron screws as per design - cement bonded wood particle board 6mm thick as per IS : 14276 - 200 mm wide	metre	405.33
5.30	Add for plaster drip course / groove in plastered surface or moulding to R.C.C. projections	metre	90.52

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
5.31	Extra for laying reinforced cement concrete in or under water and / or liquid mud including cost of pumping or bailing out water and removing slush etc., complete. Note:- The quantity will be calculated by multiplying the depth measured from the subsoil water level upto the centre of gravity of the RCC under subsoil water with the quantity of RCC in cubic metre executed under subsoil water. The depth of centre of gravity shall be reckoned correct to 0.1m . (0.05 m or more shall be taken as 0.1 and less than 0.05 m ignored) . No extra payment shall be made for placing reinforcement or centering & shuttering under subsoil water conditions	cum per metre depth	1293.08
5.32	Extra for laying reinforced cement concrete in or under foul positions	cum	551.12
5.33.1.1	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work: using coarse aggregate and fine aggregate, Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of Engineer-in-charge.- all works upto plinth level - Concrete of M25 grade with minimum cement content of 330 kg / cum - Note: Extra cement upto 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.	cum	10919.47
5.33.1.2	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work: using coarse aggregate and fine aggregate, Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of Engineer-in-charge.- all works upto plinth level - Concrete of M30 grade with minimum cement content of 350 kg / cum - Note: Extra cement upto 10% of the minimum specified cement content in design mix shall	cum	11099.86

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.		
5.33.1.3	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work: using coarse aggregate and fine aggregate, Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of Engineer-in-charge.- all works upto plinth level - Concrete of M35 grade with minimum cement content of 370 kg / cum - Note: Extra cement upto 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.	cum	11280.27
5.33.1.4	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work: using coarse aggregate and fine aggregate, Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of Engineer-in-charge.- all works upto plinth level - Concrete of M40 grade with minimum cement content of 390 kg / cum - Note: Extra cement upto 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.	cum	11460.69
5.33.1.5	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work: using coarse aggregate and fine aggregate, Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to	cum	11641.10

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of Engineer-in-charge.- all works upto plinth level - Concrete of M50 grade with minimum cement content of 410 kg / cum - Note: Extra cement upto 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.		
5.33.2.1	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work: using coarse aggregate and fine aggregate, Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of Engineer-in-charge.- all works above plinth level upto floor V level- Concrete of M25 grade with minimum cement content of 330 kg / cum - Note: Extra cement upto 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.	cum	11104.41
5.33.2.2	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work: using coarse aggregate and fine aggregate, Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of Engineer-in-charge.- all works above plinth level upto floor V level- Concrete of M30 grade with minimum cement content of 350 kg / cum - Note: Extra cement upto 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the	cum	11284.81

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.		
5.33.2.3	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work: using coarse aggregate and fine aggregate, Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of Engineer-in-charge.- all works above plinth level upto floor V level- Concrete of M35 grade with minimum cement content of 370 kg / cum - Note: Extra cement upto 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.	cum	11465.22
5.33.2.4	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work: using coarse aggregate and fine aggregate, Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of Engineer-in-charge.- all works above plinth level upto floor V level- Concrete of M40 grade with minimum cement content of 390 kg / cum - Note: Extra cement upto 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.	cum	11645.63
5.33.2.5	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work: using coarse aggregate and fine aggregate, Portland Pozzolana / Ordinary Portland / Portland Slag cement,	cum	11826.05

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of Engineer-in-charge.- all works above plinth level upto floor V level- Concrete of M50 grade with minimum cement content of 410 kg / cum - Note: Extra cement upto 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.		
5.33A.1.1	Providing and laying in position ready mixed or site batched design mix cement concrete for rein forced cement concrete work; using coarse aggregate and fine aggregate and using recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate within permissible utilization of 20% each, Portland Pozzolana / Ordinary Portland/ Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete , to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of Engineer-in-charge - All works upto plinth level - Concrete of M25 grade with minimum cement content of 330 kg / cum (Note: Extra cement upto 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)	cum	10673.90
5.33A.2.1	Providing and laying in position ready mixed or site batched design mix cement concrete for rein forced cement concrete work; using coarse aggregate and fine aggregate and using recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate within permissible utilization of 20% each, Portland Pozzolana / Ordinary Portland/ Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete , to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of Engineer-in-charge - All	cum	10858.84

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	works above plinth level upto floor V level - Concrete of M25 grade with minimum cement content of 330 kg / cum (Note: Extra cement upto 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)		
5.35	Add for using extra cement in the items of design mix over and above the specified cement content therein	quintal	855.80
5.36	Providing and placing in position precast reinforced cement concrete waffle units, square or rectangular as per design and shape for floors and roofs in 1:1 1/2 : 3 (1 cement : 1 1/2 fine aggregate : 3 graded stone aggregate 10mm nominal size) , including flush or deep ruled pointing at joints in cement mortar 1:2 (1 cement : 2 fine aggregate) , making necessary holes of required sizes for carrying through service lines etc., providing steel hooks for lifting etc, form work in precasting , handling , hoisting , centering and erection complete for all floor levels but excluding the cost of reinforcement	cum	39417.54
5.36A	Providing and placing in position precast reinforced cement concrete waffle units, square or rectangular as per design and shape for floors and roofs in 1:1.5:3 (1 cement;1.5 coarse sand including manufactured sand derived from recycled concrete aggregate (RCA) upto 20% :3 graded stone aggregate 10mm nominal size including recycled concrete aggregate (RCA) upto 20%, including flush or deep ruled pointing at joints in cement mortar 1:2 (1 cement :2 fine sand) , making necessary holes of required sizes for carrying through services lines etc., providing steel hooks for lifting etc, form work in precasting, handling,hoisting, centering and erection complete for all floor levels but excluding the cost of reinforcement	cum	54057.29
5.38	Extra for R.C.C / B.M.C / R.M.C work above floor V level for each four floors or part thereof	cum	184.94
5.39	Extra for carriage of RMC (Ready mix concrete) beyond the initial lead of 10 Km	cum per Km	71.13
5.40.1	Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work , using fly ash	cum	19157.00

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	and cement content as per approved design mix , and manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads , having continuous agitated mixer , manufactured as per mix design of specified grade for reinforced cement concrete work including pumping of R.M.C from transit mixer to site of laying , excluding the cost of centering . Shuttering , finishing and reinforcement , including cost of admixtures in recommended proportions as per IS:9103 to accelerate / retard setting of concrete, improve workability without impairing strength and durability Note:- (1) Cement content considered in this item is @ 330 kg /cum. Excess / less cement used as per design mix is payable / recoverable separately (2) Fly ash conforming to grade I of IS:3812 (part -1) only be used as part replacement of OPC as per IS: 456. Uniform blending with cement to be ensured in accordance with clause 5.2 and 5.2.1 of IS:456 -2000 in the items of BMC and RMC - All works upto plinth level		
5.40.2	Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work , using fly ash and cement content as per approved design mix , and manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads , having continuous agitated mixer , manufactured as per mix design of specified grade for reinforced cement concrete work including pumping of R.M.C from transit mixer to site of laying , excluding the cost of centering . Shuttering , finishing and reinforcement , including cost of admixtures in recommended proportions as per IS:9103 to accelerate / retard setting of concrete, improve workability without impairing strength and durability Note:- (1) Cement content considered in this item is @ 330 kg /cum. Excess / less cement used as per design mix is payable / recoverable separately (2) Fly ash conforming to grade I of IS:3812 (part -1) only be used as part replacement of OPC as per IS: 456. Uniform blending with cement to be ensured in accordance with clause 5.2 and 5.2.1 of IS:456 -2000 in the items of BMC and RMC - All works above plinth and upto floor five level	cum	21483.86
5.41.1	Supplying and applying pre tested and approved water based concrete curing compound to concrete / masonry surface , all as per manufacturer 's specification and direction of Engineer-in-charge - Non pigmented wet curing compound	sqm	92.47
5.42.1	Providing and fixing parallel threaded couplers conforming to	each	156.60

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	IS code on " Reinforcement Couplers for Mechanical Splices of Bars for Concrete Reinforcement - Specifications" , to reinforcement bars including threading , enlargement at connection by forging , protecting the prepared reinforcement bars and related operations as required to complete the works as per direction of Engineer-in-charge - Coupler for 16mm diameter reinforcement bar		
5.42.2	Providing and fixing parallel threaded couplers conforming to IS code on " Reinforcement Couplers for Mechanical Splices of Bars for Concrete Reinforcement - Specifications" , to reinforcement bars including threading , enlargement at connection by forging , protecting the prepared reinforcement bars and related operations as required to complete the works as per direction of Engineer-in-charge - Coupler for 20mm diameter reinforcement bar	each	213.58
5.42.3	Providing and fixing parallel threaded couplers conforming to IS code on " Reinforcement Couplers for Mechanical Splices of Bars for Concrete Reinforcement - Specifications" , to reinforcement bars including threading , enlargement at connection by forging , protecting the prepared reinforcement bars and related operations as required to complete the works as per direction of Engineer-in-charge- Coupler for 25mm diameter reinforcement bar	each	293.92
5.42.4	Providing and fixing parallel threaded couplers conforming to IS code on " Reinforcement Couplers for Mechanical Splices of Bars for Concrete Reinforcement - Specifications" , to reinforcement bars including threading , enlargement at connection by forging , protecting the prepared reinforcement bars and related operations as required to complete the works as per direction of Engineer-in-charge - Coupler for 28mm diameter reinforcement bar	each	402.35
5.42.5	Providing and fixing parallel threaded couplers conforming to IS code on " Reinforcement Couplers for Mechanical Splices of Bars for Concrete Reinforcement - Specifications" , to reinforcement bars including threading , enlargement at connection by forging , protecting the prepared reinforcement bars and related operations as required to complete the works as per direction of Engineer-in-charge - Coupler for 32mm diameter reinforcement bar	each	465.35
5.43.1	Providing and fixing in position Stainless steel grade 304	metre	1015.14

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	plate - 1.0 mm thick as per design for expansion joints - 200 mm wide		
5.43.2	Providing and fixing in position Stainless steel grade 304 plate - 1.0 mm thick as per design for expansion joints - 300 mm wide	metre	1425.99
5.44.1	Providing and fixing of expansion joint system related with floor location as per drawings . The joints system will be of extruded aluminium base members , self aligning / self centering arrangement and support plates etc. as per ASTM B221-02. The system shall be such that it provides floor to floor / floor to wall expansion control system for various vertical location in load application areas that accommodates multi directional seismic movement with out stress to it's components. System shall consist of metal profiles with an universal aluminium base member designed to accommdate various project conditions and finish floor treatments. The cover plate shall be designed of width and thickness required to satisfy projects movement and loading requirements and secured to base members by utilizing manufacturer's pre-engineered self - centering arrangement that freely rotates / moves in all directions. The self - centering arrangement shall exhibit circular sphere ends that lock and slide inside the corresponding aluminium extrusion cavity to allow freedom of movement and flexure in all directions including vertical displacement. Provision of Moisture Barrier Membrane in the Joint System to have watertight joint is mandatory requirement all as per the manufacturers design (Material shall confirm to ASTM 6063) - Floor joint of 100mm gap	metre	7063.03
5.44.2	Providing and fixing of expansion joint system related with floor location as per drawings . The joints system will be of extruded aluminium base members , self aligning / self centering arrangement and support plates etc. as per ASTM B221-02. The system shall be such that it provides floor to floor / floor to wall expansion control system for various vertical location in load application areas that accommodates multi directional seismic movement with out stress to it's components. System shall consist of metal profiles with a universal aluminium base member designed to accommdate various project conditions and finish floor treatments. The cover plate shall be designed of width and thickness required to satisfy projects movement and loading requirements and secured to base members by utilizing manufacturer's pre-engineered self - centering arrangement that freely rotates /	metre	8739.26

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	moves in all directions. The self - centering arrangement shall exhibit circular sphere ends that lock and slide inside the corresponding aluminium extrusion cavity to allow freedom of movement and flexure in all directions including vertical displacement. Provision of Moisture Barrier Membrane in the Joint System to have watertight joint is mandatory requirement all as per the manufacturers design (Material shall confirm to ASTM 6063) - Floor joint of 150mm gap		
5.44.3	Providing and fixing of expansion joint system related with floor location as per drawings . The joints system will be of extruded aluminium base members , self aligning / self centering arrangement and support plates etc. as per ASTM B221-02. The system shall be such that it provides floor to floor / floor to wall expansion control system for various vertical location in load application areas that accommodates multi directional seismic movement with out stress to it's components. System shall consist of metal profiles with a universal aluminium base member designed to accommdate various project conditions and finish floor treatments. The cover plate shall be designed of width and thickness required to satisfy projects movement and loading requirements and secured to base members by utilizing manufacturer's pre-engineered self - centering arrangement that freely rotates / moves in all directions. The self - centering arrangement shall exhibit circular sphere ends that lock and slide inside the corresponding aluminium extrusion cavity to allow freedom of movement and flexure in all directions including vertical displacement. Provision of Moisture Barrier Membrane in the Joint System to have watertight joint is mandatory requirement all as per the manufacturers design (Material shall confirm to ASTM 6063) - Floor joint of 200mm gap	metre	11207.88
5.45.1	Providing and fixing of expansion joints system related with wall joint (internal / external) location as per drawings. The joints shall be of extruded aluminium base members , self aligning / centering arrangement and support plates as per ASTM B221-02. The material shall be such that it provides an Expansion Joints System suitable for vertical wall to wall / wall to corner application , both new and existing construction in office Buildings & complexes with no slipping down tendency amongst the components of the Joint System. The Joint System shall utilize light weight aluminium profiles exhibiting minimal exposed aluminium surfaces mechanically snap locking the multicellular to faciliate movement. (Material shall confirm to ASTM 6063) - Wall Joint of 100mm gap	metre	5781.24

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
5.45.2	Providing and fixing of expansion joints system related with wall joint (internal / external) location as per drawings. The joints shall be of extruded aluminium base members , self aligning / centering arrangement and support plates as per ASTM B221-02. The material shall be such that it provides an Expansion Joints System suitable for vertical wall to wall / wall to corner application , both new and existing construction in office Buildings & complexes with no slipping down tendency amongst the components of the Joint System. The Joint System shall utilize light weight aluminium profiles exhibiting minimal exposed aluminium surfaces mechanically snap locking the multicellular to facilitate movement. (Material shall confirm to ASTM 6063) - Wall Joint of 150mm gap	metre	6578.27
5.45.3	Providing and fixing of expansion joints system related with wall joint (internal / external) location as per drawings. The joints shall be of extruded aluminium base members , self aligning / centering arrangement and support plates as per ASTM B221-02. The material shall be such that it provides an Expansion Joints System suitable for vertical wall to wall / wall to corner application , both new and existing construction in office Buildings & complexes with no slipping down tendency amongst the components of the Joint System. The Joint System shall utilize light weight aluminium profiles exhibiting minimal exposed aluminium surfaces mechanically snap locking the multicellular to facilitate movement. (Material shall confirm to ASTM 6063) - Wall Joint of 200mm gap	metre	7649.87
5.46.1	Providing and fixing of expansion joint system of approved make and manufactures for various roof locations as per approved drawings . The joints shall be extruded aluminium base members with, self aligning and self centering arrangement support plates as per ASTM B221-02. The system shall be such that it provides watertight roof to roof / roof to corner joint cover expansion control system that is capable of accommodating multidirectional seismic movement without stress to its components. System shall consist of metal profile that incorporates a universal aluminium base member designed to accommodate various project conditions and roof treatments . The cover plate shall be designed of width and thickness required to satisfy movement and loading requirements and secured to base members by utilizing manufacture's pre-engineered self- centering arrangement that freely rotates / moves in all directions. The Self centering arrangement shall exhibit circular sphere ends that lock and slide inside the corresponding aluminium extrusion cavity to allow freedom of movement and flexures in all directions including vertical	metre	6583.61

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	displacement . The joint system shall resists damages or deterioration from the impact of falling ice,exposure to UV , airborne contaminants and occasional foot traffic from maintenance personnel. Provision of Moisture Barrier Membrane in the Joint System to have water tight joint is mandatory requirement. Material shall confirm to ASTM 6063. - Roof joint of 100mm gap		
5.46.2	Providing and fixing of expansion joint system of approved make and manufactures for various roof locations as per approved drawings . The joints shall be extruded aluminium base members with, self aligning and self centering arrangement support plates as per ASTM B221-02. The system shall be such that it provides watertight roof to roof / roof to corner joint cover expansion control system that is capable of accommdating multidirectional seismic movement without stress to its components. System shall consist of metal profile that incorporates a universal aluminium base member designed to accommodate various project conditions and roof tratements . The cover plate shall be designed of width and thickness required to satisfy movement and loading requirements and secured to base members by utilizing manufacture's pre-engineered self- centering arrangement that freely rotates / moves in all directions. The Self centering arrangement shall exhibit cirucular sphere ends that lock and slide inside the corresponding aluminium extrusion cavity to allow freedom of movement and flexures in all directions including vertical displacement . The joint system shall resists damages or deterioration from the impact of falling ice,exposure to UV , airborne contaminants and occasional foot traffic from maintenance personnel. Provision of Moisture Barrier Membrane in the Joint System to have water tight joint is mandatory requirement. Material shall confirm to ASTM 6063. - Roof joint of 150 mm gap	metre	7426.17
5.46.3	Providing and fixing of expansion joint system of approved make and manufactures for various roof locations as per approved drawings . The joints shall be extruded aluminium base members with, self aligning and self centering arrangement support plates as per ASTM B221-02. The system shall be such that it provides watertight roof to roof / roof to corner joint cover expansion control system that is capable of accommdating multidirectional seismic movement without stress to its components. System shall consist of metal profile that incorporates a universal aluminium base member designed to accommodate various project conditions and roof tratements . The cover plate shall be designed of width and thickness	metre	8874.76

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	required to satisfy movement and loading requirements and secured to base members by utilizing manufacture's pre-engineered self- centering arrangement that freely rotates / moves in all directions. The Self centering arrangement shall exhibit circular sphere ends that lock and slide inside the corresponding aluminium extrusion cavity to allow freedom of movement and flexures in all directions including vertical displacement . The joint system shall resist damages or deterioration from the impact of falling ice, exposure to UV , airborne contaminants and occasional foot traffic from maintenance personnel. Provision of Moisture Barrier Membrane in the Joint System to have water tight joint is mandatory requirement. Material shall conform to ASTM 6063. - Roof joint of 200mm gap		
5.47.1	Providing and fixing in position factory made precast RCC M-40 door and window frame fixing with hold fast embedded in 1:3:6 concrete block, having excellent smooth finish as per IS: 6523 with reinforcement of 3 nos, 6mm dia main bars tied with 3mm M.S.stirrups placed @ 200 mm C/C and 6 numbers high strength polymer blocks of required size for fixing hinges including providing 6 no specially designed M.S.galvanised sleeves for accommodating 6mm dia fully threaded bolts for fixing hold fast on vertical members, providing suitable arrangement for receiving sliding door bolts and tower bolts etc all complete The frame shall be measured in running meter correct to two places of decimal. - Door frame 125 mm x 60 mm	metre	912.41
5.47.2	Providing and fixing in position factory made precast RCC M-40 door and window frame fixing with hold fast embedded in 1:3:6 concrete block, having excellent smooth finish as per IS: 6523 with reinforcement of 3 nos, 6mm dia main bars tied with 3mm M.S.stirrups placed @ 200 mm C/C and 6 numbers high strength polymer blocks of required size for fixing hinges including providing 6 no specially designed M.S.galvanised sleeves for accommodating 6mm dia fully threaded bolts for fixing hold fast on vertical members, providing suitable arrangement for receiving sliding door bolts and tower bolts etc all complete The frame shall be measured in running meter correct to two places of decimal. - Door frame 100 mm x 60 mm	metre	849.55
5.47.3	Providing and fixing in position factory made precast RCC M-40 door and window frame fixing with hold fast embedded in 1:3:6 concrete block, having excellent smooth finish as per	metre	817.05

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	IS: 6523 with reinforcement of 3 nos, 6mm dia main bars tied with 3mm M.S.stirrups placed @ 200 mm C/C and 6 numbers high strength polymer blocks of required size for fixing hinges including providing 6 no specially designed M.S.galvanised sleeves for accomodating 6mm dia fully threaded bolts for fixing hold fast on vertical members, providing suitable arrangement for receiving sliding door bolts and tower bolts etc all complete The frame shall be measured in running meter correct to two places of decimal. - Door frame 85 mm x 60 mm		
5.48.1	Providing and laying Reinforced cement concrete for construction of piers, abutments, portal frames, pier caps and bearing pedestals and seismic arresters over pier / abutment caps at all locations with specified grade using Ordinary Portland Cement (conforming to strength requirement of IS:8112) including the cost of steel centering and shuttering etc.complete including testing of materials etc. for casting pier & pier cap in one / two stage , necessary tools, plants, machinery and all related operations as required to complete the work as per drawings and Specifications with all leads, lifts and depths true to level and position but excluding the cost of providing reinforcement. Reinforcement shall be measured and paid separately. Note:- Cement content considered in this item is 480 kg /cum. Excess /less cement used as per design mix is payable / recoverable separately - Reinforced cement concrete M50 grade	cum	16238.12
5.48.2	Providing and laying Reinforced cement concrete for construction of piers, abutments, portal frames, pier caps and bearing pedestals and seismic arresters over pier / abutment caps at all locations with specified grade using Ordinary Portland Cement (conforming to strength requirement of IS:8112) including the cost of steel centering and shuttering etc.complete including testing of materials etc. for casting pier & pier cap in one / two stage , necessary tools, plants, machinery and all related operations as required to complete the work as per drawings and Specifications with all leads, lifts and depths true to level and position but excluding the cost of providing reinforcement. Reinforcement shall be measured and paid separately. Note:- Cement content considered in this item is 480 kg /cum. Excess /less cement used as per design mix is payable / recoverable separately - Reinforced cement concrete M60 grade	cum	17941.67
5.48.3	Providing and laying Reinforced cement concrete for construction of piers, abutments, portal frames, pier caps and	cum	963.07

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	bearing pedestals and seismic arresters over pier / abutment caps at all locations with specified grade using Ordinary Portland Cement (conforming to strength requirement of IS:8112) including the cost of steel centering and shuttering etc. complete including testing of materials etc. for casting pier & pier cap in one / two stage , necessary tools, plants, machinery and all related operations as required to complete the work as per drawings and Specifications with all leads, lifts and depths true to level and position but excluding the cost of providing reinforcement. Reinforcement shall be measured and paid separately. Note:- Cement content considered in this item is 480 kg /cum. Excess /less cement used as per design mix is payable / recoverable separately - Extra for using M50/M60 grade self - compacting Reinforced cement concrete		
5.49	Constructing cast-in situ RCC diaphragm wall by providing and laying machine batched, machine mixed, self compacting, ready mix reinforced cement concrete, tramie controlled, of M 30 grade using minimum 400 kg cement per cum of concrete including providing and mixing required admixtures in recommended proportions as per IS : 9103, as approved by the Engineer-in-charge, for achieving 150- 200mm slump, for diaphragm wall having thickness as per approved structural design not exceeding 600 mm, in pannels of required depth and lengths as per approved drawing, including constructing necessary guide walls as required and as specified including boring in all kinds of soils and rocks, including working in or under water and / or liquid mud, in foul conditions and pumping or bailing out of water and removing slush, including disposal of earth/ rock / slush etc. for all leads and all lifts, including preparing, providing and re-circulating bentonite slurry in the trench as and when required for all depths, including agitating bentonite slurry during trenching etc., providing and fixing stop ends or form tubes, upto the required depth of diaphragm wall including extracting the same after casting, including chipping off the bentonite adulterated concrete or unsound concrete up to the cut off level for obtaining the sound concrete, dressing undulations on the exposed face of diaphragm wall after excavation by chipping / chiseling etc. including filling the depression/ cavities with sound concrete etc. complete and as per direction of Engineer-in-charge, including providing recess for bearing plates and fixing insert boxes for inclined rock anchors etc. complete as per the specifications and approved design and as per direction of Engineer-in-charge, but excluding the cost of reinforcement and inserts. (rates include cost of all inputs of labour, material and T & P, cost of handling, lifting & placing in position the	cum	24714.86

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	reinforcement cage in the trench, including the additional cost of welding the reinforcement bars etc. involved in the work and all other incidental expenditure for completing the work as per direction of Engineer-in-charge), However, the actual area of the diaphragm wall, correct to two places of decimal, from design bottom level to the design cut off level (including portion anchored in the rock upto the design bottom level) only shall be measured for payment.		
5.50.1	Extra for adding 12mm fibre as fibre reinforcement in concrete as recommended by manufacturer specification including the cost of fibre.	1 cum of concrete	614.27
5.50.2	Providing and applying decentering chemical like setrelease on the surfaces of the formwork of any type of centering by diluting the concentrated chemical in the proportion recommended by manufacturer and it should be thoroughly stirred and mixed evently	sqm	23.41

6 . Brick Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
6.1.1	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 3.5 in foundation and plinth in - cement mortar 1:4 (1 cement : 4 fine aggregate)	cum	9223.09
6.1.2	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 3.5 in foundation and plinth in - cement mortar 1:6 (1 cement : 6 fine aggregate)	cum	8944.96
6.2.1	Brick work with common burnt clay modular bricks of class designation 7.5 in foundation and plinth in - cement mortar 1:4 (1 cement : 4 fine aggregate)	cum	8837.51
6.2.2	Brick work with common burnt clay modular bricks of class designation 7.5 in foundation and plinth in - cement mortar 1:6 (1 cement : 6 fine aggregate)	cum	8592.76
6.3.1	Brick work with common burnt clay machine moulded perforated bricks of class designation 12.5 conforming to IS : 2222 in superstructure above plinth level upto floor five level in cement mortar 1:6 (1 cement : 6 fine aggregate) - with F.P.S (non - modular) bricks	cum	11574.81
6.3.2	Brick work with common burnt clay machine moulded perforated bricks of class designation 12.5 conforming to IS : 2222 in superstructure above plinth level upto floor five level in cement mortar 1:6 (1 cement : 6 fine aggregate) - with modular bricks	cum	10857.65
6.4.1	Brick work with common burnt clay F.P.S (non modular) bricks of class designation 3.5 in superstructure above plinth level upto floor five level in all shapes and sizes in - cement mortar 1:4 (1 cement : 4 fine aggregate)	cum	11525.81
6.4.2	Brick work with common burnt clay F.P.S (non modular) bricks of class designation 3.5 in superstructure above plinth level upto floor five level in all shapes and sizes in - cement mortar 1:6 (1 cement : 6 fine aggregate)	cum	11247.66
6.5	Extra for brick work / AAC block masonry / Tile brick masonry in super structure above floor V level , for each four floors or part thereof by mechanical means	cum	166.09
6.6	Extra for forming cavity 5 cm to 11.5 cm wide in cavity walls	sqm	273.81

6 . Brick Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	with necessary weep and vent holes including use of cores and cost of providing and fixing bitumastic coated M.S. tiles 300 mm long of 25x3 mm section at not less than 3 ties per sqm as per approved design		
6.7	Providing half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 3.5 in cement mortar 1:3 (1 cement : 3 fine aggregate) in superstructure for closing cavity 5 to 7.5 cm wide in cavity wall complete with 10 cm / 11.4 cm wide bitumen felt type 3 grade 1	metre	368.34
6.8	Brick work 7 cm thick common burnt clay F.P.S. (non modular) brick of class designation 3.5 in cement mortar 1:3 (1cement : 3 fine aggregate) in superstructure above plinth level and upto floor five level	sqm	1058.08
6.9	Brick work in plain arches in superstructure above plinth level and upto floor five level including centering and shuttering complete for span upto 6 metres with common burnt clay F.P.S. (non modular) bricks of class designation 3.5 in cement mortar 1:3 (1 cement : 3 fine aggregate)	cum	17972.89
6.10	Brick work in gauged arches in superstruture above plinth level and upto floor five level in cement mortar 1:3 (1 cement : 3 fine aggregate) including centering and shuttering complete , for span upto 6 metre with common burnt clay F.P.S.(non modular) bricks of class designation 3.5	cum	22687.24
6.11	Extra for additional cost of centering for arches exceeding 6m span including all shuttering , bolting , wedging and removal (area of the soffit to be measured)	sqm	490.98
6.12.1	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 3.5 in foundations and plinth in - cement mortar 1:3 (1 cement :3 fine aggregate)	sqm	1158.41
6.12.2	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 3.5 in foundations and plinth in - cement mortar 1:4 (1 cement :4 fine aggregate)	sqm	1127.26
6.13.1	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 3.5 in superstructure above plinth level upto floor V level - cement mortar 1:3 (1 cement : 3 fine aggregate)	sqm	1415.81

6 . Brick Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
6.13.2	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 3.5 in superstructure above plinth level upto floor V level - cement mortar 1:4 (1 cement : 4 fine aggregate)	sqm	1384.66
6.14	Extra for half brick masonry in superstructure , above floor five level for every four floors or part thereof by mechanical means	sqm	14.71
6.15	Extra for providing and placing in position 2 nos 6mm dia M.S.bars at every third course of half brick masonry	sqm	125.44
6.16.1	Tile brick masonry with common burnt clay tile bricks of class designation 10 in foundation and plinth in - cement mortar 1:4 (1 cement : 4 fine aggregate)	cum	13205.30
6.16.2	Tile brick masonry with common burnt clay tile bricks of class designation 10 in foundation and plinth in - cement mortar 1:6 (1 cement : 6 fine aggregate)	cum	12760.27
6.17	Tile brick masonry with common burnt clay machine moulded tile bricks of class designation 12.5 conforming to IS: 2690(Part I) in foundation and plinth in cement mortar 1:6 (1 cement : 6 fine aggregate)	cum	13860.15
6.18	Tile brick masonry with common burnt clay F.P.S.(non modular) tile bricks of class designation 10 in superstructure above plinth level upto floor V level in cement mortar 1:6 (1 cement : 6 fine aggregate)	cum	15137.37
6.20	Tile brick masonry with common burnt clay F.P.S (non modular) tile bricks of class designation 10 in plain arch work in superstructure above plinth and upto floor five level in cement mortar 1.:4 (1 cement :4 fine aggregate) including centering and shuttering complete	cum	22026.99
6.21	Tile brick masonry with common burnt clay F.P.S (non modular) tile bricks of class designation 10 in gauged arch work in superstructure above plinth and upto floor five level in cement mortar 1.:4 (1 cement :4 fine aggregate) including centering and shuttering complete	cum	26752.39
6.22	Tile brick masonry work 5 cm thick with common burnt clay F.P.S.(non modular) tile bricks of class designation 10 in	sqm	1038.79

6 . Brick Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	cement mortar 1:3 (1 cement : 3 fine aggregate) in superstructure above plinth and upto floor five level		
6.23	Honey -comb brick work 10/11.4 cm thick with common burnt clay bricks of class designation 3.5 in super structure above plinth level upto floor V level with cement mortar 1:4 (1 cement : 4 fine aggregate)	sqm	854.09
6.24	Extra for laying brick work in or under water and / or liquid mud including cost of pumping or bailing out water and removing slush etc complete .- Note: The quantity will be calculated by multiplying the depth measured from sub-soil water level upto the centre of gravity of brick work under sub-soil water with the quantity of brick work in cum executed under the sub-soil water . The depth of centre of gravity shall be rounded correct to 0.1 m .0.05 m or more shall be taken as 0.1 m and less than 0.05 m ignored	cum per metre depth	1293.08
6.25	Extra for laying brick work in or under foul position	cum	551.12
6.26.1	Brick work with common burnt clay selected F.P.S (non - modular) bricks of class designation 3.5 in exposed brick work including making horizontal and vertical grooves 10 mm wide 12 mm deep complete in cement mortar 1:6 (1 cement : 6 fine aggregate) - from ground level upto plinth level	cum	9203.31
6.26.2	Brick work with common burnt clay selected F.P.S (non - modular) bricks of class designation 3.5 in exposed brick work including making horizontal and vertical grooves 10 mm wide 12 mm deep complete in cement mortar 1:6 (1 cement : 6 fine aggregate) - above plinth level and upto floor V level	cum	11629.79
6.27.1	Brick work with common burnt clay modular bricks of class designation 7.5 in exposed brick work including making horizontal and vertical grooves 10mm wide 12mm deep complete in cement mortar 1:6 (1 cement : 6 fine aggregate) - from ground level upto plinth level	cum	8631.58
6.27.2	Brick work with common burnt clay modular bricks of class designation 7.5 in exposed brick work including making horizontal and vertical grooves 10mm wide 12mm deep complete in cement mortar 1:6 (1 cement : 6 fine aggregate) - above plinth level and upto floor V level	cum	10934.30

6 . Brick Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
6.28.1	Brick work with common burnt clay machine moulded modular bricks of class designation 12.5 in exposed brick work including making horizontal and vertical grooves 10mm wide 12mm deep complete in cement mortar 1:6 (1 cement : 6 fine aggregate) - from ground level upto plinth level	cum	8237.38
6.28.2	Brick work with common burnt clay machine moulded modular bricks of class designation 12.5 in exposed brick work including making horizontal and vertical grooves 10mm wide 12mm deep complete in cement mortar 1:6 (1 cement : 6 fine aggregate) - above plinth level and upto floor V level	cum	10540.09
6.29.1	Brick work with common burnt clay machine moulded F.P.S.(non modular) bricks of class designation 12.5 in exposed brick work including making horizontal and vertical grooves 10mm wide 12mm deep complete in cement mortar 1:6 (1 cement : 6 fine aggregate) - from ground level upto plinth level	cum	9451.51
6.29.2	Brick work with common burnt clay machine moulded F.P.S.(non modular) bricks of class designation 12.5 in exposed brick work including making horizontal and vertical grooves 10mm wide 12mm deep complete in cement mortar 1:6 (1 cement : 6 fine aggregate) - above plinth level and upto floor V level	cum	11670.13
6.30.1	Brick work with common burnt clay machine moulded perforated F.P.S. (non modular bricks of class designation 12.5 conforming IS : 2222 in exposed brickwork including making horizontal and vertical grooves 10mm wide 12 mm deep complete in cement mortar 1:6 (1 cement : 6 fine aggregate) - from ground level upto plinth level	cum	9310.95
6.30.2	Brick work with common burnt clay machine moulded perforated F.P.S. (non modular bricks of class designation 12.5 conforming IS : 2222 in exposed brickwork including making horizontal and vertical grooves 10mm wide 12 mm deep complete in cement mortar 1:6 (1 cement : 6 fine aggregate) - above plinth level and upto floor V level	cum	11613.64
6.31.1	Brick work with common burnt clay machine moulded perforated modular bricks of class designation 12.5 conforming to IS:2222 in exposed brick work including making horizontal and vertical grooves 10 mm wide 12 mm deep complete in cement mortar 1:6 (1 cement :6 fine aggregate)- from ground	cum	8610.82

6 . Brick Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	level upto plinth level		
6.31.2	Brick work with common burnt clay machine moulded perforated modular bricks of class designation 12.5 conforming to IS:2222 in exposed brick work including making horizontal and vertical grooves 10 mm wide 12 mm deep complete in cement mortar 1:6 (1 cement :6 fine aggregate)- above plinth level and upto floor V level	cum	10913.51
6.32.1	Brick work with clay flyash F.P.S. (non modular) bricks of class designation 3.5 in superstructure above plinth level upto floor five level in - cement mortar 1:4 (1 cement : 4 fine aggregate)	cum	9970.05
6.32.2	Brick work with clay flyash F.P.S. (non modular) bricks of class designation 3.5 in superstructure above plinth level upto floor five level in - cement mortar 1:6 (1 cement : 6 fine aggregate)	cum	9691.92
6.34.1	Brick work with non modular fly ash bricks conforming to IS:12894 , class designation 10 average compressive strength in super struture above plinth level upto floor V level in - cement mortar 1:4 (1 cement : 4 fine aggregate)	cum	11190.21
6.34.2	Brick work with non modular fly ash lime bricks conforming to IS:12894 , class designation 10 average compressive strength in super struture above plinth level upto floor V level in - cement mortar 1:6 (1 cement : 6 fine aggregate)	cum	10945.46
6.35.1	Brick work with modular calcium silicate bricks machine moulded conforming to IS -4139 , class designation 10 average compressive strength in super structure above plinth level upto floor V level in - cement moratr 1:4 (1 cement : 4 fine aggregate)	cum	11709.84
6.35.2	Brick work with modular calcium silicate bricks machine moulded conforming to IS -4139 , class designation 10 average compressive strength in super structure above plinth level upto floor V level in - cement moratr 1:6 (1 cement : 6 fine aggregate)	cum	11465.09
6.36.1	Brick work with modualr extruded brunt fly ash clay sewer bricks (conforming to IS : 4885) in foundation and plinth - cement mortar 1:4 (1 cement : 4 fine aggregate)	cum	7651.40

6 . Brick Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
6.37	Brick work with modular extruded burnt fly ash clay sewer bricks (conforming to IS : 4885) in arches in foundation and plinth in cement mortar 1:3 (1 cement : 3 fine aggregate)	cum	14892.05
6.38	Providing and laying autoclaved aerated concrete (AAC) blocks masonry with 100mm /125 mm thick with grade - 1 AAC blocks of density 551 to 650 kg/cum conforming to IS:2185 (Part 3) in superstructure above plinth level upto floor five level in cement mortar 1:4 (1 cement : 4 fine aggregate) . The rate includes providing and placing in position 2 nos 6 mm dia M.S.bars at every third course of masonry work.	cum	12137.50
6.40	Providing and laying Gypsum panel partitions 100mm thick with water proof Gypsum panels of size 666 x500x100 mm, made of calcite phosphor Gypsum fixed with tongue and groove edges and jointed with bonding plaster as per manufacturers specifications in superstructure above plinth level upto floor V level. Gypsum blocks will have a minimum compressive strength of 9.3 kg /sq.cm	sqm	1384.52
6.41	Extra for gypsum panel partitions in superstructure above floor V level for every four floors or part thereof	sqm	214.12
6.44	Brick edging 7cm wide 11.4 cm deep to plinth protection with common burnt clay F.P.S. (non modular) bricks of class designation 3.5 including grouting with cement mortar 1:4 (1 cement : 4 fine aggregate)	metre	76.50
6.45.1	Half brick masonry with non modular fly ash lime Gypsum bricks (FALG bricks) of class designation 10, conforming to IS : 12894 , in super structure above plinth and upto floor V level - cement mortar 1:3 (1 cement : 3 fine aggregate)	sqm	1409.02
6.45.2	Half brick masonry with non modular fly ash lime Gypsum bricks (FALG bricks) of class designation 10, conforming to IS : 12894 , in super structure above plinth and upto floor V level - cement mortar 1:4 (1 cement : 4 fine aggregate)	sqm	1377.86
6.47	Providing and laying autoclaved aerated concrete blocks masonry with 150mm to 300mm thick grade -1 AAC blocks of density 551 to 650 kg /cum conforming to IS:2185 (Part 3) in super structure above plinth level up to floor V level with RCC band at sill level and lintel level with approved block laying polymer modified adhesive mortar all complete as per direction	cum	10285.18

6 . Brick Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>

of Engineer-in-charge.(The payment of RCC band and reinforcement shall be made for seperately).

7 . Stone Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
7.1.1	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 fine aggregate : 12 graded stone aggregate 20mm nominal size) upto plinth level with - cement mortar 1:6 (1 cement : 6 fine aggregate)	cum	7774.92
7.2.1	Random rubble masonry with hard stone in superstructure above plinth level and upto floor five level, including leveling up with cement concrete 1:6:12 (1 cement : 6 fine aggregate : 12 graded stone aggregate 20mm nominal size) at window sills, ceiling level and the like - cement mortar 1:6 (1 cement : 6 fine aggregate)	cum	10077.84
7.4.1	Extra for random rubble masonry with hard stone in - square or rectangular pillars	cum	1134.56
7.4.2	Extra for random rubble masonry with hard stone in - circular pillars	cum	2891.93
7.5	Extra for random rubble masonry with hard stone curved on plan for a mean radius not exceeding 6m	cum	1200.70
7.6.1	Coursed rubble masonry (first sort) with hard stone in foundation and plinth with - cement mortar 1:6 (1 cement : 6 fine aggregate)	cum	9510.88
7.7.1	Coursed rubble masonry (second sort) with hard stone in foundation and plinth with - cement mortar 1:6 (1 cement : 6 fine aggregate)	cum	8824.74
7.8.1	Coursed rubble masonry with hard stone (first or second sort) in superstructure above plinth level and upto floor five level - Masonry work (first sort), in cement mortar 1:6 (1 cement : 6 fine aggregate)	cum	11770.26
7.8.2	Coursed rubble masonry with hard stone (first or second sort) in superstructure above plinth level and upto floor five level - Masonry work (second sort), in cement mortar 1:6 (1 cement : 6 fine aggregate)	cum	11084.11
7.10.1	Extra for coursed rubble masonry with hard stone (first or second sort) - in square or rectangular pillars	cum	1258.75

7 . Stone Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
7.10.2	Extra for coursed rubble masonry with hard stone (first or second sort) - in circular pillars	cum	3288.58
7.11	Extra for coursed rubble masonry with hard stone (first or second sort) curved on plan for a mean radius not exceeding 6m	cum	1300.72
7.12.1.1	Stone work in plain ashlar in super structure upto floor five level in cement mortar 1:6 (1 cement : 6 fine aggregate) including pointing with cement mortar 1:2 (1 white cement :2 stone dust) with an admixture of pigment matching the stone shade - one face dressed - red sand stone.	cum	63546.00
7.12.1.2	Stone work in plain ashlar in super structure upto floor five level in cement mortar 1:6 (1 cement : 6 fine aggregate) including pointing with cement mortar 1:2 (1 white cement :2 stone dust) with an admixture of pigment matching the stone shade - one face dressed - white sand stone.	cum	64984.00
7.12.2.1	Stone work in plain ashlar in super structure upto floor five level in cement mortar 1:6 (1 cement : 6 fine aggregate) including pointing with cement mortar 1:2 (1 white cement :2 stone dust) with an admixture of pigment matching the stone shade - both faces dressed - red sand stone.	cum	90869.00
7.12.2.2	Stone work in plain ashlar in super structure upto floor five level in cement mortar 1:6 (1 cement : 6 fine aggregate) including pointing with cement mortar 1:2 (1 white cement :2 stone dust) with an admixture of pigment matching the stone shade - both faces dressed -white sand stone.	cum	92308.00
7.13.1.1	Stone work plain ashlar in arches in superstructure upto floor V level in cement mortar 1:3 (1 cement : 3 fine aggregate) including centering, shuttering and pointing with white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade - one face dressed - red sand stone.	cum	69685.00
7.13.1.2	Stone work plain ashlar in arches in superstructure upto floor V level in cement mortar 1:3 (1 cement : 3 fine aggregate) including centering, shuttering and pointing with white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade - one face dressed - white sand stone.	cum	71124.00

7 . Stone Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
7.13.2.1	Stone work plain ashlar in arches in superstructure upto floor V level in cement mortar 1:3 (1 cement : 3 fine aggregate) including centering, shuttering and pointing with white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade - both faces dressed - red sand stone.	cum	97008.00
7.13.2.2	Stone work plain ashlar in arches in superstructure upto floor V level in cement mortar 1:3 (1 cement : 3 fine aggregate) including centering, shuttering and pointing with white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade - both faces dressed - white sand stone.	cum	98448.00
7.14.1.1	Stone work plain ashlar in domes, in super structure upto floor V level in cement mortar 1:3 (1 cement : 3 fine aggregate) including centering , shuttering and pointing with white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade - one face dressed - red sand stone.	cum	117460.00
7.14.1.2	Stone work plain ashlar in domes, in super structure upto floor V level in cement mortar 1:3 (1 cement : 3 fine aggregate) including centering , shuttering and pointing with white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade - one face dressed - white sand stone.	cum	118900.00
7.14.2.1	Stone work plain ashlar in domes, in super structure upto floor V level in cement mortar 1:3 (1 cement : 3 fine aggregate) including centering , shuttering and pointing with white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade - both faces dressed - red sand stone.	cum	186972.00
7.14.2.2	Stone work plain ashlar in domes, in super structure upto floor V level in cement mortar 1:3 (1 cement : 3 fine aggregate) including centering , shuttering and pointing with white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade - both faces dressed - white sand stone.	cum	188411.00
7.15.1.1	Stone work ashlar punched (ordinary) in superstructure upto floor five level in cement mortar 1:6 (1 white cement : 6 fine aggregate) including pointing with cement mortar 1:2 (1 white	cum	59544.00

7 . Stone Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	cement : 2 stone dust) with an admixture of pigment matching the stone shade - one face dressed - red sand stone		
7.15.1.2	Stone work ashlar punched (ordinary) in superstructure upto floor five level in cement mortar 1:6 (1 white cement : 6 fine aggregate) including pointing with cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade - one face dressed - white sand stone	cum	60984.00
7.15.2.1	Stone work ashlar punched (ordinary) in superstructure upto floor five level in cement mortar 1:6 (1 white cement : 6 fine aggregate) including pointing with cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade - both faced punched - red sand stone	cum	82863.00
7.15.2.2	Stone work ashlar punched (ordinary) in superstructure upto floor five level in cement mortar 1:6 (1 white cement : 6 fine aggregate) including pointing with cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade - both faced punched - white sand stone	cum	84305.00
7.16	Extra for stone work, Random rubble / Coursed rubble masonry / Ashlar masonry above floor V level for every four floors or part thereof	cum	166.09
7.17.1	Extra for plain ashlar or ashlar punched in - square or rectangular pillars	cum	2552.00
7.18	Extra for stone work ; plain ashlar or ashlar punched curved on plan with a mean radius not exceeding 6 m	cum	1775.00
7.19	Extra for additional cost of centering for arches exceeding 6 m span including all strutting , bolting, wedging etc. and removal (area of soffit to be measured)	sqm	490.98
7.20.1	Stone work ashlar sunk or moulded or sunk and moulded upto floor five level in cement mortar 1:6 (1 cement :6 fine aggregate) including pointing with white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade - red sand stone	cum	93851.00
7.20.2	Stone work ashlar sunk or moulded or sunk and moulded upto floor five level in cement mortar 1:6 (1 cement :6 fine aggregate) including pointing with white cement mortar 1:2 (1 white	cum	95291.00

7 . Stone Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	cement : 2 stone dust) with an admixture of pigment matching the stone shade - white sand stone		
7.21.1	Extra for stone work ashlar sunk or moulded or carved in - triangular or square or rectangular pillars	cum	3329.00
7.21.2	Extra for stone work ashlar sunk or moulded or carved in - circular or polygonal pillars	cum	9431.00
7.22	Extra for stone work ashlar sunk or moulded in cornices	metre per cm girth	359.61
7.24	Extra for stone work (veneer work) curved on plan with a mean radius not exceeding 6m	cum	2552.00
7.26	Providing and fixing stone dowels 10x5x2.50 cm cut to double wedge shape as per design in cement mortar 1:2 (1 cement : 2 fine aggregate) including making the necessary chases	each	50.44
7.28.1.1	Providing and fixing sloping chajja of stone 40 mm thick and upto 80 cm wide beyond the wall as measured along the slope in cement mortar 1:4 (1 cement : 4 fine aggregate) with 12mm diameter anchoring steel bar, 45 cm long, fixed in each stone and supported on and including with brick cove in cement mortar 1:4 (1 cement :4 fine aggregate) including pointing in cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade - red sand stone - with common burnt clay F.P.S (non modular) bricks of class designation 3.5	sqm	3027.88
7.28.2.1	Providing and fixing sloping chajja of stone 40 mm thick and upto 80 cm wide beyond the wall as measured along the slope in cement mortar 1:4 (1 cement : 4 fine aggregate) with 12mm diameter anchoring steel bar, 45 cm long, fixed in each stone and supported on and including with brick cove in cement mortar 1:4 (1 cement :4 fine aggregate) including pointing in cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade - white sand stone - with common burnt clay F.P.S (non modular) bricks of class designation 3.5	sqm	3178.49
7.29.1	Providing and fixing horizontal chajja of stone 40mm thick and upto 80cm projection in cement mortar 1:4 (1 cement : 4 fine	sqm	1904.04

7 . Stone Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade - red sand stone		
7.29.2	Providing and fixing horizontal chajja of stone 40mm thick and upto 80cm projection in cement mortar 1:4 (1 cement : 4 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade - white sand stone	sqm	2035.49
7.30	30 mm red sand stone sun - shade (chisel - dressed) supported on red sand stone brackets, fixed in walls with cement mortar 1:4 (1 cement : 4 fine aggregate), including finishing complete	sqm	2233.34
7.31	Providing and fixing red sand stone brackets 55x22.5x45 cm sunk and moulded including providing and fixing with 4 nos gun metal cramp 25x6 mm 30 cm long and dowel bars 7.5 cm long 6mm dia as per design	each	7330.76
7.32.1	Stone work, plain in copings, cornices , string courses and plinth course , upto 75 mm thick in cement mortar 1:6 (1 cement : 6 fine aggregate) including pointing with white cement mortar 1:2 (1 white cement : 2 stone dust) with an amixture of pigment matching the stone shade - red sand stone	cum	92937.64
7.32.2	Stone work, plain in copings, cornices , string courses and plinth course , upto 75 mm thick in cement mortar 1:6 (1 cement : 6 fine aggregate) including pointing with white cement mortar 1:2 (1 white cement : 2 stone dust) with an amixture of pigment matching the stone shade -white sand stone	cum	94377.35
7.33.1	Providing and fixing stone jali 40 mm thick throughout in cement mortar 1:3 (1 cement : 3 fine aggregate), including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment, matching the stone shade , jali slab without any chamfers etc - red sand stone	sqm	17433.21
7.33.2	Providing and fixing stone jali 40 mm thick throughout in cement mortar 1:3 (1 cement : 3 fine aggregate), including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment, matching the stone shade , jali slab without any chamfers etc - white sand stone	sqm	17553.72

7 . Stone Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
7.34	Extra for laying stone work in or under water and / or liquid mud including cost of pumping or bailing out water and removing slush etc.complete - Note:- The quantity will be calculated by multiplying the depth measure from sub-soil water level upto the centre of gravity of stone work under sub-soil water with the quantity of stone work in cum executed under the sub - soil water . The depth of centre of gravity shall be reconed correct to 0.1 m . (0.05 m or more shall be taken as 0.1 m and less than 0.05 m ignored)	cum /mtr depth	1293.08
7.35	Extra for laying stone work in or under foul position	cum	551.12
7.38.1.1	Stone tile work for wall lining upto 10m height with special adhesive over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 fine aggregate), including pointing in white cement with an admixture of pigment to match the stone shade - 8mm thick (mirror polished and machine cut edge) - granite stone of any colour and shade	sqm	3701.71
7.38.1.2	Stone tile work for wall lining upto 10m height with special adhesive over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 fine aggregate), including pointing in white cement with an admixture of pigment to match the stone shade - 8mm thick (mirror polished and machine cut edge) - raj nagar plain white marble / udaipur green marble / zebra black marble	sqm	3211.75
7.100.1	Laterite Stone Masonry for building work using neatly dressed Laterite Stone of size 30x20x20 cm in cement mortar 1:4 (1 cement : 4 fine aggregate) for foundation and basement	cum	9743.10
7.100.2	Laterite Stone Masonry for Well steining work using neatly dressed Laterite Stone of size 30x20x20 cm in cement mortar 1:4 (1 cement : 4 fine aggregate) for foundation and basement	cum	10844.92

8 . Cladding Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
8.1.1.1	Marble work gang saw cut (polished and machine cut) of thickness 18mm for wall lining (veneer work), backing filled with a grout of average 12mm thick in cement mortar 1:3 (1 cement : 3 fine aggregate), including pointing with white cement mortar 1:2 (1 white cement : 2 marble dust) with an admixture of pigment to match the marble shade (To be secured to the backing by means of cramps, which shall be paid for separately) - Raj nagar plain white marble / Udaipur green marble / Zebra black marble - area of slab upto 0.50 sqm	sqm	7301.31
8.1.1.2	Marble work gang saw cut (polished and machine cut) of thickness 18mm for wall lining (veneer work), backing filled with a grout of average 12 mm thick in cement mortar 1:3 (1 cement : 3 fine aggregate) , including pointing with white cement mortar 1:2 (1 white cement : 2 marble dust) with an admixture of pigment to match the marble shade (To be secured to the backing by means of cramps, which shall be paid for separately) - Raj nagar plain white marble / Udaipur green marble / Zebra black marble - area of slab over 0.50 sqm	sqm	7472.22
8.2.1.1	Providing and fixing 18mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations, of required size, approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement : 4 fine aggregate), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels - Raj nagar plain white marble / Udaipur green marble / Zebra black marble - area of slab upto 0.50 sqm	sqm	4162.26
8.2.1.2	Providing and fixing 18mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations, of required size, approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement : 4 fine aggregate), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels - Raj nagar plain white marble / Udaipur green marble / Zebra black marble - area of slab over 0.50 sqm	sqm	3732.07
8.2.2.1	Providing and fixing 18mm thick gang saw cut, mirror	sqm	6441.46

8 . Cladding Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations, of required size, approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement : 4 fine aggregate), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels - Granite stone slab of colour black, cherry/ ruby red - area of slab upto 0.50 sqm		
8.2.2.2	Providing and fixing 18mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations, of required size, approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement : 4 fine aggregate), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels - Granite stone slab of colour black, cherry/ ruby red - area of slab over 0.50 sqm	sqm	5356.11
8.2.3.1	Providing and fixing 18mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations, of required size, approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement : 4 fine aggregate), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels - Granite stone slab of all colour and texture except black, cherry/ruby red - area of slab upto 0.50 sqm	sqm	6796.96
8.2.3.2	Providing and fixing 18mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations, of required size, approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement : 4 fine aggregate), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels - Granite stone slab of all colour and texture except black, cherry/ruby red - area of slab over 0.50 sqm	sqm	4068.48
8.3.1	Providing edge moulding to 18mm thick marble stone counters	metre	299.61

8 . Cladding Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	,vanities etc., including machine polishing to edge to give high gloss finish etc. complete - Marble work		
8.3.2	Providing edge moulding to 18mm thick marble stone counters ,vanities etc., including machine polishing to edge to give high gloss finish etc. complete - Granite work	metre	516.28
8.4	Extra for fixing marble / granite stone , over and above corresponding basic item, in facia and drops of width upto 150 mm with epoxy resin based adhesive , including cleaning etc.complete	metre	629.82
8.5	Extra for providing opening of required size & shape for wash basin / kitchen sink in kitchen platform , vanity counter and similar location in marble / granite / stone work , including necessary holes for pillar taps etc . Including moulding ,rubbing and polishing of cut edges etc.complete.	each	1221.48
8.6	Mirror polishing on marble work / granite work / stone work where ever required to give high gloss finish complete	sqm	613.16
8.7.1	Providing and fixing cramps of required size & shape in RCC / CC / Brick masonry backing with cement mortar 1:2 (1 cement : 2 fine aggregate), including drilling necessary hole in stones and embedding the cramp in the hole (fastener to be paid separately) - Gunmetal cramps	kg	851.89
8.7.2	Providing and fixing cramps of required size & shape in RCC / CC / Brick masonry backing with cement mortar 1:2 (1 cement : 2 fine aggregate), including drilling necessary hole in stones and embedding the cramp in the hole (fastener to be paid separately) - stainless steel cramps	kg	890.32
8.8.1.1	Providing and fixing expansion hold fasteners on CC /RCC /Brick masonry surface backing including drilling necessary holes and the cost of bolt etc complete - wedge expansion type - Fastener with threaded dia 6mm	each	48.06
8.8.1.2	Providing and fixing expansion hold fasteners on CC /RCC /Brick masonry surface backing including drilling necessary holes and the cost of bolt etc complete - wedge expansion type - Fastener with threaded dia 10mm	each	52.90

8 . Cladding Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
8.8.1.3	Providing and fixing expansion hold fasteners on CC /RCC /Brick masonry surface backing including drilling necessary holes and the cost of bolt etc complete - wedge expansion type - Fastener with threaded dia 12 mm	each	74.81
8.9.1.1	Stone tile (polished) work for wall lining over 12mm thick bed of cement mortar 1:3 (1 cement : 3 fine aggregate) and cement slurry @ 3.3 kg/sqm including pointing in white cement complete - 8mm thick - Raj nagar plain white marble / udaipur green marble / zebra black marble	sqm	3694.22
8.9.1.2	Stone tile (polished) work for wall lining over 12mm thick bed of cement mortar 1:3 (1 cement : 3 fine aggregate) and cement slurry @ 3.3 kg/sqm including pointing in white cement complete - 8mm thick - granite of any colour and shade	sqm	4303.75
8.10.1	Providing and fixing stone slab with table rubbed , edges rounded and polished , of size 75x50 cm deep and 1.8cm thick, fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 6mm nominal size) as per direction of Engineer-in-charge and finished smooth - White agaria mable stone	sqm	2599.41
8.10.2	Providing and fixing stone slab with table rubbed , edges rounded and polished , of size 75x50 cm deep and 1.8cm thick, fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 6mm nominal size) as per direction of Engineer-in-charge and finished smooth - Granite stone of approved shade	sqm	4434.61
8.11.1	Providing and fixing machine cut, mirror / eggshell polished, marble stone work for wall lining (veneer work) including dado, skirting , risers of steps etc., in required design and pattern wherever required, stones of different finished surface texture, on 12mm (average) thick cement mortar 1:3 (1 cement : 3 fine aggregate) laid and jointed with white cement slurry @ 3.3 kg /sqm including pointing with white cement slurry admixed with pigment of matching shade, including rubbing,curing,polishing etc. All complete as per Architectural drawings and as per direction of Engineer-in-charge -18 mm thick Italian marble stone slab, Perlato,Rosso verona,fire red or	sqm	13650.96

8 . Cladding Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	dark emperadore etc		
8.14.1.1	Stone work (machine cut edges) for wall lining etc. (vener work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - Red sand stone - exposed face fine dressed with rough backing 70mm thick	sqm	6247.21
8.14.1.2	Stone work (machine cut edges) for wall lining etc. (vener work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - Red sand stone - exposed face fine dressed with rough backing 60mm thick	sqm	6119.55
8.14.1.3	Stone work (machine cut edges) for wall lining etc. (vener work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - Red sand stone - exposed face fine dressed with rough backing 50mm thick	sqm	5992.16
8.14.1.4	Stone work (machine cut edges) for wall lining etc. (vener work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - Red sand stone - exposed face fine dressed with rough backing 40mm thick	sqm	5864.12
8.14.1.5	Stone work (machine cut edges) for wall lining etc. (vener work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine	sqm	5736.36

8 . Cladding Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - Red sand stone - exposed face fine dressed with rough backing 30mm thick		
8.14.2.1	Stone work (machine cut edges) for wall lining etc. (vener work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - Red sand stone - exposed face machine cut and table rubbed with rough backing -70mm thick	sqm	8885.21
8.14.2.2	Stone work (machine cut edges) for wall lining etc. (vener work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - Red sand stone - exposed face machine cut and table rubbed with rough backing -60mm thick	sqm	8757.54
8.14.2.3	Stone work (machine cut edges) for wall lining etc. (vener work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - Red sand stone - exposed face machine cut and table rubbed with rough backing -50mm thick	sqm	8630.16
8.14.2.4	Stone work (machine cut edges) for wall lining etc. (vener work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - Red sand stone - exposed face machine cut and table rubbed with rough backing -40mm thick	sqm	8502.11

8 . Cladding Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
8.14.2.5	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - Red sand stone - exposed face machine cut and table rubbed with rough backing -30mm thick	sqm	8374.35
8.14.3.1	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - White sand stone - exposed face fine dressed with rough backing -70mm thick	sqm	6347.99
8.14.3.2	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - White sand stone - exposed face fine dressed with rough backing -60mm thick	sqm	6205.91
8.14.3.3	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - White sand stone - exposed face fine dressed with rough backing -50mm thick	sqm	6064.19
8.14.3.4	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment	sqm	5921.39

8 . Cladding Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - White sand stone - exposed face fine dressed with rough backing -40mm thick		
8.14.3.5	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - White sand stone - exposed face fine dressed with rough backing -30mm thick	sqm	5779.55
8.14.4.1	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - White sand stone - exposed face machine cut and table rubbed with rough backing - 70mm thick	sqm	8985.66
8.14.4.2	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - White sand stone - exposed face machine cut and table rubbed with rough backing - 60mm thick	sqm	8843.92
8.14.4.3	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - White sand stone - exposed face machine 50mm thick	sqm	8702.18

8 . Cladding Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
8.14.4.4	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - White sand stone - exposed face machine 40mm thick	sqm	8559.39
8.14.4.5	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - White sand stone - exposed face machine 30mm thick	sqm	8417.54
8.14.5.1	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - Gang saw cut stone - 30 mm thick white sand stone	sqm	3659.43
8.14.5.2	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - Gang saw cut stone - 30 mm thick red sand stone	sqm	3626.57
8.15	Providing and fixing stainless steel cramps of required size and shape for anchoring stone wall lining to the backing or securing adjacent stones in stone wall lining in cement mortar 1:2 (1 cement ; 2 fine aggregate), including making the necessary chases in stone and holes in walls wherever required	kg	890.32
8.16	Providing and fixing copper pins 7.5cm long 6mm diameter for	each	53.06

8 . Cladding Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	securing adjacent stones in stone wall lining in cement mortar 1:2 (1 cement : 2 fine aggregate), including making the necessary chases		
8.17	Wall lining work upto 10m height with Dholpur stone 40mm thick rough facing on the exposed surface with stone strips of minimum length 300mm and required width, including embedding every tenth layer and bottom most layer in masonry or concrete after making necessary chases of size 75x75 mm and by providing layer of 75mm thick strips i/c ruled pointing in cement mortar 1:2 *1 white cement : 2 stone dust) with an admixture of pigment to match the shade of stone complete as per direction of Engineer-in-charge	sqm	3411.05
8.18.1.1	Syone work (machine cut edges in veneer work) for wall lining upto 10m height, backing filled with a grout of 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) and jointed with cement mortar 1:2 (1 cement:2 stone dust) including grinding with hand grinder on joints, rubbing and polishing complete (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - Prepolished kota stone slabs on exposed face - 25mm thick	sqm	3394.33
8.19	Extra for stone work for wall lining on exterior walls of height more than 10 m from ground level for every additional height of 3m or part there of	sqm	169.90
8.20.1	Providing and fixing dry cladding upto 10 metre heights with 30mm thick gang saw cut stone with machine cut edges of uniform colour and size upto 1mx1m, fixed to structural steel frame work and / or with the help of cramps, pins etc and sealing the joints with approved weather sealant as per Architectural drawing and direction (The steel frame work, stainless steel cramps and pins etc. shall be paid separately)- Red sand stone - 30mm thick gang saw cut stone	sqm	3277.53
8.20.2	Providing and fixing dry cladding upto 10 metre heights with 30mm thick gang saw cut stone with machine cut edges of uniform colour and size upto 1mx1m, fixed to structural steel frame work and / or with the help of cramps, pins etc and sealing the joints with approved weather sealant as per Architectural drawing and direction (The steel frame work, stainless steel cramps and pins etc. shall be paid separately)- White sand stone - 30mm thick gang saw cut stone	sqm	3310.40

8 . Cladding Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
8.21	Providing and fixing structural steel frame (for dry cladding with 30mm thick gang saw cut with machine cut edges sand stone) on walls at all heights using M.S. square / rectangular tube in the required pattern as per architectural drawing, including cost of cutting, bending, welding etc. The frame work shall be fixed to the wall with the help of M.S. brackets / lugs of angle iron / flats etc.which shall be welded to the frame and embedded in brick wall with cement concrete block 1:2:4 (1 cement: 2 fine aggregate: 4 graded stone aggregate 20mm nominal size) of size 300x230x300mm, including cost of necessary centering and shuttering and with approved expansion hold fasteners on CC/RCC surface, including drilling necessary holes. Approved cramps/ pins etc.shall be welded to the frame work to support stone cladding, the steel work will be given a priming coat of Zinc primer as approved by Engineer-in-charge and painted with two or more coats of epoxy paint (shop drawings shall be submitted by the contractor to the engineer-in-charge for approval before execution). The frame work shall be fixed in true horizontal & vertical lines/planes.(Only structural steel frame work shall be measured for the purpose of payment, stainless steel cramps shall be paid for separately and nothing extra shall be paid)	kg	320.29
8.22	Providing and fixing adjustable stainless steel cramps of approved quality, required shape and size, adjustable with stainless steel nuts, bolts and washer (total weight not less than 260gms), for dry stone cladding fixed on frame work at suitable location, including making necessary recesses in stone slab, drilling required holes etc complete as per direction of Engineer-in-charge	no	492.97
8.23	Providing 50x50x50 mm 2nd class teak wood plugs including cutting brick work and fixing in cement mortar 1:3 (1 cement : 3 fine aggregate) and making good the walls etc.	no	31.00
8.24.1	Providing and fixing expandable fasteners of specified size with necessary plastic sleeves and galvanised M.S.screws including drilling holes in masonry work /CC/R.C.C and making good etc.complete-25mm long	no	21.57
8.24.2	Providing and fixing expandable fasteners of specified size with necessary plastic sleeves and galvanised M.S.screws including drilling holes in masonry work /CC/R.C.C and making good etc.complete-32mm long	no	25.89

8 . Cladding Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
8.24.3	Providing and fixing expandable fasteners of specified size with necessary plastic sleeves and galvanised M.S.screws including drilling holes in masonry work /CC/R.C.C and making good etc.complete-40mm long	no	27.32
8.24.4	Providing and fixing expandable fasteners of specified size with necessary plastic sleeves and galvanised M.S.screws including drilling holes in masonry work /CC/R.C.C and making good etc.complete-50mm long	no	31.58
8.25.1	Providing and fixing 2nd class teak wood plain lining tongued and grooved, including wooden plugs complete with necessary screws and priming coat on unexposed surface-40mm thick	sqm	814.91
8.25.2	Providing and fixing 2nd class teak wood plain lining tongued and grooved, including wooden plugs complete with necessary screws and priming coat on unexposed surface- 25mm thick	sqm	814.91
8.25.3	Providing and fixing 2nd class teak wood plain lining tongued and grooved, including wooden plugs complete with necessary screws and priming coat on unexposed surface- 20mm thick	sqm	700.14
8.25.4	Providing and fixing 2nd class teak wood plain lining tongued and grooved, including wooden plugs complete with necessary screws and priming coat on unexposed surface- 12mm thick	sqm	700.14
8.26.1	Providing and fixing in wall lining flat pressed three layer (medium density) particle board or graded wood Pre-laminated one side decorative lamination and other side balancing lamination grade I, type II, IS:12823 marked, including priming coat on unexposed arrangement and screws etc.complete-12mm thick	sqm	1588.46
8.26.2	Providing and fixing in wall lining flat pressed three layer (medium density) particle board or graded wood Pre-laminated one side decorative lamination and other side balancing lamination grade I, type II, IS:12823 marked, including priming coat on unexposed arrangement and screws etc.complete-18mm thick	sqm	1698.01
8.26.3	Providing and fixing in wall lining flat pressed three layer (medium density) particle board or graded wood Pre-laminated one side decorative lamination and other side balancing lamination grade I, type II, IS:12823 marked, including	sqm	1915.53

8 . Cladding Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	priming coat on unexposed arrangement and screws etc.complete-25 mm thick		
8.27.1M	Providing and fixing specified wood frame work consisting of battens 50x25mm fixed with rawl plug and drilling necessary holes for rawl plug etc. Including priming coat complete - Malabar teak wood	cum	468760.23
8.28.1	Providing and fixing plywood 4mm thick, one side decorative veneer conforming to IS:1328(type-1) for plain lining / cladding with necessary screws, including priming coat on unexposed surface with: Decorative veneer facings of approved manufacture	sqm	2808.54
8.29	Providing and fixing 4mm thick coir veneer board, ISI marked IS:14842, plain lining with necessary screws, priming coat on unexposed surface etc., complete	sqm	2091.53
8.30.1	Providing and fixing skirting with Pre-laminated (one side decorative and other side balancing lamination) flat pressed 3 layer or graded particle board (medium density) grade I, Type II, IS:12823 marked, with necessary fixing arrangements and screws, including drilling necessary holes for rawl plugs etc. and priming coat on unexposed surface complete- 18mm thick	sqm	2072.92
8.30.2	Providing and fixing skirting with Pre-laminated (one side decorative and other side balancing lamination) flat pressed 3 layer or graded particle board (medium density) grade I, Type II, IS:12823 marked, with necessary fixing arrangements and screws, including drilling necessary holes for rawl plugs etc. and priming coat on unexposed surface complete- 25mm thick	sqm	2290.44
8.31	Providing and fixing Ist quality ceramic glazed wall tiles conforming to IS:15622(thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved, in skirting, risers of steps and dados, over 12mm thick bed of cement mortar 1:3 (1 cement : 3 fine aggregate) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete	sqm	1554.47
8.32	Designing, fabricating, testing, installing and fixing in position Curtain Wall with Aluminium Composite Panel Cladding, with open grooves for linear as well as curvilinear portions of the	sqm	5578.80

8 . Cladding Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	building , for all heights and all levels etc. including: (a) Structural analysis & design and preparation of shop drawings for pressure equalisation or rain screen principle as required, proper drainage of water to make it watertight including checking of all the structural and functional design. (b) Providing, fabricating and supplying and fixing panels of aluminium composite panel cladding in pan shape in metallic colour of approved shades made out of 4mm thick aluminium composite panel material consisting of 3mm thick FR grade mineral core sandwiched between two Aluminium sheets (each 0.5mm thick). The aluminium composite panel cladding sheet shall be coil coated, with Kynar 500 based PVDF / Lumiflon based fluoropolymer resin coating of approved colour and shade on face # 1 and polymer (Service) coating on face # 2 as specified using stainless steel screws, nuts, bolts, washers, cleats, weather silicone sealant, backer rods etc. (c) The fastening brackets of Aluminium alloy 6005 T5 / MS with Hot Dip Galvanised with serrations and serrated washers to arrest the wind load movement, fasteners, SS 316 Pins and anchor bolts of approved make in SS 316, Nylon separators to prevent bi-metallic contacts all complete required to perform as per specification and drawing The item includes cost of all material & labour component, the cost of all mock ups at site, cost of all samples of the individual components for testing in an approved laboratory, field tests on the assembled working curtain wall with aluminium composite panel cladding, cleaning and protection of the curtain wall with aluminium composite panel cladding till the handing over of the building for occupation. Base frame work for ACP cladding is payable under the relevant aluminium item.s The Contractor shall provide curtain wall with aluminium composite panel cladding, having all the performance characteristics all complete , as per the Architectural drawings, as per item description, as specified, as per the approved shop drawings and as per direction of Engineer-in-charge. However, for the purpose of payment, only the actual area on the external face of the curtain wall with Aluminum Composite Panel Cladding (including width of groove) shall be measured in sqm. Up to two decimal places.		

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.1.1M	Providing wood work in frames of doors , windows, clerestory windows and other frames , wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately) - Malabar Teak wood- Ist class	cum	278635.28
9.1.2I	Providing wood work in frames of doors , windows, clerestory windows and other frames , wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately) - Irul wood	cum	212561.39
9.1.2J	Providing wood work in frames of doors , windows, clerestory windows and other frames , wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately) - Jack wood	cum	237339.44
9.1.3I	Providing wood work in frames of doors , windows, clerestory windows and other frames , wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately) - Kiln seasoned and chemically treated Irul wood	cum	214787.22
9.1.3J	Providing wood work in frames of doors , windows, clerestory windows and other frames , wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately) - Kiln seasoned and chemically treated Jack wood	cum	239565.00
9.2	Providing laminated veneer lumber conforming to IS:14616 and TAD -15:2001 (Part B) in factory made frames of doors , windows, clerestory windows and other frames , wrought framed and fixing in Position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately)	cum	25190.00
9.3.1I	Providing wood work in frames of false ceiling , partitions etc. sawn and fixed in position with necessary stainless steel screws etc - Irul wood	cum	199111.90
9.3.1J	Providing wood work in frames of false ceiling , partitions etc. sawn and fixed in position with necessary stainless steel screws etc - Jack wood	cum	223773.92

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.3.1M	Providing wood work in frames of false ceiling , partitions etc. sawn and fixed in position with necessary stainless steel screws etc- Malabar I st class teak wood	cum	264877.28
9.3.2I	Providing wood work in frames of false ceiling , partitions etc. sawn and fixed in position with necessary stainless steel screws etc - Kiln seasoned and chemically treated Irul wood	cum	200949.30
9.3.2J	Providing wood work in frames of false ceiling , partitions etc. sawn and fixed in position with necessary stainless steel screws etc- Kiln seasoned and chemically treated Jack wood	cum	225611.33
9.4.1M	Extra for additional labour for circular works , such as in frames of fan light - Malabar Ist class teak wood	cum	27863.53
9.4.2I	Extra for additional labour for circular works , such as in frames of fan light - Irul wood	cum	21256.14
9.4.2J	Extra for additional labour for circular works , such as in frames of fan light - Jack wood	cum	23733.94
9.4.3I	Extra for additional labour for circular works , such as in frames of fan light - Kiln seasoned and chemically treated Irul wood	cum	21478.94
9.4.3J	Extra for additional labour for circular works , such as in frames of fan light - Kiln seasoned and chemically treated Jack wood	cum	23956.72
9.5.1.1I	Providing and fixing panelled or panelled and glazed shutters for doors, windows, and clerestory windows, fixing with butt hinges of required size with necessary screws, excluding panelling which will be paid for separately , all complete as per direction of Engineer-in-charge -(Note:- Butt hinges and necessary screws shall be paid separately) - Irul wood - 35 mm thick shutters	sqm	6457.82
9.5.1.1J	Providing and fixing panelled or panelled and glazed shutters for doors, windows, and clerestory windows, fixing with butt hinges of required size with necessary screws, excluding panelling which will be paid for separately , all complete as per direction of Engineer-in-charge -(Note:- Butt hinges and	sqm	6676.15

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	necessary screws shall be paid separately) - Jack wood - 35 mm thick shutters		
9.5.1.1M	Providing and fixing panelled or panelled and glazed shutters for doors, windows, and clerestory windows, fixing with butt hinges of required size with necessary screws, excluding panelling which will be paid for separately , all complete as per direction of Engineer-in-charge -(Note:- Butt hinges and necessary screws shall be paid separately) - Malabar Ist class teak wood - 35 mm thick shutters	sqm	9413.74
9.5.1.2I	Providing and fixing panelled or panelled and glazed shutters for doors, windows, and clerestory windows, fixing with butt hinges of required size with necessary screws, excluding panelling which will be paid for separately , all complete as per direction of Engineer-in-charge -(Note:- Butt hinges and necessary screws shall be paid separately) - Irul wood - 30 mm thick shutters	sqm	5803.15
9.5.1.2J	Providing and fixing panelled or panelled and glazed shutters for doors, windows, and clerestory windows, fixing with butt hinges of required size with necessary screws, excluding panelling which will be paid for separately , all complete as per direction of Engineer-in-charge -(Note:- Butt hinges and necessary screws shall be paid separately) - Jack wood - 30 mm thick shutters	sqm	5991.51
9.5.1.2M	Providing and fixing panelled or panelled and glazed shutters for doors, windows, and clerestory windows, fixing with butt hinges of required size with necessary screws, excluding panelling which will be paid for separately , all complete as per direction of Engineer-in-charge -(Note:- Butt hinges and necessary screws shall be paid separately) - Malabar Ist class teak wood - 30 mm thick shutters	sqm	8353.35
9.5.2.1I	Providing and fixing panelled or panelled and glazed shutters for doors, windows, and clerestory windows, fixing with butt hinges of required size with necessary screws, excluding panelling which will be paid for separately , all complete as per direction of Engineer-in-charge -(Note:- Butt hinges and necessary screws shall be paid separately) - Kiln seasoned and chemically treated Irul wood - 35 mm thick shutters	sqm	6503.74
9.5.2.1J	Providing and fixing panelled or panelled and glazed shutters for doors, windows, and clerestory windows, fixing with butt	sqm	6722.07

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	hinges of required size with necessary screws, excluding panelling which will be paid for separately , all complete as per direction of Engineer-in-charge -(Note:- Butt hinges and necessary screws shall be paid separately) - Kiln seasoned and chemically treated Jack wood - 35 mm thick shutters		
9.5.2.2I	Providing and fixing panelled or panelled and glazed shutters for doors, windows, and clerestory windows, fixing with butt hinges of required size with necessary screws, excluding panelling which will be paid for separately , all complete as per direction of Engineer-in-charge -(Note:- Butt hinges and necessary screws shall be paid separately) - Kiln seasoned and chemically treated Irul wood - 30 mm thick shutters	sqm	5844.40
9.5.2.2J	Providing and fixing panelled or panelled and glazed shutters for doors, windows, and clerestory windows, fixing with butt hinges of required size with necessary screws, excluding panelling which will be paid for separately , all complete as per direction of Engineer-in-charge -(Note:- Butt hinges and necessary screws shall be paid separately) - Kiln seasoned and chemically treated Jack wood - 30 mm thick shutters	sqm	6032.77
9.6.1	Providing and fixing 35mm thick factory made laminated veneer lumber door shutter conforming to IS : 14616 and TADS 15 : 2001 (Part B) ,fixing with butt hinges of required size with necessary screws, all complete as per direction of Engineer-in-charge and panelling with panels of - (Note: Butthinges and necessary screws shall be paid separately) - 12mm thick plain grade -1 , medium density flat pressed three layer particle board FPT - I or graded wood particle board FPT -I, IS :3087 marked , bonded with BWP type synthetic resin adhesive as per IS : 848	sqm	3937.81
9.6.2	Providing and fixing 35mm thick factory made laminated veneer lumber door shutter conforming to IS : 14616 and TADS 15 : 2001 (Part B) ,fixing with butt hinges of required size with necessary screws, all complete as per direction of Engineer-in-charge and panelling with panels of - (Note: Butthinges and necessary screws shall be paid separately) - 12mm thick pre - laminated particle board (decorative lamination on both sides) grade - 1 , medium density flat pressed , three layer particle board FPT - I or graded wood particle board FPT - I , conforming to IS : 3087 , bonded with BWP type synthetic resin adhesive as per IS : 848 and prelaminated conforming to IS : 12823, Grade 1, type - II marked	sqm	4435.74

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.6.3	Providing and fixing 35mm thick factory made laminated veneer lumber door shutter conforming to IS : 14616 and TADS 15 : 2001 (Part B) ,fixing with butt hinges of required size with necessary screws, all complete as per direction of Engineer-in-charge and panelling with panels of - (Note: Butthings and necessary screws shall be paid separately) - 12mm thick one side pre - laminated particle board (decorative lamination on one side and other sides balancing lamination) grade - 1 , medium density flat pressed , three layer particle board FPT - I or graded wood particle board FPT - I , conforming to IS : 3087 , bonded with BWP type synthetic resin adhesive as per IS : 848 and prelaminated conforming to IS : 12823, Grade 1, type - II marked	sqm	4311.25
9.7.1I	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors , windows and clerestory windows (area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick - Irul wood	sqm	5349.64
9.7.1J	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors , windows and clerestory windows (area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick - Jack wood	sqm	5531.77
9.7.1M	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors , windows and clerestory windows (area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick - Malabar 1st class teak wood	sqm	7815.53
9.7.2I	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors , windows and clerestory windows (area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick - Kiln seasoned and chemically treated Irul wood	sqm	5416.61
9.7.2J	Providing and fixing panelling or panelling and glazing in	sqm	5598.74

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	panelled or panelled and glazed shutters for doors , windows and clerestory windows (area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick - Kiln seasoned and chemically treated Jack wood		
9.7.3.1	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors , windows and clerestory windows (area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick - Ply wood 5 ply , 9mm thick - decorative plywood both side decorative veneer (Type - I) conforming to IS 1328 BWR type	sqm	3693.32
9.7.3.2	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors , windows and clerestory windows (area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick - Ply wood 5 ply , 9mm thick - decorative plywood one side decorative veneer and commercial veneer on other face (Type 1) conforming to IS 1328 BWR type	sqm	3439.85
9.7.4.1	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors , windows and clerestory windows (area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick - Ply wood 7 ply , 9 mm thick - decorative plywood one side decorative veneer and commercial veneer on other face (Type 1) conforming to IS 1328 BWR type	sqm	3612.30
9.7.5.1	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors , windows and clerestory windows (area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick - Particle board 12 mm thick - Plain particle board flat pressed , 3 layer or graded wood particle board medium density grade I , IS :3087 marked	sqm	2318.98
9.7.5.2	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors , windows	sqm	2331.05

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	and clerestory windows (area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick - Particle board 12 mm thick - Veneered flat pressed three layer or graded wood particle board with commercial veneering on both sides conforming to IS : 3097 , grade I		
9.7.5.3	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors , windows and clerestory windows (area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick - Particle board 12 mm thick - Pre - laminated particle board with decorative lamination on one side and balancing lamination on other side , grade I , type II , IS : 12823 marked	sqm	2450.05
9.7.5.4	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors , windows and clerestory windows (area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick - Particle board 12 mm thick - Pre - laminated particle board with decorative lamination on both sides , grade I , type II , IS:12823 marked	sqm	2641.44
9.7.6.1	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors , windows and clerestory windows (area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick - Coir Veneer board (conforming to IS 14842) - 12mm thick	sqm	2684.55
9.7.7.1	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors , windows and clerestory windows (area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick - Float glass panes - 4mm thick glass pane (weight not less than 10kg/sqm)	sqm	2674.86
9.7.7.2	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors , windows	sqm	2916.29

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	and clerestory windows (area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick - Float glass panes - 5mm thick glass panes (weight not less than 12.50kg / sqm)		
9.7.8	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors , windows and clerestory windows (area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick - Fly proof stainless steel grade 304 wire gauge with 0.5 mm dia wire and 1.4 mm wide aperture with matching wood beading	sqm	3395.65
9.9.1.1I	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass panes (weight not less than 10 kg per sqm) fixing with ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws. -Irul wood - 35 mm thick	sqm	7728.37
9.9.1.1J	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass panes (weight not less than 10 kg per sqm) fixing with ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws. -Jack wood - 35 mm thick	sqm	7976.67
9.9.1.1M	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass panes (weight not less than 10 kg per sqm) fixing with ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws. - Malabar Ist class teak wood - 35 mm thick	sqm	11090.00
9.9.1.2I	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass panes (weight not less than 10 kg per sqm) fixing with ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws. -Irul wood - 30 mm thick	sqm	6980.17
9.9.1.2J	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass panes (weight not less than 10 kg per sqm) fixing with ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws. -Jack wood - 30 mm thick	sqm	7194.22

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.9.1.2M	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass panes (weight not less than 10 kg per sqm) fixing with ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws. -Malabar Ist class teak wood - 30 mm thick	sqm	9878.13
9.9.2.1I	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass panes (weight not less than 10 kg per sqm) fixing with ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws. -Kiln seasoned and chemically treated Irul wood - 35mm thick	sqm	7778.94
9.9.2.1J	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass panes (weight not less than 10 kg per sqm) fixing with ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws. -Kiln seasoned and chemically treated Jack wood - 35mm thick	sqm	8027.24
9.9.2.2I	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass panes (weight not less than 10 kg per sqm) fixing with ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws. -Kiln seasoned and chemically treated Irul wood - 30mm thick	sqm	7025.42
9.9.2.2J	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass panes (weight not less than 10 kg per sqm) fixing with ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws. -Kiln seasoned and chemically treated Jack wood - 30mm thick	sqm	7239.47
9.9.3.1I	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass panes (weight not less than 10 kg per sqm) fixing with ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws.-Kiln seasoned selected planks of Irul wood - 35mm thick	sqm	7766.95
9.9.3.1J	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass panes (weight not less than 10 kg per sqm) fixing with ISI marked M.S. pressed butt hinges bright finished of required size with	sqm	8015.25

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	necessary screws. -Kiln seasoned selected planks of Jack wood - 35mm thick		
9.9.3.2I	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass panes (weight not less than 10 kg per sqm) fixing with ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws. -Kiln seasoned selected planks of Irul wood - 30mm thick	sqm	7013.43
9.9.3.2J	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass panes (weight not less than 10 kg per sqm) fixing with ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws. -Kiln seasoned selected planks of Jack wood - 30mm thick	sqm	7227.48
9.10.1	Providing and fixing factory made laminated veneer lumber glazed shutter conforming to IS : 14616 and TADS 15 :2001 (Part B) , using 4mm thick float glass panes for doors , windows and clerestory windows, with butt hinges of required size with necessary screws all as per direction (Note: Butt hinges and necessary screws shall be paid separately) - 30 mm thick shutters	sqm	3752.87
9.11.1	Extra for providing heavy sheet float glass panes instead of ordinary float glass in glazed doors, windows and clerestory window shutters. (Area of opening for glass panes excluding portion inside rebate shall be measured) -5 mm thick (weight not less than 12.50 kg per sqm) instead of 4 mm thick (weight not less than 10 kg per sqm)	sqm	199.17
9.12	Extar for providing frosted glass panes 4 mm thick (weight not less than 10 kg per sqm) instead of ordinary float glass panes 4mm thick (weight not less than 10 kg per sqm) in doors, windows and clerestory window shutters . (Area of opening for glass panes excluding portion inside rebate shall be measured)	sqm	270.31
9.13	Deduct for providing pin headed glass panes 4mm thick instead of ordinary float glass panes 4mm thick (weight not less than 10 kg per sqm) in doors , windows and clerestory window shutters (Area of opening for glass panes excluding portion inside rebate shall be measured)	sqm	29.88

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.14	Extra for providing ISI marked Stainless steel butt hinges instead of M.S.pressed butt hinges bright finished of required size with necessary screws . (Shutter area to be measured)	sqm	167.77
9.15.1.1	Deduct for not providing hinges in doors, windows or clearestory window shutter with - ISI marked Stainless steel butt hinges with stainless steel screws - For teak wood and other wood shutters	sqm	265.29
9.15.2.1	Deduct for not providing hinges in doors, windows and clearestory window shutter with - ISI marked M.S.pressed butt hinges bright finished of required size with necessary screws - for teak wood and other class of wood shutters	sqm	97.53
9.16.1.1I	Providing and fixing 25 mm thick shutters for cup board etc - panelled or panelled & glazed shutters -Irul wood including ISI marked anodised aluminium butt hinges with necessary screws.	sqm	6626.26
9.16.1.1J	Providing and fixing 25 mm thick shutters for cup board etc - panelled or panelled & glazed shutters -Jack wood including ISI marked anodised aluminium butt hinges with necessary screws.	sqm	6797.50
9.16.1.1M	Providing and fixing 25 mm thick shutters for cup board etc - panelled or panelled & glazed shutters -Malabar Ist class teak wood including ISI marked anodised aluminium butt hinges with necessary screws.	sqm	8944.63
9.16.1.2I	Providing and fixing 25 mm thick shutters for cup board etc - panelled or panelled & glazed shutters - Irul wood including ISI marked nickel plated bright finished M.S.piano hinges with necessary screws	sqm	6754.35
9.16.1.2J	Providing and fixing 25 mm thick shutters for cup board etc - panelled or panelled & glazed shutters - Jack wood including ISI marked nickel plated bright finished M.S.piano hinges with necessary screws	sqm	6925.59
9.16.1.2M	Providing and fixing 25 mm thick shutters for cup board etc - panelled or panelled & glazed shutters - Malabar Ist class wood including ISI marked nickel plated bright finished M.S.piano hinges with necessary screws	sqm	9072.72

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.16.2.1I	Providing and fixing 25 mm thick shutters for cup board etc - Glazed shutters - Irul wood including ISI marked anodised aluminium butt hinges with necessary screws	sqm	6388.80
9.16.2.1J	Providing and fixing 25 mm thick shutters for cup board etc - Glazed shutters - Jack wood including ISI marked anodised aluminium butt hinges with necessary screws	sqm	6572.88
9.16.2.1M	Providing and fixing 25 mm thick shutters for cup board etc - Glazed shutters - Malabar Ist class Teak wood including ISI marked anodised aluminium butt hinges with necessary screws	sqm	8881.04
9.16.2.2I	Providing and fixing 25 mm thick shutters for cup board etc - Glazed shutters - Irul wood including ISI marked nickel plated bright finished M.S.piano hinges with necessary screws	sqm	6385.18
9.16.2.2J	Providing and fixing 25 mm thick shutters for cup board etc - Glazed shutters - Jack wood including ISI marked nickel plated bright finished M.S.piano hinges with necessary screws	sqm	6569.26
9.16.2.2M	Providing and fixing 25 mm thick shutters for cup board etc - Glazed shutters - Malabar Ist class teak wood including ISI marked nickel plated bright finished M.S.piano hinges with necessary screws	sqm	8877.42
9.17.1	Providing and fixing flat Pressed 3 layer particle or graded plain wood board medium density exterior grade (Grade I) FPT-I, conforming and marked to frame, backing or studding with screws etc. complete (Frames, backing or studding to be paid separately) - 12mm thick	sqm	1201.38
9.17.2	Providing and fixing flat Pressed 3 layer particle or graded plain wood board medium density exterior grade (Grade I) FPT-I, conforming and marked to frame, backing or studding with screws etc. complete (Frames, backing or studding to be paid separately) - 18mm thick	sqm	1343.29
9.18.1	Providing and fixing Pre - laminated flat pressed 3 layer (medium density) particle board or graded wood particle board IS : 3087 marked, with one side decorative and other side balancing lamination Grade 1 , Type II exterior grade IS : 12823 marked , in shelves with screws and fittings wherever required , edges to be painted with polyurethane primer (fittings to be paid separately) - 18mm thick	sqm	1474.30

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.18.2	Providing and fixing Pre - laminated flat pressed 3 layer (medium density) particle board or graded wood particle board IS : 3087 marked, with one side decorative and other side balancing lamination Grade 1 , Type II exterior grade IS : 12823 marked , in shelves with screws and fittings wherever required , edges to be painted with polyurethane primer (fittings to be paid separately) - 25mm thick	sqm	1681.90
9.20.1	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part 1) decorative type , core of block board construction with frame of 1 st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters - 35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	sqm	5350.86
9.20.2	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part 1) decorative type , core of block board construction with frame of 1 st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters - 30 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	sqm	4983.82
9.20.3	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part 1) decorative type , core of block board construction with frame of 1 st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters - 25 mm thick (for cupboard) including ISI marked nickel plated bright finished M.S.Piano hinges IS : 3818 marked with necessary screws	sqm	4536.43
9.21.1	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part 1) non - decorative type, core of block board construction with frame of 1 st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters - 35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	sqm	3810.14
9.21.2	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part 1) non - decorative type, core of block board construction with frame of 1 st class hard wood	sqm	3472.98

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters - 30 mm thick including ISI marked Stainless Steel butt hinges with necessary screws		
9.21.3	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part 1) non - decorative type, core of block board construction with frame of 1 st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters - 25 mm thick (for cupboard) including ISI marked nickel plated bright finished M.S.piano hinges with necessary screws	sqm	3103.84
9.22.1	Extra for providing and fixing flush doors with decorative veneering instead of non decorative ISI marked flush door shutters conforming to IS 2202 (part1) - on one side only	sqm	640.19
9.23	Extra for providing lipping with teak wood battens 25 mm minimum depth on all edges of flush door shutters (over all area of door shutter to be measured)	sqm	792.41
9.24.1	Extra for providing vision panel not exceeding 0.1 sqm in all type of flush doors (cost of glass excluded) (overall area of door shutter to be measured) - Rectangular or square	sqm	219.08
9.24.2	Extra for providing vision panel not exceeding 0.1 sqm in all type of flush doors (cost of glass excluded) (overall area of door shutter to be measured) - Circular	sqm	226.20
9.25.1	Extra if louvers (not exceeding 0.2 sqm) are provided in flush door shutters (overall area of door shutters to be measured) - Decorative type door	sqm	453.82
9.26	Extra for cutting rebate in flush door shutters (Total area of the shutter to be measured)	sqm	88.20
9.27.1.1.II	Providing and fixing wire gauge shutters using galvanized M.S.wire gauge average width of aperture 1.4 mm in both directions with ire of dia 0.63mm, for doors, windows and clerestory windows with hinges and necessary screws - 35mm thick shutters - with ISI marked M.S.pressed butt hinges bright finished of required size - 35mm thick shutters - with ISI marked M.S.pressed butt hinges bright finished of required	sqm	7498.87

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	size - Irul wood		
9.27.1.1.1J	Providing and fixing wire gauge shutters using galvanized M.S.wire gauge average width of aperture 1.4 mm in both directions with ire of dia 0.63mm, for doors, windows and clerestory windows with hinges and necessary screws - 35mm thick shutters - with ISI marked M.S.pressed butt hinges bright finished of required size - 35mm thick shutters - with ISI marked M.S.pressed butt hinges bright finished of required size - Jack wood	sqm	7718.91
9.27.1.1.1M	Providing and fixing wire gauge shutters using galvanized M.S.wire gauge average width of aperture 1.4 mm in both directions with ire of dia 0.63mm, for doors, windows and clerestory windows with hinges and necessary screws - 35mm thick shutters - with ISI marked M.S.pressed butt hinges bright finished of required size - Malabar I st class teak wood	sqm	10477.97
9.27.1.1.2I	Providing and fixing wire gauge shutters using galvanized M.S.wire gauge average width of aperture 1.4 mm in both directions with ire of dia 0.63mm, for doors, windows and clerestory windows with hinges and necessary screws - 35mm thick shutters - with ISI marked M.S.pressed butt hinges bright finished of required size - Kiln seasoned and chemically treated Irul wood	sqm	7544.87
9.27.1.1.2J	Providing and fixing wire gauge shutters using galvanized M.S.wire gauge average width of aperture 1.4 mm in both directions with ire of dia 0.63mm, for doors, windows and clerestory windows with hinges and necessary screws - 35mm thick shutters - with ISI marked M.S.pressed butt hinges bright finished of required size - Kiln seasoned and chemically treated Jack wood	sqm	7764.92
9.27.1.1.3I	Providing and fixing wire gauge shutters using galvanized M.S.wire gauge average width of aperture 1.4 mm in both directions with ire of dia 0.63mm, for doors, windows and clerestory windows with hinges and necessary screws - 35mm thick shutters - with ISI marked M.S.pressed butt hinges bright finished of required size - Kiln seasoned selected class of Irul wood	sqm	7533.05
9.27.1.1.3J	Providing and fixing wire gauge shutters using galvanized M.S.wire gauge average width of aperture 1.4 mm in both directions with ire of dia 0.63mm, for doors, windows and	sqm	7753.11

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	clerestory windows with hinges and necessary screws - 35mm thick shutters - with ISI marked M.S.pressed butt hinges bright finished of required size - Kiln seasoned selected class of Jack wood		
9.27.1.2.1I	Providing and fixing wire gauge shutters using galvanized M.S.wire gauge average width of aperture 1.4 mm in both directions with ire of dia 0.63mm, for doors, windows and clerestory windows with hinges and necessary screws - 35mm thick shutters - with ISI marked Stainless steel butt hinges of required size - Irul wood	sqm	7666.63
9.27.1.2.1J	Providing and fixing wire gauge shutters using galvanized M.S.wire gauge average width of aperture 1.4 mm in both directions with ire of dia 0.63mm, for doors, windows and clerestory windows with hinges and necessary screws - 35mm thick shutters - with ISI marked Stainless steel butt hinges of required size -Jack wood	sqm	7886.67
9.27.1.2.1M	Providing and fixing wire gauge shutters using galvanized M.S.wire gauge average width of aperture 1.4 mm in both directions with ire of dia 0.63mm, for doors, windows and clerestory windows with hinges and necessary screws - 35mm thick shutters - with ISI marked Stainless steel butt hinges of required size - Malabar Ist class teak wood	sqm	10645.74
9.27.1.2.2I	Providing and fixing wire gauge shutters using galvanized M.S.wire gauge average width of aperture 1.4 mm in both directions with ire of dia 0.63mm, for doors, windows and clerestory windows with hinges and necessary screws - 35mm thick shutters - with ISI marked Stainless steel butt hinges of required size -Kiln seasoned and chemically treated Irul wood	sqm	7712.63
9.27.1.2.2J	Providing and fixing wire gauge shutters using galvanized M.S.wire gauge average width of aperture 1.4 mm in both directions with ire of dia 0.63mm, for doors, windows and clerestory windows with hinges and necessary screws - 35mm thick shutters - with ISI marked Stainless steel butt hinges of required size -Kiln seasoned and chemically treated Jack wood	sqm	7932.68
9.27.1.2.3I	Providing and fixing wire gauge shutters using galvanized M.S.wire gauge average width of aperture 1.4 mm in both directions with ire of dia 0.63mm, for doors, windows and clerestory windows with hinges and necessary screws - 35mm thick shutters - with ISI marked Stainless steel butt hinges of	sqm	7700.81

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	required size -Kiln seasoned selected class of Irul wood		
9.27.1.2.3J	Providing and fixing wire gauge shutters using galvanized M.S.wire gauge average width of aperture 1.4 mm in both directions with ire of dia 0.63mm, for doors, windows and clerestory windows with hinges and necessary screws - 35mm thick shutters - with ISI marked Stainless steel butt hinges of required size -Kiln seasoned selected class of Jack wood	sqm	7920.87
9.27.2.1.1I	Providing and fixing wire gauge shutters using galvanized M.S.wire gauge average width of aperture 1.4 mm in both directions with ire of dia 0.63mm, for doors, windows and clerestory windows with hinges and necessary screws - 30mm thick shutters - with ISI marked M.S.pressed butt hinges bright finished of required size - 30mm thick shutters - with ISI marked M.S.pressed butt hinges bright finished of required size - Irul wood	sqm	6633.06
9.27.2.1.1J	Providing and fixing wire gauge shutters using galvanized M.S.wire gauge average width of aperture 1.4 mm in both directions with ire of dia 0.63mm, for doors, windows and clerestory windows with hinges and necessary screws - 30mm thick shutters - with ISI marked M.S.pressed butt hinges bright finished of required size - 30mm thick shutters - with ISI marked M.S.pressed butt hinges bright finished of required size - Jack wood	sqm	6821.43
9.27.2.1.1M	Providing and fixing wire gauge shutters using galvanized M.S.wire gauge average width of aperture 1.4 mm in both directions with ire of dia 0.63mm, for doors, windows and clerestory windows with hinges and necessary screws - 30mm thick shutters - with ISI marked M.S.pressed butt hinges bright finished of required size - 30mm thick shutters - with ISI marked M.S.pressed butt hinges bright finished of required size - Malabar Ist class teak wood	sqm	9183.27
9.27.2.1.2I	Providing and fixing wire gauge shutters using galvanized M.S.wire gauge average width of aperture 1.4 mm in both directions with ire of dia 0.63mm, for doors, windows and clerestory windows with hinges and necessary screws - 30mm thick shutters - with ISI marked M.S.pressed butt hinges bright finished of required size - 30mm thick shutters - with ISI marked M.S.pressed butt hinges bright finished of required size - Kiln seasoned and chemically treated Irul wood	sqm	6672.45

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.27.2.1.2J	Providing and fixing wire gauge shutters using galvanized M.S.wire gauge average width of aperture 1.4 mm in both directions with wire of dia 0.63mm, for doors, windows and clerestory windows with hinges and necessary screws - 30mm thick shutters - with ISI marked M.S.pressed butt hinges bright finished of required size - 30mm thick shutters - with ISI marked M.S.pressed butt hinges bright finished of required size - Kiln seasoned and chemically treated Jack wood	sqm	6860.82
9.27.2.1.3I	Providing and fixing wire gauge shutters using galvanized M.S.wire gauge average width of aperture 1.4 mm in both directions with wire of dia 0.63mm, for doors, windows and clerestory windows with hinges and necessary screws - 30mm thick shutters - with ISI marked M.S.pressed butt hinges bright finished of required size - 30mm thick shutters - with ISI marked M.S.pressed butt hinges bright finished of required size - Kiln seasoned selected class of Irul wood	sqm	6662.33
9.27.2.1.3J	Providing and fixing wire gauge shutters using galvanized M.S.wire gauge average width of aperture 1.4 mm in both directions with wire of dia 0.63mm, for doors, windows and clerestory windows with hinges and necessary screws - 30mm thick shutters - with ISI marked M.S.pressed butt hinges bright finished of required size - 30mm thick shutters - with ISI marked M.S.pressed butt hinges bright finished of required size - Kiln seasoned selected class of Jack wood	sqm	6850.70
9.27.2.2.1I	Providing and fixing wire gauge shutters using galvanized M.S.wire gauge average width of aperture 1.4 mm in both directions with wire of dia 0.63mm, for doors, windows and clerestory windows with hinges and necessary screws - 30mm thick shutters - with ISI marked Stainless steel butt hinges of required size - Irul wood	sqm	6800.83
9.27.2.2.1J	Providing and fixing wire gauge shutters using galvanized M.S.wire gauge average width of aperture 1.4 mm in both directions with wire of dia 0.63mm, for doors, windows and clerestory windows with hinges and necessary screws - 30mm thick shutters - with ISI marked Stainless steel butt hinges of required size -Jack wood	sqm	6989.19
9.27.2.2.1M	Providing and fixing wire gauge shutters using galvanized M.S.wire gauge average width of aperture 1.4 mm in both directions with wire of dia 0.63mm, for doors, windows and clerestory windows with hinges and necessary screws - 30mm	sqm	9351.04

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	thick shutters - with ISI marked Stainless steel butt hinges of required size - Malabar Ist class teak wood		
9.27.2.2.2I	Providing and fixing wire gauge shutters using galvanized M.S.wire gauge average width of aperture 1.4 mm in both directions with wire of dia 0.63mm, for doors, windows and clerestory windows with hinges and necessary screws - 30mm thick shutters - with ISI marked Stainless steel butt hinges of required size - Kiln seasoned and chemically treated Irul wood	sqm	6840.22
9.27.2.2.2J	Providing and fixing wire gauge shutters using galvanized M.S.wire gauge average width of aperture 1.4 mm in both directions with wire of dia 0.63mm, for doors, windows and clerestory windows with hinges and necessary screws - 30mm thick shutters - with ISI marked Stainless steel butt hinges of required size - Kiln seasoned and chemically treated Jack wood	sqm	7028.58
9.27.2.2.3I	Providing and fixing wire gauge shutters using galvanized M.S.wire gauge average width of aperture 1.4 mm in both directions with wire of dia 0.63mm, for doors, windows and clerestory windows with hinges and necessary screws - 30mm thick shutters - with ISI marked Stainless steel butt hinges of required size - Kiln seasoned Selected class of Irul wood	sqm	6830.10
9.27.2.2.3J	Providing and fixing wire gauge shutters using galvanized M.S.wire gauge average width of aperture 1.4 mm in both directions with wire of dia 0.63mm, for doors, windows and clerestory windows with hinges and necessary screws - 30mm thick shutters - with ISI marked Stainless steel butt hinges of required size - Kiln seasoned Selected class of Jack wood	sqm	7018.47
9.31.1	Providing and fixing wire gauge laminated veneer lumber shutters conforming to IS : 14616 , and as per TADS 15 : 2001 (Part B) using galvanised wire gauge with average width of aperture 1.4 mm in both directions with wire of dia 0.63 mm as per IS :1568 for doors, windows and clerestory windows, fixing with butt hinges of required size with necessary screws, as per direction of Engineer-in-charges (Note:- Butt hinges and necessary screws shall be paid separately) 35 mm thick shutters	sqm	3801.23
9.31.2	Providing and fixing wire gauge laminated veneer lumber shutters conforming to IS : 14616 , and as per TADS 15 : 2001 (Part B) using galvanised wire gauge with average width of aperture 1.4 mm in both directions with wire of dia 0.63 mm as per IS :1568 for doors, windows and clerestory windows,	sqm	3439.89

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	fixing with butt hinges of required size with necessary screws, as per direction of Engineer-in-charges (Note:- Butt hinges and necessary screws shall be paid separately) 30 mm thick shutters		
9.32B	Providing 50x50x50 mm Burma teak wood plugs including cutting brick work and fixing in cement moratr 1:3 (1 cement : 3 fine aggregate) and making good the walls etc	each	51.26
9.32F	Providing 50x50x50 mm Forest teak wood plugs including cutting brick work and fixing in cement moratr 1:3 (1 cement : 3 fine aggregate) and making good the walls etc	each	31.00
9.32I	Providing 50x50x50 mm Irul wood plugs including cutting brick work and fixing in cement moratr 1:3 (1 cement : 3 fine aggregate) and making good the walls etc	each	55.10
9.32J	Providing 50x50x50 mm Jack wood plugs including cutting brick work and fixing in cement moratr 1:3 (1 cement : 3 fine aggregate) and making good the walls etc	each	58.39
9.32M	Providing 50x50x50 mm Malabar I st class teak wood plugs including cutting brick work and fixing in cement moratr 1:3 (1 cement : 3 fine aggregate) and making good the walls etc	each	63.86
9.32P	Providing 50x50x50 mm Padak wood plugs including cutting brick work and fixing in cement moratr 1:3 (1 cement : 3 fine aggregate) and making good the walls etc	each	46.19
9.32V	Providing 50x50x50 mm Vengai wood plugs including cutting brick work and fixing in cement moratr 1:3 (1 cement : 3 fine aggregate) and making good the walls etc	each	45.35
9.33.1	Providing and fixing expandable fasteners of specified size with necessary plastic sleeves and galvanised M.S.screws including drilling holes in masonry work / C.C / R.C.C and making good etc.complete - 25mm long	each	21.57
9.33.2	Providing and fixing expandable fasteners of specified size with necessary plastic sleeves and galvanised M.S.screws including drilling holes in masonry work / C.C / R.C.C and making good etc.complete - 32 mm long	each	25.89
9.33.3	Providing and fixing expandable fasteners of specified size	each	27.32

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	with necessary plastic sleeves and galvanised M.S.screws including drilling holes in masonry work / C.C / R.C.C and making good etc.complete - 40 mm long		
9.33.4	Providing and fixing expandable fasteners of specified size with necessary plastic sleeves and galvanised M.S.screws including drilling holes in masonry work / C.C / R.C.C and making good etc.complete - 50 mm long	each	31.58
9.34.1M	Providing and fixing Malabar Ist class teak wood plain lining tongued and grooved , including wooden plugs complete with necessary screws and priming coat on unexposed surface - 40 mm thick	sqm	15389.01
9.34.2M	Providing and fixing Malabar Ist class teak wood plain lining tongued and grooved , including wooden plugs complete with necessary screws and priming coat on unexposed surface - 25 mm thick	sqm	9990.11
9.34.3M	Providing and fixing Malabar Ist class teak wood plain lining tongued and grooved , including wooden plugs complete with necessary screws and priming coat on unexposed surface - 20 mm thick	sqm	8075.69
9.34.4M	Providing and fixing Malabar Ist class teak wood plain lining tongued and grooved , including wooden plugs complete with necessary screws and priming coat on unexposed surface - 12 mm thick	sqm	5196.28
9.35.1	Providing and fixing in wall lining flat pressed three layer (Medium density) particle board or graded wood Pre - laminated one side decorative lamination and other side balancing lamination grade -1 , type -II , IS :12823 marked , including priming coat on unexposed surface , with necessary fixing arrangement and screws etc. complete - 12 mm thick	sqm	1584.73
9.35.2	Providing and fixing in wall lining flat pressed three layer (Medium density) particle board or graded wood Pre - laminated one side decorative lamination and other side balancing lamination grade -1 , type -II , IS :12823 marked , including priming coat on unexposed surface , with necessary fixing arrangement and screws etc. complete - 18 mm thick	sqm	1694.28
9.35.3	Providing and fixing in wall lining flat pressed three layer	sqm	1911.80

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	(Medium density) particle board or graded wood Pre - laminated one side decorative lamination and other side balancing lamination grade -1 , type -II , IS :12823 marked , including priming coat on unexposed surface , with necessary fixing arrangement and screws etc. complete - 25 mm thick		
9.36.1I	Providing and fixing specified wood frame work consisting of battens 50x25 mm fixed with rawl plug and drilling necessary holes for rawl plug etc. including priming coat complete - Kiln seasoned and chemically treated Irul wood	cum	336109.76
9.36.1J	Providing and fixing specified wood frame work consisting of battens 50x25 mm fixed with rawl plug and drilling necessary holes for rawl plug etc. including priming coat complete - Kiln seasoned and chemically treated Jack wood	cum	345875.52
9.37.1	Providing and fixing plywood 4mm thick , one side decorative veneer conforming to IS: 1328 (type-1), for plain lining / cladding with necessary screws , including priming coat on unexposed surface with - Decorative veneer facings of approved manufacture	sqm	2804.81
9.38	Providing and fixing 4mm thick coir veneer board , ISI marked IS : 14842 , plain lining with necessary screws , priming coat on unexposed surface etc., complete	sqm	2087.80
9.39.1	Providing and fixing skirting with Pre-laminated (one side decorative and other side balancing lamination) flat pressed 3 layer or graded particle board (medium density) grade 1, type II , IS : 12823 marked , with necessary fixing arrangements and screws , including drilling necessary holes for rawl plugs etc. and priming coat on unexposed surface complete - 18 mm thick	sqm	2069.19
9.39.2	Providing and fixing skirting with Pre-laminated (one side decorative and other side balancing lamination) flat pressed 3 layer or graded particle board (medium density) grade 1, type II , IS : 12823 marked , with necessary fixing arrangements and screws , including drilling necessary holes for rawl plugs etc. and priming coat on unexposed surface complete - 25 mm thick	sqm	2286.71
9.40.1.1M	Providing and fixing wooden moulded beading to door and window frames with iron screws , plugs and priming coat on unexposed surface etc. complete- Malabar I st class teak wood - 50 x 12 mm	metre	396.03

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.40.1.2M	Providing and fixing wooden moulded beading to door and window frames with iron screws , plugs and priming coat on unexposed surface etc. complete- Malabar 1st class teak wood - 50 x 20 mm	metre	541.47
9.40.2.1I	Providing and fixing wooden moulded beading to door and window frames with iron screws , plugs and priming coat on unexposed surface etc. complete- - Kiln seasoned and chemically treated Irul wood - 50 x 12 mm	metre	314.08
9.40.2.1J	Providing and fixing wooden moulded beading to door and window frames with iron screws , plugs and priming coat on unexposed surface etc. complete-- Kiln seasoned and chemically treated Jack wood - 50 x 12 mm	metre	320.45
9.40.2.2I	Providing and fixing wooden moulded beading to door and window frames with iron screws , plugs and priming coat on unexposed surface etc. complete - Kiln seasoned and chemically treated Irul wood - 50 x 20 mm	metre	405.34
9.40.2.2J	Providing and fixing wooden moulded beading to door and window frames with iron screws , plugs and priming coat on unexposed surface etc. complete - Kiln seasoned and chemically treated Jack wood - 50 x 20 mm	metre	415.52
9.41.1M	Providing and fixing plain jaffri of 35 X 10 mm laths placed 35 mm apart (frames to be paid separately) , including fixing 50 X 12 mm beading complete with - Malabar 1st class teak wood	sqm	6364.75
9.42I	Providing and fixing 18 mm thick , 150 mm wide pelmet of flat pressed 3 layer or graded wood particle board medium density grade 1, ISI marked and conforming to IS : 3087 marked , including top cover of 6mm commercial ply wood conforming to IS : 303 BWR grade , nickel plated M.S.pipe 20 mm dia (heavy type) curtain rod with nickel plated brackets , including fixing with 25 x 3 mm M.S.flat 10 cm long fixed to pelmet with Irul wood cleats of size 100 mm x 40 mm x 40 mm on both inner side of pelmet and rawl plugs 75mm long etc.all complete	metre	1038.95
9.42J	Providing and fixing 18 mm thick , 150 mm wide pelmet of flat pressed 3 layer or graded wood particle board medium density grade 1, ISI marked and conforming to IS : 3087 marked , including top cover of 6mm commercial ply wood conforming to IS : 303 BWR grade , nickel plated M.S.pipe 20 mm dia	metre	1053.74

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	(heavy type) curtain rod with nickel plated brackets , including fixing with 25 x 3 mm M.S.flat 10 cm long fixed to pelmet with jack wood cleats of size 100 mm x 40 mm x 40 mm on both inner side of pelmet and rawl plugs 75mm long etc.all complete		
9.43I	Providing and fixing 18 mm thick , 150mm wide pelmet of coir Veneer board ISI marked IS : 14842 , including top cover of 6mm coir veneer board , nickle plated M.S.Pipe 20mm dia (heavy type) curtain rod with nickel plated brackets , including fixing with 25 X 3 mm M.S. flat 10 cm long fixed to pelmet with Irul wood cleats of size 100 mm X 40 mm X 40 mm on both inner side of pelmet and rawl plugs 75 mm long etc , all complete	metre	1161.64
9.43J	Providing and fixing 18 mm thick , 150mm wide pelmet of coir Veneer board ISI marked IS : 14842 , including top cover of 6mm coir veneer board , nickle plated M.S.Pipe 20mm dia (heavy type) curtain rod with nickel plated brackets , including fixing with 25 X 3 mm M.S. flat 10 cm long fixed to pelmet with Jack wood cleats of size 100 mm X 40 mm X 40 mm on both inner side of pelmet and rawl plugs 75 mm long etc , all complete	metre	1176.44
9.44.1	Extra for using veneered particle board conforming to IS : 3097 Grade 1, in item of pelmet 18mm thick 150 mm wide - Non Decorative veneer on both sides	metre	30.05
9.44.2	Extra for using veneered particle board conforming to IS : 3097 Grade 1, in item of pelmet 18mm thick 150 mm wide - Particle board with decorative veneer on both sides	metre	210.32
9.45	Providing and fixing teak wood lipping of size 25 X3 mm in pelmet	metre	108.83
9.46.1	Providing and fixing chromium plated brass curtain rod having wall thickness of 1.25 mm, with two chromium plated brass brackets fixed with C.P.brass screws and PVC sleeves etc.,wherever necessary complete - 12mm dia	metre	376.32
9.46.2	Providing and fixing chromium plated brass curtain rod having wall thickness of 1.25 mm, with two chromium plated brass brackets fixed with C.P.brass screws and PVC sleeves etc.,wherever necessary complete - 20mm dia	metre	532.81

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.46.3	Providing and fixing chromium plated brass curtain rod having wall thickness of 1.25 mm, with two chromium plated brass brackets fixed with C.P.brass screws and PVC sleeves etc.,wherever necessary complete - 25mm dia	metre	642.35
9.47.1	Providing and fixing nickel plated M.S.pipe curtain rods with nickel plated brackets - 20 mm dia (heavy type)	metre	192.47
9.47.2	Providing and fixing nickel plated M.S.pipe curtain rods with nickel plated brackets - 25 mm dia (heavy type)	metre	205.99
9.48.1	Providing and fixing M.S.grills of required pattern in frames of windows etc with M.S. flats , square or round bars etc. including priming coat with approved steel primer all complete - Fixed to steel windows by welding	kg	262.59
9.48.2	Providing and fixing M.S.grills of required pattern in frames of windows etc with M.S. flats , square or round bars etc. including priming coat with approved steel primer all complete - Fixed to openings / wooden frames with rawl plugs screws etc	kg	277.63
9.49M	Providing and fixing expanded metal 20 X 60 mm strands 3.25 mm wide and 1.6 mm thick for windows etc. including 62 X 19 mm beading of Malabar Ist class teak wood and priming coat with approved steel primer all complete	sqm	2676.58
9.50M	Providing and fixing hard drawn steel wire fabric 75 x 25 mm mesh of weight not less than 7.75 Kg per sqm to window frames etc. including 62 x19 mm beading of malabar Ist class teak wood and priming coat with approved steel primer all complete	sqm	3006.84
9.51.1M	Providing and fixing fly proof galvanized M.S. wire gauge to windows and clerestory windows using wire gauge with average width of aperture 1.4mm in both directions with wire of dia 0.63 mm all complete - with Malabar Ist class teak wood beading 62 X 19 mm	sqm	2355.36
9.51.2	Providing and fixing fly proof galvanized M.S. wire gauge to windows and clerestory windows using wire gauge with average width of aperture 1.4mm in both directions with wire of dia 0.63 mm all complete - with 12 mm mild steel U beading	sqm	1172.91

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.52	Deduct for fixing 75 X 25 mm hard drawn steel wire fabric of weight not less than 7.75 kg per sqm in panelled and glazed door and window shutter instead of glass sheet 4 mm thick (weight not less than 10kg /sqm)	sqm	384.11
9.53	Providing 40 X 5 mm flat iron hold fast 400 mm long including fixing to frame with 10 mm diameter bolts, nuts and wooden plugs and embeddings in cement concrete block 300 x100 x 150 mm 1:3:6 mix (1 cement : 3 fine aggregate : 6 graded stone aggregate 20mm nominal size)	each	262.96
9.54.1I	Providing beams including hoisting , fixing in position and applying wood preservative for the unexposed surfaces etc . Complete with - Irul wood	cum	194825.07
9.54.1J	Providing beams including hoisting , fixing in position and applying wood preservative for the unexposed surfaces etc . Complete with - Jack wood	cum	218761.13
9.54.2M	Providing beams including hoisting , fixing in position and applying wood preservative for the unexposed surfaces etc . Complete with - Malabar Ist class teak wood	cum	258654.48
9.55.1	Providing and fixing ISI marked IS: 1341 M.S. pressed butt hinges bright finished with necessary screws etc. complete - 125 X 65 X 2.12 mm	each	73.34
9.55.2	Providing and fixing ISI marked IS: 1341 M.S. pressed butt hinges bright finished with necessary screws etc. complete - 100 X 58 x 1.90 mm	each	62.16
9.55.3	Providing and fixing ISI marked IS: 1341 M.S. pressed butt hinges bright finished with necessary screws etc. complete - 75 x 47 x 1.70 mm	each	53.34
9.55.4	Providing and fixing ISI marked IS: 1341 M.S. pressed butt hinges bright finished with necessary screws etc. complete - 50X37X1.50 mm	each	26.97
9.56.1	Providing and fixing ISI marked IS : 1341 , M.S. heavy weight bright finished butt hinges with necessary screws etc.complete - 125 X 90 X 4.00 mm	each	105.21

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.56.2	Providing and fixing ISI marked IS : 1341 , M.S. heavy weight bright finished butt hinges with necessary screws etc.complete - 100 X 75 X 3.50 mm	each	74.39
9.56.3	Providing and fixing ISI marked IS : 1341 , M.S. heavy weight bright finished butt hinges with necessary screws etc.complete - 75 X 60 X 3.10 mm	each	56.18
9.56.4	Providing and fixing ISI marked IS : 1341 , M.S. heavy weight bright finished butt hinges with necessary screws etc.complete - 50 X 40X 2.50 mm	each	30.10
9.57.1	Providing and fixing ISI marked IS:1341 oxidised M.S pressed butt hinges with necessary screws etc. complete (Copper oxidised as per IS 1378) - 125 X 65 X 2.12 mm	each	82.13
9.57.1R	Providing and fixing ISI marked powder coating pressed butt hinges with necessary screws etc. complete - 125 X 65 X 2.12 mm	each	97.35
9.57.2	Providing and fixing ISI marked IS:1341 oxidised M.S pressed butt hinges with necessary screws etc. complete (Copper oxidised as per IS 1378) - 100 X 58 X 1.90 mm	each	68.70
9.57.2R	Providing and fixing ISI marked powder coating pressed butt hinges with necessary screws etc. complete - 100 X 58 X 1.90 mm	each	76.01
9.57.3	Providing and fixing ISI marked IS:1341 oxidised M.S pressed butt hinges with necessary screws etc. complete (Copper oxidised as per IS 1378) - 75 X 47 X 1.70 mm	each	55.16
9.57.4	Providing and fixing ISI marked IS:1341 oxidised M.S pressed butt hinges with necessary screws etc. complete (Copper oxidised as per IS 1378) - 50X37X1.50mm	each	29.16
9.57.4R	Providing and fixing ISI marked powder coating pressed butt hinges with necessary screws etc. complete - 50X37X1.50mm	each	32.01
9.58.1	Providing and fixing ISI marked IS : 1341 oxidised M.S.pressed Parliamentary hinges with necessary screws etc , complete (Copper oxidised as per IS 1378) - 150X 125X 27X 2.80mm	each	135.35

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.58.1R	Providing and fixing ISI marked powder coating pressed Parliamentary hinges with necessary screws etc , complete - 150X 125X 27X 2.80mm	each	160.02
9.58.2	Providing and fixing ISI marked IS : 1341 oxidised M.S.pressed Parliamentary hinges with necessary screws etc , complete (Copper oxidised as per IS 1378) - 125 X 125 X 27 X 2.80 mm	each	129.09
9.58.2R	Providing and fixing ISI marked powder coating Parliamentary hinges with necessary screws etc , complete - 125 X 125 X 27 X 2.80 mm	each	152.19
9.58.3	Providing and fixing ISI marked IS : 1341 oxidised M.S.pressed Parliamentary hinges with necessary screws etc , complete (Copper oxidised as per IS 1378) - 100 X 125 X 27 X 2.80 mm	each	108.75
9.58.3R	Providing and fixing ISI marked powder coating pressed Parliamentary hinges with necessary screws etc , complete - 100 X 125 X 27 X 2.80 mm	each	126.73
9.58.4	Providing and fixing ISI marked IS : 1341 oxidised M.S.pressed Parliamentary hinges with necessary screws etc , complete (Copper oxidised as per IS 1378) - 75 X 100 X 20 X 2.24 mm	each	95.77
9.58.4R	Providing and fixing ISI marked powder coating pressed Parliamentary hinges with necessary screws etc , complete - 75 X 100 X 20 X 2.24 mm	each	111.22
9.59.1	Providing and fixing ISI marked oxidised M.S.single acting spring hinges with necessary screws etc. complete (Copper oxidised as per IS1378)- 150 mm	each	289.08
9.59.1R	Providing and fixing ISI marked powder coating single acting spring hinges with necessary screws etc. complete - 150 mm	each	346.27
9.59.2	Providing and fixing ISI marked oxidised M.S.single acting spring hinges with necessary screws etc. complete (Copper oxidised as per IS1378) - 125 mm	each	269.16

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.59.2R	Providing and fixing ISI marked powder coating single acting spring hinges with necessary screws etc. complete - 125 mm	each	317.82
9.59.3	Providing and fixing ISI marked oxidised M.S.single acting spring hinges with necessary screws etc. complete (Copper oxidised as per IS1378) - 100 mm	each	220.74
9.59.3R	Providing and fixing ISI marked powder coating single acting spring hinges with necessary screws etc. complete - 100 mm	each	255.22
9.60.1	Providing and fixing ISI marked IS:453 oxidised M.S.double acting spring hinges with necessary screws etc. complete (Copper oxidised as per IS 1378) - 150mm	each	277.70
9.60.1R	Providing and fixing powder coating .double acting spring hinges with necessary screws etc. complete - 150mm	each	332.04
9.60.2	Providing and fixing ISI marked IS:453 oxidised M.S.double acting spring hinges with necessary screws etc. complete (Copper oxidised as per IS 1378) -125 mm	each	269.16
9.60.2R	Providing and fixing powder coating double acting spring hinges with necessary screws etc. complete - 125 mm	each	324.93
9.60.3	Providing and fixing ISI marked IS:453 oxidised M.S.double acting spring hinges with necessary screws etc. complete (Copper oxidised as per IS 1378) -100 mm	each	213.62
9.60.3R	Providing and fixing powder coating .double acting spring hinges with necessary screws etc. complete - 100 mm	each	248.11
9.61.1	Providing M.S.Piano hinges ISI marked IS : 3818 finished with nickel Chromium plating grade I as per IS : 1068 and fixing with necessary screws etc.complete - Overall width 35 mm	metre	462.08
9.61.2	Providing M.S.Piano hinges ISI marked IS : 3818 finished with nickel Chromium plating grade I as per IS : 1068 and fixing with necessary screws etc.complete - - Overall width 50 mm	metre	406.60
9.61.3	Providing M.S.Piano hinges ISI marked IS : 3818 finished with nickel Chromium plating grade I as per IS : 1068 and fixing with necessary screws etc.complete - - Overall width 65 mm	metre	423.66

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.62.1	Providing and fixing ISI marked oxidised M.S.sliding door bolts with nuts and screws etc.complte (Copper oxidised as per IS 1378) - 300 X 16 mm	each	267.87
9.62.1R	Providing and fixing ISI marked powder coating sliding door bolts with nuts and screws etc.complte - 300 X 16 mm	each	314.64
9.62.2	Providing and fixing ISI marked oxidised M.S.sliding door bolts with nuts and screws etc.complte (Copper oxidised as per IS 1378) - 250 X 16 mm	each	227.55
9.62.2R	Providing and fixing ISI marked powder coating sliding door bolts with nuts and screws etc.complte - 250 X 16 mm	each	347.62
9.63.1	Providing and fixing ISI marked oxidised M.S. tower bolt black finish (Barrel type) with necessary screws etc.complete (Copper oxidised as per IS 1378) - 250 x10 mm	each	142.83
9.63.1R	Providing and fixing ISI marked powder coating tower bolt black finish (Barrel type) with necessary screws etc.complete - 250 x10 mm	each	131.60
9.63.2	Providing and fixing ISI marked oxidised M.S. tower bolt black finish (Barrel type) with necessary screws etc.complete (Copper oxidised as per IS 1378) - 200 x10 mm	each	101.04
9.63.2R	Providing and fixing ISI marked powder coating tower bolt black finish (Barrel type) with necessary screws etc.complete - 200 x10 mm	each	113.10
9.63.3	Providing and fixing ISI marked oxidised M.S. tower bolt black finish (Barrel type) with necessary screws etc.complete (Copper oxidised as per IS 1378) - 150x10mm	each	91.96
9.63.3R	Providing and fixing ISI marked powder coating tower bolt black finish (Barrel type) with necessary screws etc.complete - 150x10mm	each	108.83
9.63.4	Providing and fixing ISI marked oxidised M.S. tower bolt black finish (Barrel type) with necessary screws etc.complete (Copper oxidised as per IS 1378) - 100x10mm	each	80.44

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.63.4R	Providing and fixing ISI marked powder coating tower bolt black finish (Barrel type) with necessary screws etc.complete - 100x10mm	each	98.73
9.64	Providing and fixing ISI marked 85 x 42 mm oxidised M.S.pull bolt lock conforming to IS : 7534 with necessary screws bolts, nut and washers etc. complete (Copper oxidised as per IS 1378)	each	95.67
9.64R	Providing and fixing ISI marked 85 x 42 mm powder coating .pull bolt lock conforming to IS : 7534 with necessary screws bolts, nut and washers etc. complete	each	112.74
9.65.1	Providing and fixing ISI marked oxidised MS door latches conforming to IS : 5930 with screws etc.complete (Copper oxidised as per IS 1378) - 300 x20x6 mm	each	127.40
9.65.1R	Providing and fixing ISI marked powder coating door latches conforming to IS : 5930 with screws etc.complete - 300 x20x6 mm	each	217.24
9.65.2	Providing and fixing ISI marked oxidised MS door latches conforming to IS : 5930 with screws etc.complete (Copper oxidised as per IS 1378) - 250 x20x6 mm	each	103.21
9.65.2R	Providing and fixing ISI marked powder coating door latches conforming to IS : 5930 with screws etc.complete - 250 x20x6 mm	each	217.24
9.66.1	Providing and fixing ISI marked oxidised M.S.handles conforming to IS : 4992 with necessary screws etc.complete (Copper oxidised as per IS 1378) - 125 mm	each	67.58
9.66.1R	Providing and fixing ISI marked powder coating handles conforming to IS : 4992 with necessary screws etc.complete - 125 mm	each	154.93
9.66.2	Providing and fixing ISI marked oxidised M.S.handles conforming to IS : 4992 with necessary screws etc.complete (Copper oxidised as per IS 1378)- 100 mm	each	56.19
9.66.2R	Providing and fixing ISI marked powder coating handles	each	123.63

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	conforming to IS : 4992 with necessary screws etc.complete - 100 mm		
9.66.3	Providing and fixing ISI marked oxidised M.S.handles conforming to IS : 4992 with necessary screws etc.complete (Copper oxidised as per IS 1378) - 75mm	each	51.93
9.66.3R	Providing and fixing ISI marked powder coating handles conforming to IS : 4992 with necessary screws etc.complete - 75mm	each	95.17
9.67.1	Providing and fixing oxidised M.S. hasp and staple (safety type) conforming to IS : 363 with necessary screws etc complste (Copper oxidised as per IS 1378) - 150 mm	each	46.66
9.67.1R	Providing and fixing powder coating hasp and staple (safety type) conforming to IS : 363 with necessary screws etc complste - 150 mm	each	53.49
9.67.2	Providing and fixing oxidised M.S. hasp and staple (safety type) conforming to IS : 363 with necessary screws etc complete (Copper oxidised as per IS 1378) - 115 mm	each	42.47
9.67.2R	Providing and fixing powder coating hasp and staple (safety type) conforming to IS : 363 with necessary screws etc complste - 115 mm	each	49.37
9.67.3	Providing and fixing oxidised M.S. hasp and staple (safety type) conforming to IS : 363 with necessary screws etc complete (Copper oxidised as per IS 1378) - 90 mm	each	37.06
9.67.3R	Providing and fixing powder coating hasp and staple (safety type) conforming to IS : 363 with necessary screws etc complste - 90 mm	each	45.10
9.68.1	Providing and fixing oxidised M.S.casement stays (straight peg type) with necessary screws etc. complete (Copper oxidised as per IS 1378) - 300 mm weighing not less than 330 gms	each	90.00
9.68.1R	Providing and fixing powder coating casement stays (straight peg type) with necessary screws etc. complete - 300 mm weighing not less than 200 gms	each	67.58

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.68.2	Providing and fixing oxidised M.S.casement stays (straight peg type) with necessary screws etc. complete (Copper oxidised as per IS 1378) - 250 mm weighing not less than 280 gms	each	50.79
9.68.2R	Providing and fixing powder coating casement stays (straight peg type) with necessary screws etc. complete - 250 mm weighing not less than 150 gms	each	79.81
9.68.3	Providing and fixing oxidised M.S.casement stays (straight peg type) with necessary screws etc. complete (Copper oxidised as per IS 1378) - 200 mm weighing not less than 240 gms	each	43.67
9.68.3R	Providing and fixing powder coating casement stays (straight peg type) with necessary screws etc. complete - 200 mm weighing not less than 120 gms	each	102.57
9.69	Providing and fixing oxidised M.S.Safety chain with necessary fixtures for doors, (weighing not less than 450 gms) and Copper oxidised as per IS:1378	each	83.65
9.69R	Providing and fixing powder coating Safety chain with necessary fixtures for doors, (weighing not less than 450 gms)	each	137.85
9.70.1	Providing and fixing IS : 12817 marked stainless steel butt hinges with stainless steel screws etc.complete - 125 x64 x1.90 mm	each	128.52
9.70.2	Providing and fixing IS : 12817 marked stainless steel butt hinges with stainless steel screws etc.complete - 100 x 58 x 1.90 mm	each	110.30
9.70.3	Providing and fixing IS : 12817 marked stainless steel butt hinges with stainless steel screws etc.complete - 75 x 47 x 1.80 mm	each	104.04
9.70.4	Providing and fixing IS : 12817 marked stainless steel butt hinges with stainless steel screws etc.complete - 50 x 37 x 1.5 mm	each	50.08
9.71.1	Providing and fixing IS : 12817 marked stainless steel butt hinges (heavy weight) with stainless steel screws etc.complete - 125 X 64 x 2.50 mm	each	144.38

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.71.2	Providing and fixing IS : 12817 marked stainless steel butt hinges (heavy weight) with stainless steel screws etc.complete - 100 x 60 x 2.50 mm	each	114.85
9.71.3	Providing and fixing IS : 12817 marked stainless steel butt hinges (heavy weight) with stainless steel screws etc.complete - 75 x 50 x 2.50 mm	each	94.08
9.72.1	Providing and fixing bright finished brass butt hinges with necessary screws etc complete - 125 X 85 X 5.5 mm (heavy type)	each	627.38
9.72.2	Providing and fixing bright finished brass butt hinges with necessary screws etc complete - 125 X 70 X 4 mm (ordinary type)	each	337.88
9.72.3	Providing and fixing bright finished brass butt hinges with necessary screws etc complete - 100 X 85 X 5.5 mm (heavy type)	each	452.74
9.72.4	Providing and fixing bright finished brass butt hinges with necessary screws etc complete - 100 X 70 X 4 mm (ordinary type)	each	304.07
9.72.5	Providing and fixing bright finished brass butt hinges with necessary screws etc complete - 75 x 65 x 4 mm (heavy type)	each	297.50
9.72.6	Providing and fixing bright finished brass butt hinges with necessary screws etc complete - 75 x 40 x 2.5 mm (ordinary type)	each	177.86
9.72.7	Providing and fixing bright finished brass butt hinges with necessary screws etc complete - 50 x 40 x 2.5 mm (ordinary type)	each	68.14
9.73.1	Providing and fixing bright finished brass parliamentary hinges with necessary screws etc.complete - 150 X 125 X 27 X 5 mm	each	645.48
9.73.2	Providing and fixing bright finished brass parliamentary hinges with necessary screws etc.complete - 125 X 125 X 27 X 5 mm	each	582.88
9.73.3	Providing and fixing bright finished brass parliamentary hinges with necessary screws etc.complete - 100 X 125 X 27 X 5 mm	each	504.64

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.73.4	Providing and fixing bright finished brass parliamentary hinges with necessary screws etc.complete - 75 X 100 X 20 X 3.2 mm	each	365.05
9.74.1	Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc complete - 250 x 10 mm	each	582.14
9.74.2	Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc complete - 200 x 10 mm	each	528.31
9.74.3	Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc complete - 150 X 10 mm	each	387.47
9.74.4	Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc complete - 100 X 10 mm	each	275.31
9.75.1	Providing and fixing bright finished brass door latch with necessary screws etc complete - 300 x 16 x 5 mm	each	447.55
9.75.2	Providing and fixing bright finished brass door latch with necessary screws etc complete - 250 x 16 x 5 mm	each	400.60
9.76	Providing and fixing bright finished brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles of approved quality with necessary screws etc complete	each	1215.32
9.77	Providing and fixing bright finished brass 100 mm mortice latch with one dead bolt and a pair of lever handles of approved quality with necessary screws etc complete	each	1090.13
9.78	Providing and fixing bright finished brass night latch of approved quality including necessary screws etc complete	each	1543.96
9.79.1	Providing and fixing special quality bright finished brass cupboard or ward robe locks with four levers of approved quality including necessary screws etc complete - 40mm	each	383.08
9.79.2	Providing and fixing special quality bright finished brass cupboard or ward robe locks with four levers of approved quality including necessary screws etc complete - 50mm	each	404.42
9.79.3	Providing and fixing special quality bright finished brass	each	418.66

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	cupboard or ward robe locks with four levers of approved quality including necessary screws etc complete - 65mm		
9.79.4	Providing and fixing special quality bright finished brass cupboard or ward robe locks with four levers of approved quality including necessary screws etc complete - 75mm	each	447.11
9.80	Providing and fixing 50 mm bright finished brass cupboard or wardrobe knob of approved quality with necessary screws	each	108.69
9.81.1	Providing and fixing bright finished brass handles with screws etc complete - 125 mm	each	340.64
9.81.2	Providing and fixing bright finished brass handles with screws etc complete - 100 mm	each	285.15
9.81.3	Providing and fixing bright finished brass handles with screws etc complete - 75 mm	each	206.91
9.82	Providing and fixing bright finished brass hanging type floor door stopper with necessary screws etc complete	each	123.37
9.83	Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI , IS :3564 , embossed on the body , door weight upto 35 kg and door width upto 700 mm), with necessary accessories and screws etc complete	each	1734.93
9.84	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564 , embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000 mm) , with double speed adjustment with necessary accessories and screws etc.complete	each	1706.48
9.85	Providing and fixing bright finished brass casement window fastener with necessary screws etc complete	each	134.92
9.86.1	Providing and fixing bright finished brass casement stays (straight peg type) with necessary screws etc complete - 300 mm weighing not less than 330 gms	each	295.45

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.86.2	Providing and fixing bright finished brass casement stays (straight peg type) with necessary screws etc complete - 250 mm weighing not less than 280 gms	each	275.76
9.86.3	Providing and fixing bright finished brass casement stays (straight peg type) with necessary screws etc complete - 200 mm weighing not less than 240 gms	each	253.00
9.87.1	Providing and fixing bright finished brass hasp and staple (safety type) with necessary screws etc complete - 150 mm	each	227.59
9.87.2	Providing and fixing bright finished brass hasp and staple (safety type) with necessary screws etc complete - 115mm	each	165.10
9.87.3	Providing and fixing bright finished brass hasp and staple (safety type) with necessary screws etc complete - 90 mm	each	122.85
9.88	Providing and fixing chromium plated brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles of approved quality with necessary screws etc complete	each	1622.20
9.89	Providing and fixing chromium plated brass night latch of approved quality including necessary screws etc complete	each	1543.96
9.90.1	Providing and fixing special quality chromium plated brass cupboard locks with six levers of approved quality including necessary screws etc complete -size 40 mm	each	375.96
9.90.2	Providing and fixing special quality chromium plated brass cupboard locks with six levers of approved quality including necessary screws etc complete -size 50 mm	each	397.31
9.90.3	Providing and fixing special quality chromium plated brass cupboard locks with six levers of approved quality including necessary screws etc complete -size 65 mm	each	418.66
9.90.4	Providing and fixing special quality chromium plated brass cupboard locks with six levers of approved quality including necessary screws etc complete -size 75 mm	each	447.11
9.91	Providing and fixing chromium plated brass 50 mm cupboard or wardrobe knobs with nuts complete	each	110.11

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.92.1	Providing and fixing chromium plated brass handles with necessary screws etc complete - 125 mm	each	441.64
9.92.2	Providing and fixing chromium plated brass handles with necessary screws etc complete - 100 mm	each	379.05
9.92.3	Providing and fixing chromium plated brass handles with necessary screws etc complete - 75 mm	each	300.80
9.93	Providing and fixing chromium plated brass casement window fastener with necessary screws etc.complete	each	196.21
9.94.1	Providing and fixing chrominum plated brass casement stays (straight peg type) with necessary screws etc complete - 300 mm weighing not less than 330 gms	each	328.52
9.94.2	Providing and fixing chrominum plated brass casement stays (straight peg type) with necessary screws etc complete - 250 mm weighing not less than 280 gms	each	264.50
9.94.3	Providing and fixing chrominum plated brass casement stays (straight peg type) with necessary screws etc complete - 200 mm weighing not less than 240 gms	each	226.08
9.95.1	Providing and fixing ISI marked aluminium butt hinges anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc.complete - 125 X 75 X 4 mm	each	241.18
9.95.2	Providing and fixing ISI marked aluminium butt hinges anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc.complete - 125 X 63 X 4 mm	each	225.53
9.95.3	Providing and fixing ISI marked aluminium butt hinges anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc.complete - 100 X 75 X 4 mm	each	197.42
9.95.4	Providing and fixing ISI marked aluminium butt hinges anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc.complete - 100 X 63 X 4 mm	each	195.85

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.95.5	Providing and fixing ISI marked aluminium butt hinges anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc.complete - 100 X 63 X 3.2 mm	each	180.21
9.95.6	Providing and fixing ISI marked aluminium butt hinges anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc.complete - 75 X 63 X 4 mm	each	138.84
9.95.7	Providing and fixing ISI marked aluminium butt hinges anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc.complete - 75 X 63 X 3.2 mm	each	123.19
9.95.8	Providing and fixing ISI marked aluminium butt hinges anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc.complete - 75 X 45 X 3.2 mm	each	109.10
9.96.1	Providing and fixing aluminium sliding door bolts , ISI marked , anodised (anodic coating not less than grade AC 10 as per IS : 1868), transparent or dyed to required colour or shade , with nuts and screws etc complete - 300 X 16 mm	each	496.39
9.96.2	Providing and fixing aluminium sliding door bolts , ISI marked , anodised (anodic coating not less than grade AC 10 as per IS : 1868), transparent or dyed to required colour or shade , with nuts and screws etc complete - 250 X 16 mm	each	433.79
9.97.1	Providing and fixing aluminium tower bolts , ISI marked , anodised (anodic coating not less than grade AC 10 as per IS :1868) , transparent or dyed to required colour or shade , with necessary screws etc. complete - 300 x10 mm	each	263.37
9.97.2	Providing and fixing aluminium tower bolts , ISI marked , anodised (anodic coating not less than grade AC 10 as per IS :1868) , transparent or dyed to required colour or shade , with necessary screws etc. complete - 250 x10 mm	each	200.92
9.97.3	Providing and fixing aluminium tower bolts , ISI marked , anodised (anodic coating not less than grade AC 10 as per IS :1868) , transparent or dyed to required colour or shade , with	each	119.40

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	necessary screws etc. complete - 200 x10 mm		
9.97.4	Providing and fixing aluminium tower bolts , ISI marked , anodised (anodic coating not less than grade AC 10 as per IS :1868) , transparent or dyed to required colour or shade , with necessary screws etc. complete - 150 x10 mm	each	141.38
9.97.5	Providing and fixing aluminium tower bolts , ISI marked , anodised (anodic coating not less than grade AC 10 as per IS :1868) , transparent or dyed to required colour or shade , with necessary screws etc. complete - 100 x10 mm	each	116.74
9.98	Providing and fixing aluminium pull bolt lock , ISI marked , anodised (anodic coating not less than grade AC 10 as per IS : 1868) , transparent or dyed required colour and shade , with necessary screws bolts , nut and washers etc complete	each	122.70
9.99	Providing and fixing 50 cm long aluminium kicking plate of size 100 x 3.15 mm , anodised (anodic coating not less than grade A C 10 as per IS : 1868) , transparent or dyed to required colour or shade , with necessary screws etc complete	each	310.09
9.100.1	Providing and fixing aluminium handles , ISI marked , anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade,with necessary screws etc, complete - 125 mm	each	111.42
9.100.2	Providing and fixing aluminium handles , ISI marked , anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade,with necessary screws etc, complete - 100 mm	each	102.03
9.100.3	Providing and fixing aluminium handles , ISI marked , anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade,with necessary screws etc, complete - 75 mm	each	93.61
9.101.1	Providing and fixing aluminium hanging floor door stopper , ISI marked , anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade with necessary screws etc complete - Single rubber stopper	each	81.46

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.101.2	Providing and fixing aluminium hanging floor door stopper , ISI marked , anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade with necessary screws etc complete - Twin rubber stopper	each	129.83
9.102	Providing and fixing aluminium casement stays , ISI marked , anodised (anodic coating not less than grade AC 10 as per IS :1868) transparent or dyed to required colour and shade , with necessary screws etc complete	each	126.50
9.103	Providing and fixing bright finished brass 100 mm mortice latch and lock , ISI marked , with six levers and a pair of anodised (anodic coating not less than grade AC 10 as per IS : 1868) aluminium lever handles of approved quality with necessary screws etc complete	each	1293.18
9.104	Providing and fixing aluminium tee channels (heavy duty) with rollers & stop end in pelmets as curtain rod	metre	197.97
9.105.1	Providing and fixing partition upto ceiling height consisting of G.I. frame and required board , including providing and fixing of frame work made of special section power pressed / roll form G.I. sheet with zinc coating of 120 gms / sqm (both side inclusive) , consisting of floor and ceiling channel 50mm wide having equal flanges of 32 mm and 0.50 mm thick , fixed to the floor and ceiling at the spacing of 610 mm centre to centre with dash fastener of 12.5 mm diameter 50 mm length or suitable anchor fastener or metal screws with nylon plugs and the studs 48 mm wide having one flange of 34 mm and other flange 36 mm and 0.50 mm thick fixed vertically within flanges of floor and ceiling channel and placed at a spacing of 610 mm centre to centre by 6 mm dia bolts and nuts, including fixing of studs along both ends of partition fixed flush to wall with suitable anchor fastener or metal screws with nylon plugs at spacing of 450 mm centre to centre , and fixing of boards to both side of frame work by 25 mm long dry wall screws on studs, floor and ceiling channels at the spacing of 300 mm centre to centre . The boards are to be fixed to the frame work with joints staggered to avoid through cracks , M.S. fixing channel of 99 mm width (0.9 mm thick having two flanges of 9.5 mm each) to be provided at the horizontal joints of two boards , fixed to the studs using metal to metal flat head screws , including jointing and finishing to a flush finish with recommended jointing compound , jointing tape , angle beads at corners (25 mm X 25 mm X 0.5 mm) , joint finisher and two coats of primer suitable for board as per manufacture,s specification	sqm	2671.72

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	and direction all complete as per direction of Engineer-in-charge. - 75 mm overall thickness partition with 12.5 mm thick double skin fire rated glass reinforced gypsum (GRG) plaster board conforming to IS :2095 : Part 3 (Board with BIS certification Marks)		
9.105.2	Providing and fixing partition upto ceiling height consisting of G.I. frame and required board , including providing and fixing of frame work made of special section power pressed / roll form G.I. sheet with zinc coating of 120 gms / sqm (both side inclusive), consisting of floor and ceiling channel 50mm wide having equal flanges of 32 mm and 0.50 mm thick , fixed to the floor and ceiling at the spacing of 610 mm centre to centre with dash fastener of 12.5 mm diametre 50 mm length or suitable anchor fastener or metal screws with nylon plugs and the studs 48 mm wide having one flange of 34 mm and other flange 36 mm and 0.50 mm thick fixed vertically within flanges of floor and ceiling channel and placed at a spacing of 610 mm centre to centre by 6 mm dia bolts and nuts, including fixing of studs along both ends of partition fixed flush to wall with suitable anchor fastener or metal screws with nylon plugs at spacing of 450 mm centre to centre , and fixing of boards to both side of frame work by 25 mm long dry wall screws on studs, floor and ceiling channels at the spacing of 300 mm centre to centre . The boards are to be fixed to the frame work with joints staggered to avoid through cracks , M.S. fixing channel of 99 mm width (0.9 mm thick having two flanges of 9.5 mm each) to be provided at the horizontal joints of two boards , fixed to the studs using metal to metal flat head screws , including jointing and finishing to a flush finish with recommended jointing compound , jointing tape , angle beads at corners (25 mm X 25 mm X 0.5 mm) , joint finisher and two coats of primer suitable for board as per manufacture,s specification and direction all complete as per direction of Engineer-in-charge. - 75 mm overall thickness partition with 12.5 mm thick double skin tapered edged plain Gypsum plaster board conforming to IS : 2095 : (part I):2011 (Board with BIS certification marks)	sqm	2704.44
9.105.3	Providing and fixing partition upto ceiling height consisting of G.I. frame and required board , including providing and fixing of frame work made of special section power pressed / roll form G.I. sheet with zinc coating of 120 gms / sqm (both side inclusive), consisting of floor and ceiling channel 50mm wide having equal flanges of 32 mm and 0.50 mm thick , fixed to the floor and ceiling at the spacing of 610 mm centre to centre with dash fastener of 12.5 mm diametre 50 mm length or suitable	sqm	2826.78

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	anchor fastener or metal screws with nylon plugs and the studs 48 mm wide having one flange of 34 mm and other flange 36 mm and 0.50 mm thick fixed vertically within flanges of floor and ceiling channel and placed at a spacing of 610 mm centre to centre by 6 mm dia bolts and nuts, including fixing of studs along both ends of partition fixed flush to wall with suitable anchor fastener or metal screws with nylon plugs at spacing of 450 mm centre to centre , and fixing of boards to both side of frame work by 25 mm long dry wall screws on studs, floor and ceiling channels at the spacing of 300 mm centre to centre . The boards are to be fixed to the frame work with joints staggered to avoid through cracks , M.S. fixing channel of 99 mm width (0.9 mm thick having two flanges of 9.5 mm each) to be provided at the horizontal joints of two boards , fixed to the studs using metal to metal flat head screws , including jointing and finishing to a flush finish with recommended jointing compound , jointing tape , angle beads at corners (25 mm X 25 mm X 0.5 mm) , joint finisher and two coats of primer suitable for board as per manufacture,s specification and direction all complete as per direction of Engineer-in-charge.- 66 mm overall thickness partition with 8 mm thick double skin Calcium Silicate board made with Calcareous & Siliceous materials reinforced with cellulose fiber manufactured through autoclaving process with Compressive Strength 225 kg / sq.cm, bending strength 100 kg /sq cm		
9.105.4	Providing and fixing partition upto ceiling height consisting of G.I. frame and required board , including providing and fixing of frame work made of special section power pressed / roll form G.I. sheet with zinc coating of 120 gms / sqm (both side inclusive) , consisting of floor and ceiling channel 50mm wide having equal flanges of 32 mm and 0.50 mm thick , fixed to the floor and ceiling at the spacing of 610 mm centre to centre with dash fastener of 12.5 mm diametre 50 mm length or suitable anchor fastener or metal screws with nylon plugs and the studs 48 mm wide having one flange of 34 mm and other flange 36 mm and 0.50 mm thick fixed vertically within flanges of floor and ceiling channel and placed at a spacing of 610 mm centre to centre by 6 mm dia bolts and nuts, including fixing of studs along both ends of partition fixed flush to wall with suitable anchor fastener or metal screws with nylon plugs at spacing of 450 mm centre to centre , and fixing of boards to both side of frame work by 25 mm long dry wall screws on studs, floor and ceiling channels at the spacing of 300 mm centre to centre . The boards are to be fixed to the frame work with joints staggered to avoid through cracks , M.S. fixing channel of 99 mm width (0.9 mm thick having two flanges of 9.5 mm each)	sqm	2858.08

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	to be provided at the horizontal joints of two boards , fixed to the studs using metal to metal flat head screws , including jointing and finishing to a flush finish with recommended jointing compound , jointing tape , angle beads at corners (25 mm X 25 mm X 0.5 mm) , joint finisher and two coats of primer suitable for board as per manufacture,s specification and direction all complete as per direction of Engineer-in-charge.- 66 mm overall thickness partition using 8 mm thick double skin multipurpose cement board Type -B , Category -III as per IS:14862 : 2000 reinforced with cellulose fibre manufactured through autoclaving process (High pressure steam cured) with suitable fibre cement screws		
9.105.5	Providing and fixing partition upto ceiling height consisting of G.I. frame and required board , including providing and fixing of frame work made of special section power pressed / roll form G.I. sheet with zinc coating of 120 gms / sqm (both side inclusive) , consisting of floor and ceiling channel 50mm wide having equal flanges of 32 mm and 0.50 mm thick , fixed to the floor and ceiling at the spacing of 610 mm centre to centre with dash fastener of 12.5 mm diametre 50 mm length or suitable anchor fastener or metal screws with nylon plugs and the studs 48 mm wide having one flange of 34 mm and other flange 36 mm and 0.50 mm thick fixed vertically within flanges of floor and ceiling channel and placed at a spacing of 610 mm centre to centre by 6 mm dia bolts and nuts, including fixing of studs along both ends of partition fixed flush to wall with suitable anchor fastener or metal screws with nylon plugs at spacing of 450 mm centre to centre , and fixing of boards to both side of frame work by 25 mm long dry wall screws on studs, floor and ceiling channels at the spacing of 300 mm centre to centre . The boards are to be fixed to the frame work with joints staggered to avoid through cracks , M.S. fixing channel of 99 mm width (0.9 mm thick having two flanges of 9.5 mm each) to be provided at the horizontal joints of two boards , fixed to the studs using metal to metal flat head screws , including jointing and finishing to a flush finish with recommended jointing compound , jointing tape , angle beads at corners (25 mm X 25 mm X 0.5 mm) , joint finisher and two coats of primer suitable for board as per manufacture,s specification and direction all complete - 66 mm overall thickness partition using 8mm thick double skin multipurpose cement bonded wood particle board manufactured as per IS:14276 with suitable cement bonded board screws	sqm	2802.24
9.106.1	Providing and fixing PTMT handles with necessary screws etc complete - 125x34 x 24 mm weighing not less than 23 gms	each	67.58

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.106.2	Providing and fixing PTMT handles with necessary screws etc complete - 150x34 x 24 mm weighing not less than 26 gms	each	71.84
9.107.1	Providing and fixing PTMT butt hinges with necessary screws etc complete - 75 x60 x10 mm fitted with 5.5 mm dia M.S. bright bar rod weighing not less than 34 gms	each	110.24
9.107.2	Providing and fixing PTMT butt hinges with necessary screws etc complete - 100 x75 x10 mm fitted with 5.5 mm dia M.S. bright bar rod weighing not less than 53 gms	each	135.56
9.108.1	Providing and fixing PTMT Tower bolts with 12 mm one piece rod inside and necessary screws etc., complete - 152 x42x18 mm weighing not less than 60 gms	each	137.09
9.108.2	Providing and fixing PTMT Tower bolts with 12 mm one piece rod inside and necessary screws etc., complete - 202 x42x18 mm weighing not less than 78 gms	each	164.71
9.109	Providing and fixing PTMT door catcher of length 72 mm and dia of 42 mm with suitable washers weighing not less than 33 gms	each	53.21
9.110I	Providing and fixing Bamboo jaffery / fencing consisting of superior quality 25 mm dia (average) half cut bamboo placed vertically and fixed together with three numbers horizontal running members of Irul wood in scantling of section 50 x 25 mm , fixed with nails and G.I wire on existing support , complete as per direction of Engineer-in-charge	sqm	869.16
9.110J	Providing and fixing Bamboo jaffery / fencing consisting of superior quality 25 mm dia (average) half cut bamboo placed vertically and fixed together with three numbers horizontal running members of Jack wood in scantling of section 50 x 25 mm , fixed with nails and G.I wire on existing support , complete as per direction of Engineer-in-charge	sqm	913.20
9.111.1M	Providing and fixing wooden moulded corner beading of triangular shape to the junction of panelling etc with iron screws , plugs and priming coat on unexposed surface etc. complete Malabar I st class teak wood - 50 x 50 mm (base and height)	metre	695.42

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.112	Providing and fixing teak wood lipping / moulded beading or taj beading of size 18 x5 mm fixed with wooden adhesive of approved quality and screws / nails on the edges of the Pre - laminated particle board as per direction of Engineer-in-charge	metre	122.35
9.113	Providing and fixing bright finished 100 mm mortice lock with 6 levers without pair of handles of approved quality for aluminium door , with necessary screws etc complete as per direction of Engineer-in-charge	each	644.73
9.114.1	Providing and fixing magnetic catcher of approved quality in cupboard / ward robe shutters , including fixing with necessary screws etc complete - Triple strip vertical type	each	48.65
9.114.2	Providing and fixing magnetic catcher of approved quality in cupboard / ward robe shutters , including fixing with necessary screws etc complete - Double strip horizontal type	each	38.69
9.115	Providing and fixing powder coated telescopic drawer channels 300 mm long with necessary screws etc. complete as per direction of Engineer-in-charge	set	469.50
9.116	Providing and fixing sliding arrangement in racks / cupboards / cabinets shutter by with stainless steel rollers to run inside C or E aluminium channel section (The payment of C or E channel shall be made separately)	each	20.03
9.117.1	Providing and fixing factory made uPVC door frame made of uPVC extruded sections having an overall dimension as below (tolerance +_ 1mm), with wall thickness 2.0 mm (+-0.2mm) , corners of the door frame to be jointed with galvanized brackets and stainless steel screws , joints mitred and plastic welded. The hinge side vertical of the frames reinforced by galvanized M.S.tube of size 19 x 19 mm and 1mm (+-0.1mm) wall thickness and 3 nos. stainless steel hinges fixed to the frame complete as per manufacturer's specification and direction of Engineer-in-charge - Extruded section profile size 48 x 40 mm	metre	332.86
9.117.2	Providing and fixing factory made uPVC door frame made of uPVC extruded sections having an overall dimension as below (tolerance +_ 1mm), with wall thickness 2.0 mm (+-0.2mm) , corners of the door frame to be jointed with galvanized brackets and stainless steel screws , joints mitred and plastic	metre	351.35

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	welded. The hinge side vertical of the frames reinforced by galvanized M.S.tube of size 19 x 19 mm and 1mm (+0.1mm) wall thickness and 3 nos. stainless steel hinges fixed to the frame complete as per manufacturer's specification and direction of Engineer-in-charge - Extruded section profile size 42 x 50 mm		
9.118.1	Providing and fixing to existing door frames - 24 mm thick factory made PVC door shutters made of styles and rails of a uPVC hollow section of size 59 x 24 mm and wall thickness 2 mm (+ 0.2 mm) with inbuilt edging on both sides . The styles and rails mitred and joint at the corners by means of M.S. galvanised / plastic brackets of size 75 x 220 mm having wall thickness 1.0 mm and stainless steel screws . The styles of the shutter reinforced by inserting galvanised M.S.tube of size 20x20 mm and 1mm (+ 0.1mm) wall thickness . The lock rail made up of 'H' section , a uPVC hollow section of size 100 x 24 mm and 2 mm (+0.2 mm) wall thickness , fixed to the shutter styles by means of plastic / galvanised M.S. 'U' cleats. The shutter frame filled with a uPVC multichambered single panel of size not less than 620 mm, having overall thickness of 20 mm and 1 mm (+ 0.1mm) wall thickness . They panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S.rod and fastened with nuts and washers , complete as per manufacturer's specification and direction of Engineer-in-charge - (For W.C. and bathroom door shutter)	sqm	3601.26
9.118.2	Providing and fixing to existing door frames - 30 mm thick factory made Polyvinyl Chloride (PVC) door shutters made of styles and rails of a uPVC hollow section of size 60 x 30 mm and wall thickness 2 mm (+ 0.2 mm) with inbuilt decorative moulding edging on one side . The styles and rails mitred and joint at the corners by means of M.S. galvanised / plastic brackets of size 75 x 220 mm having wall thickness 1.0 mm and stainless steel screws . The styles of the shutter reinforced by inserting galvanised M.S.tube of size 25x20 mm and 1mm (+ 0.1mm) wall thickness . The lock rail made up of 'H' section , a uPVC hollow section of size 100 x 30 mm and 2 mm (+0.2 mm) wall thickness , fixed to the shutter styles by means of plastic / galvanised M.S. 'U' cleats. The shutter frame filled with a uPVC multichambered single panel of size not less than 620 mm, having overall thickness of 20 mm and 1 mm (+ 0.1mm) wall thickness . They panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S.rod and fastened with nuts and washers , complete as per manufacturer's specification and direction of Engineer-in-	sqm	3601.26

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	charge		
9.118.3	Providing and fixing to existing door frames - 25 mm thick PVC flush door shutters made out of a one piece Multi chamber extruded PVC section of the size of 762 mm x 25 mm or less as per requirement with an average wall thickness of 1 mm (+- 0.3mm). PVC foam end cap of size 23 x 10 mm are provided on both vertical edges to ensure the overall thickness of 25 mm. An M.S.tube having dimensions 19 mm x 19 mm and 1.0 mm (+- 0.1mm) is inserted along the hinge side of the door. Core of the door shutter should be filled with High Density Polyurethane foam. The Top & Bottom edges of the shutter are covered with an end -cap of the size 25 mm x 11 mm. Door shutter shall be reinforced with special polymeric reinforcements as per manufacturer's specification and direction of Engineer-in-charge to take up necessary hardware and fixtures. Stickers indicating the locations of hardware will be pasted at appropriate places	sqm	4540.20
9.119	Providing and fixing factory made P.V.C. door frame of size 50x 47 mm with a wall thickness of 5mm , made out of extruded 5 mm rigid PVC foam sheet, mitred at corners and joined with 2 nos , of 150mm long brackets of 15 x15 mm M.S. square tube, the vertical door frame profiles to be reinforced with 19 x19 mm M.S.square tube of 19 gauge , EPDM rubber gasket weather seal to be provided through out the frame . The door frame to be fixed to the wall using M.S.screws of 65 / 100 mm size, complete as per manufacturer's specification and direction of Engineer-in-charge	metre	741.51
9.120.1	Providing and fixing factory made panel PVC door shutter consisting of frame made out of M.S.tubes of 19 gauge thickness and size of 19 mm x 19 mm for styles and 15 x15 mm for top & bottom rails. M.S.frame shall have a coat of steel primers of approved make and manufacture . M.S. frame covered with 5 mm thick heat moulded PVC 'C' channel of size 30mm thickness, 70 mm width out of which 50 mm shall be flat and 20 mm shall be tapered in 45 degree angle on both side forming styles and 5 mm thick, 95 mm wide PVC sheet out of which 75 mm shall be flat and 20 mm shall be tapered in 45 degree on the inner side to form top and bottom rail and 115 mm wide PVC sheet out of which 75 mm shall be flat and 20 mm shall be tapered on both sides to form lock rail. Top , bottom and lock rails shall be provided both side of the panel. 10mm (5 mm x 2) thick , 20 mm wide cross PVC sheet be provided as gap insert for top rail & bottom rail , panelling of 5	sqm	3660.36

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	mm thick both side PVC sheet to be fitted in the M.S. frame welded / sealed to the styles & rails with 7 mm (5 mm + 2 mm) thick x 15 mm wide PVC sheet beading on inner side , and joined together with solvent cement adhesive. An additional 5 mm thick PVC strip of 20 mm width is to be stuck on the interior side of the 'C' Channel using PVC solvent adhesive etc. complete as per direction of Engineer-in-charge manufacturer's specification & drawing - 30mm thick plain PVC door shutters		
9.120.2	Providing and fixing factory made panel PVC door shutter consisting of frame made out of M.S.tubes of 19 gauge thickness and size of 19 mm x 19 mm for styles and 15 x15 mm for top & bottom rails. M.S.frame shall have a coat of steel primers of approved make and manufacture . M.S. frame covered with 5 mm thick heat moulded PVC 'C' channel of size 30mm thickness, 70 mm width out of which 50 mm shall be flat and 20 mm shall be tapered in 45 degree angle on both side forming styles and 5 mm thick, 95 mm wide PVC sheet out of which 75 mm shall be flat and 20 mm shall be tapered in 45 degree on the inner side to form top and bottom rail and 115 mm wide PVC sheet out of which 75 mm shall be flat and 20 mm shall be tapered on both sides to form lock rail. Top , bottom and lock rails shall be provided both side of the panel. 10mm (5 mm x 2) thick , 20 mm wide cross PVC sheet be provided as gap insert for top rail & bottom rail , panelling of 5 mm thick both side PVC sheet to be fitted in the M.S. frame welded / sealed to the styles & rails with 7 mm (5 mm + 2 mm) thick x 15 mm wide PVC sheet beading on inner side , and joined together with solvent cement adhesive. An additional 5 mm thick PVC strip of 20 mm width is to be stuck on the interior side of the 'C' Channel using PVC solvent adhesive etc. complete as per direction of Engineer-in-charge manufacturer's specification & drawing - 30mm thick pre laminated PVC door shutters	sqm	3660.36
9.121	Providing and fixing Fiber Glass Reinforced plastic (FRP) Door Frames of cross section 90 mm x 45 mm having single rebate of 32 mm x 15 mm to receive shutter of 30 mm thickness . The laminate shall be moulded with fire resistant grade unsaturated polyester resin and chopped mat. Door frame laminate shall be 2 mm thick and shall be filled with suitable wooden block in all the three legs. The frame shall be covered with fiber glass from all sides. M.S.stay shall be provided at the bottom to steady the frame	metre	806.95

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.122.1	Providing and fixing to existing door frames - 30mm thick Glass Fibre Reinforced Plastic (FRP) panelled door shutter of required colour and approved brand and manufacture , made with fire - retardant grade unsaturated polyester resin , moulded to 3 mm thick FRP laminate for forming hollow rails and styles , with wooden frame and suitable blocks of seasoned wood inside at required places for fixing of fittings , cast monolithically with 5 mm thick FRP laminate for panels conforming to IS : 14856 , including fixing to frames	sqm	4455.61
9.122.2	Providing and fixing to existing door frames - 30mm thick Fibre Glass Reinforced Plastic (FRP) flush door shutter in different plain and wood finish made with fire retardant grade unsaturated polyester resin , moulded to 3 mm thick FRP laminate all around , with suitable wooden blocks inside at required places for fixing of fittings and polyurethane foam (PUF) / Polystyrene foam to be used as filler material throughout the hollow panel , casted monolithically with testing parameters of F.R.P. laminate conforming to table -3 of IS : 14856 , complete as per direction of the Engineer-in-charge	sqm	5652.05
9.123	Providing and fixing factory made door frame (single rebate) made out of solid foam PVC extruded profile of minimum 60mm width and minimum 30mm thickness, having homogenous fine cellular structure and integral smooth outer skin. The frame's vertical and horizontal members to be mitered cut and joined together with PVC solvent adhesive / cement and both corners strengthened with fully threaded steel screws (of required size) fixed diagonally. The door frame is to be fixed to door jambs using 6 nos.SS 304 grade minimum 8mm dia CSK Phillips stainless steel self tapping screws / fasteners with PA6 grade polyamide sleeves both of required size , and gap if any between the door frame and the jamb must be filled with clear silicon, complete as per direction of Engineer-in-charge	metre	780.46
9.123A	Providing PVC moulding/ architrave for door frame made up of extruded solid foam PVC profile having homogenous fine cellular structure with smooth outer integral skin, minimum 30mm width and minimum 12mm thick suitable for fixing to frame. The moulding shall be snap fitted in the groove provided in the frame & fixed with PVC solvent adhesive / cement and self tapping screws (of required size) complete as per direction of Engineer-in-charge	metre	138.99
9.124.1	Providing and fixing factory made PVC door shutter made of	sqm	5022.62

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	solid foam PVC profiles of thickness 5mm and 15mm at edges integrally extruded for vertical style and horizontal (top/bottom/lock) rails of minimum cross section of 70mm x 28mm , of shape and design as per manufacture's specification having homogenous fine cellular structure and smooth integral outer skin, inserted with G.I. "C" section/rectangular tube profile of minimum 0.30mm thickness with 120 gsm coating as stiffeners as per manufacturer's specification Mitred cut joints for styles and rails provided with telescopic polymeric 'L' corners are jointed together using solvent adhesive and strengthened with fully threaded stainless steel screws (of required size) through reinforced stiffener with panelling of specified solid foam PVC board / high pressure laminate of required thickness and of approved design and shade (matching the styles and rails), secured within styles and rails with specially designed solid foam PVC moulded beadings of required size using PVC solvent adhesive /cement . The finished door shutter including SS hardware , 1 no. ss sliding bolt 200x10mm , 1 no SS tower bolt 200x 10mm and 2 nos .SS handles 125mm, shall be fixed to frame with 3 nos. stainless steel hinges of minimum size 100x58x1.9mm and ss screws of required size complete as per direction of Engineer-in-charge (Cost of above hardware is inclusive in rates) - 5mm thick solid foam PVC panel of required size with moulded / extruded beading of appropriate design shape and size as per manufacturer's specification (to secure the panel insert tight in place within the style and rails of shutter) matching the colour and shade of shutter frame. Non decorative type		
9.124.2	Providing and fixing factory made PVC door shutter made of solid foam PVC profiles of thickness 5mm and 15mm at edges integrally extruded for vertical style and horizontal (top/bottom/lock) rails of minimum cross section of 70mm x 28mm , of shape and design as per manufacture's specification having homogenous fine cellular structure and smooth integral outer skin, inserted with G.I. "C" section/rectangular tube profile of minimum 0.30mm thickness with 120 gsm coating as stiffeners as per manufacturer's specification Mitred cut joints for styles and rails provided with telescopic polymeric 'L' corners are jointed together using solvent adhesive and strengthened with fully threaded stainless steel screws (of required size) through reinforced stiffener with panelling of specified solid foam PVC board / high pressure laminate of required thickness and of approved design and shade (matching the styles and rails), secured within styles and rails with specially designed solid foam PVC moulded beadings of required size using PVC solvent adhesive /cement . The	sqm	5719.72

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	finished door shutter including SS hardware , 1 no. ss sliding bolt 200x10mm , 1 no SS tower bolt 200x 10mm and 2 nos .SS handles 125mm, shall be fixed to frame with 3 nos. stainless steel hinges of minimum size 100x58x1.9mm and ss screws of required size complete as per direction of Engineer-in-charge (Cost of above hardware is inclusive in rates) - 5mm thick solid foam PVC panel of required size with moulded / extruded beading of appropriate design shape and size as per manufacturer's specification (to secure the panel insert tight in place within the style and rails of shutter) matching the colour and shade of shutter frame. Decorative type		
9.124.3	Providing and fixing factory made PVC door shutter made of solid foam PVC profiles of thickness 5mm and 15mm at edges integrally extruded for vertical style and horizontal (top/bottom/lock) rails of minimum cross section of 70mm x 28mm , of shape and design as per manufacture's specification having homogenous fine cellular structure and smooth integral outer skin, inserted with G.I. "C" section/rectangular tube profile of minimum 0.30mm thickness with 120 gsm coating as stiffeners as per manufacturer's specification Mitred cut joints for styles and rails provided with telescopic polymeric 'L' corners are jointed together using solvent adhesive and strengthened with fully threaded stainless steel screws (of required size) through reinforced stiffener with panelling of specified solid foam PVC board / high pressure laminate of required thickness and of approved design and shade (matching the styles and rails), secured within styles and rails with specially designed solid foam PVC moulded beadings of required size using PVC solvent adhesive /cement . The finished door shutter including SS hardware , 1 no. ss sliding bolt 200x10mm , 1 no SS tower bolt 200x 10mm and 2 nos .SS handles 125mm, shall be fixed to frame with 3 nos. stainless steel hinges of minimum size 100x58x1.9mm and ss screws of required size complete as per direction of Engineer-in-charge (Cost of above hardware is inclusive in rates) - 3mm thick high pressure laminate (decorative type) with moulded / extruded beading of appropriate design shape and size as per manufacturer's specification (to secure the panel insert tight in place within the style and rails of shutter) matching the colour and shade of shutter frame. Non Decorative type	sqm	1487.38
9.126.1	Providing and fixing 12 mm thick panelling or panelling and glazing in panelled or panelled and glazed shutters for doors , windows and clerestory windows (area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed	sqm	3284.65

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	shutters 25 mm to 40 mm thick - Marine plywood conforming to IS : 710		
9.126.2	Providing and fixing 12 mm thick panelling or panelling and glazing in panelled or panelled and glazed shutters for doors , windows and clerestory windows (area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick - Fire retardant plywood conforming to IS : 5509	sqm	3450.21
9.127.1	Providing & fixing decorative high pressure laminated sheet of plain / wood grain in gloss / matt / suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 type S, including cost of adhesive of approved quality - 1.5 mm thick	sqm	1525.64
9.127.2	Providing & fixing decorative high pressure laminated sheet of plain / wood grain in gloss / matt / suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 type S, including cost of adhesive of approved quality - 1.0 mm thick	sqm	1218.91
9.128	Providing and fixing factory made fibreglass reinforced plastics (F.R.P) chajja 4 mm thick of required colour , size and design made by Resin Transfer Moulding (RTM) Machine Technology , resulting in void free compact laminate in single piece , having smooth gradual slope curvature for easy drainage of water and duly reinforced by 2 nos vertically and 1 nos horizontally 50 x 2 mm thick M.S. flat with 12 mm in built hole for grouting on the existing wall along with the 50 mm flanges duly inserted and sealed in the wall complete in one single piece casted monolithically , including all necessary fittings. The FRP Chajja should be manufactured using unsaturated Polyester resin as per IS : 6746 , duly reinforced with fibre glass chopped strand mat (CSM) as per IS : 11551 complete with protective gel coat U/V coating on Top for complete resistance from the extreme of temperature , weather & sunlight(Only plan area of chajjas shall be measured for making payment)	sqm	6657.41
9.129	Providing and fixing cupboard shutters 25 mm thick , with Pre - laminated flat pressed three layer particle board or graded wood particle board IS : 12823 marked , exterior grade (Grade I Type II) , having oneside decorative lamination and other side	sqm	2799.40

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	balancing lamination , including teak wood lipping of 25 mm wide x 12 mm thick with necessary screws and bright finished stainless steel piano hinges , complete as per direction of Engineer-in-charge		
9.130.1	Providing and fixing cup board shutters with 25 mm thick veneered particle board IS : 3097 marked , exterior grade (Grade 1) , of approved make including teak wood lipping of 25 mm wide x 12 mm thick with necessary screws and bright finished stainless steel piano hinges , complete as per direction of Engineer-in-charge - with decorative veneering on one side and commercial veneering on other side	sqm	2800.81
9.130.2	Providing and fixing cup board shutters with 25 mm thick veneered particle board IS : 3097 marked , exterior grade (Grade 1) , of approved make including teak wood lipping of 25 mm wide x 12 mm thick with necessary screws and bright finished stainless steel piano hinges , complete as per direction of Engineer-in-charge - with non decorative veneering on both sides	sqm	2300.05
9.131.1	Providing and fixing factory made shutters of pre - laminated particle board flat pressed three layer or graded wood particle board with one side decorative finish and other side balancing lamination conforming to IS : 12823 Grade 1 type II , of approved design , and edges sealed with water resistant paint and lipped with aluminium 'U' type edge beading all - round the shutter , including fixing with angle cleat , grip strip, cadmium plated steel screws , including fixing of aluminium hinges 100 x 63 x 4 mm etc. complete as per architectural drawing and direction(Cost of 'U' beading and hinges will be paid for separately) - 25 mm thick	sqm	2503.67
9.132	Providing and fixing aluminium U beading of required size to Pre laminated / flush door shutter , including fixing etc . Complete as per direction of Engineer-in-charge	kg	675.75
9.133.1.1	Providing and fixing , in position concealed G.I.section for wall panelling using board of required thickness fixed on the 'W' profile (0.55 mm thick) having a knurled web of 51.55 mm and two flanges of 26 mm each with lips of 10.55 mm , placed @ 610 mm C/C in perimeter channel having one flange of 20 mm and another flange of 30 mm with thickness of 0.55 mm and web of length 27 mm . Perimeter channel is fixed on the floor and the ceiling with the nylon sleeves @ 610 mm C/C	sqm	2079.66

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	with fully threaded self - tapping dry wall screws. Board is fixed to the 'W' profile with 25 mm countersunk ribbed head screws at @ 200 mm C/C ., all complete as per the drawing and directions , the joints of the boards are finished with specially formulated jointing compound and 48 mm wide jointing tape to provide seamless finish - Tapered edge calcium silicate board made with calcareous & siliceous materials reinforced with cellulose fibre manufactured through autoclaving process to give stable crystalline structure with compressive strength 225 kg / sq cm , Bending strength 100 kg / sqcm - 10mm thick		
9.133.2.1	Providing and fixing , in position concealed G.I.section for wall panelling using board of required thickness fixed on the 'W' profile (0.55 mm thick) having a knurled web of 51.55 mm and two flanges of 26 mm each with lips of 10.55 mm , placed @ 610 mm C/C in perimeter channel having one flange of 20 mm and another flange of 30 mm with thickness of 0.55 mm and web of length 27 mm . Perimeter channel is fixed on the floor and the ceiling with the nylon sleeves @ 610 mm C/C with fully threaded self - tapping dry wall screws. Board is fixed to the 'W' profile with 25 mm countersunk ribbed head screws at @ 200 mm C/C ., all complete as per the drawing and directions , the joints of the boards are finished with specially formulated jointing compound and 48 mm wide jointing tape to provide seamless finish - Multipurpose cement board reinforced with suitable fibre cement screw . - 8mm thick cement fibre board, Type-B, Category - III as per IS:14862:2000	sqm	1924.68
9.133.2.2	Providing and fixing , in position concealed G.I.section for wall panelling using board of required thickness fixed on the 'W' profile (0.55 mm thick) having a knurled web of 51.55 mm and two flanges of 26 mm each with lips of 10.55 mm , placed @ 610 mm C/C in perimeter channel having one flange of 20 mm and another flange of 30 mm with thickness of 0.55 mm and web of length 27 mm . Perimeter channel is fixed on the floor and the ceiling with the nylon sleeves @ 610 mm C/C with fully threaded self - tapping dry wall screws. Board is fixed to the 'W' profile with 25 mm countersunk ribbed head screws at @ 200 mm C/C ., all complete as per the drawing and directions , the joints of the boards are finished with specially formulated jointing compound and 48 mm wide jointing tape to provide seamless finish - Multipurpose cement board reinforced with suitable fibre cement screw . - 8mm thick cement bonded board wood particle board as per IS:14276	sqm	1890.24

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.133.3.1	Providing and fixing , in position concealed G.I.section for wall panelling using board of required thickness fixed on the 'W' profile (0.55 mm thick) having a knurled web of 51.55 mm and two flanges of 26 mm each with lips of 10.55 mm , placed @ 610 mm C/C in perimeter channel having one flange of 20 mm and another flange of 30 mm with thickness of 0.55 mm and web of length 27 mm . Perimeter channel is fixed on the floor and the ceiling with the nylon sleeves @ 610 mm C/C with fully threaded self - tapping dry wall screws. Board is fixed to the 'W' profile with 25 mm countersunk ribbed head screws at @ 200 mm C/C ., all complete as per the drawing and directions , the joints of the boards are finished with specially formulated jointing compound and 48 mm wide jointing tape to provide seamless finish - Plain Gypsum plaster board conforming to IS:2095 Part -1:2011 (board with BIS certification marks)-12.5mm thick	sqm	1840.15
9.134.1.1.1 M	Providing and fixing wire gauge shutters using stainless steel grade 304 wire gauge with wire of dia 0.5 mm and average width of aperture 1.4 mm in both directions for doors, windows and clerestory windows with necessary screws - 35 mm thick shutters - with ISI marked M.S.pressed butt hinges bright finished of required size - Malabar Ist class teak wood	sqm	11290.56
9.134.1.1.2I	Providing and fixing wire gauge shutters using stainless steel grade 304 wire gauge with wire of dia 0.5 mm and average width of aperture 1.4 mm in both directions for doors, windows and clerestory windows with necessary screws - 35 mm thick shutters - with ISI marked M.S.pressed butt hinges bright finished of required size - Kiln seasoned and chemically treated Irul wood	sqm	8357.45
9.134.1.1.2J	Providing and fixing wire gauge shutters using stainless steel grade 304 wire gauge with wire of dia 0.5 mm and average width of aperture 1.4 mm in both directions for doors, windows and clerestory windows with necessary screws - 35 mm thick shutters - with ISI marked M.S.pressed butt hinges bright finished of required size - Kiln seasoned and chemically treated Jack wood	sqm	8577.50
9.134.1.1.3I	Providing and fixing wire gauge shutters using stainless steel grade 304 wire gauge with wire of dia 0.5 mm and average width of aperture 1.4 mm in both directions for doors, windows and clerestory windows with necessary screws - 35 mm thick shutters - with ISI marked M.S.pressed butt hinges bright finished of required size - Kiln seasoned selected class Irul	sqm	8345.63

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	wood		
9.134.1.1.3J	Providing and fixing wire gauge shutters using stainless steel grade 304 wire gauge with wire of dia 0.5 mm and average width of aperture 1.4 mm in both directions for doors, windows and clerestory windows with necessary screws - 35 mm thick shutters - with ISI marked M.S.pressed butt hinges bright finished of required size - Kiln seasoned selected class Jack wood	sqm	8565.68
9.134.1.2.1 M	Providing and fixing wire gauge shutters using stainless steel grade 304 wire gauge with wire of dia 0.5 mm and average width of aperture 1.4 mm in both directions for doors, windows and clerestory windows with necessary screws - 35 mm thick shutters - With ISI marked stainless steel butt hinges of required size - Malabar I st class teak wood	sqm	11458.31
9.134.1.2.2I	Providing and fixing wire gauge shutters using stainless steel grade 304 wire gauge with wire of dia 0.5 mm and average width of aperture 1.4 mm in both directions for doors, windows and clerestory windows with necessary screws - 35 mm thick shutters - With ISI marked stainless steel butt hinges of required size - Kiln seasoned and chemically treated Irul wood	sqm	8525.22
9.134.1.2.2J	Providing and fixing wire gauge shutters using stainless steel grade 304 wire gauge with wire of dia 0.5 mm and average width of aperture 1.4 mm in both directions for doors, windows and clerestory windows with necessary screws - 35 mm thick shutters - With ISI marked stainless steel butt hinges of required size - Kiln seasoned and chemically treated Jack wood	sqm	8745.26
9.134.1.2.3I	Providing and fixing wire gauge shutters using stainless steel grade 304 wire gauge with wire of dia 0.5 mm and average width of aperture 1.4 mm in both directions for doors, windows and clerestory windows with necessary screws - 35 mm thick shutters - With ISI marked stainless steel butt hinges of required size - Kiln seasoned selected class of Irul wood	sqm	8513.40
9.134.1.2.3J	Providing and fixing wire gauge shutters using stainless steel grade 304 wire gauge with wire of dia 0.5 mm and average width of aperture 1.4 mm in both directions for doors, windows and clerestory windows with necessary screws - 35 mm thick shutters - With ISI marked stainless steel butt hinges of required size - Kiln seasoned selected class of Jack wood	sqm	8733.44

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.134.2.1.1 M	Providing and fixing wire gauge shutters using stainless steel grade 304 wire gauge with wire of dia 0.5 mm and average width of aperture 1.4 mm in both directions for doors, windows and clerestory windows with necessary screws - 30 mm thick shutters - With ISI marked M.S.pressed butt hinges bright finished of required size - Malabar 1st class teak wood	sqm	9995.85
9.134.2.1.2I	Providing and fixing wire gauge shutters using stainless steel grade 304 wire gauge with wire of dia 0.5 mm and average width of aperture 1.4 mm in both directions for doors, windows and clerestory windows with necessary screws - 30 mm thick shutters - With ISI marked M.S.pressed butt hinges bright finished of required size - Kiln seasoned and chemically treated Irul wood	sqm	7485.04
9.134.2.1.2J	Providing and fixing wire gauge shutters using stainless steel grade 304 wire gauge with wire of dia 0.5 mm and average width of aperture 1.4 mm in both directions for doors, windows and clerestory windows with necessary screws - 30 mm thick shutters - With ISI marked M.S.pressed butt hinges bright finished of required size - Kiln seasoned and chemically treated Jack wood	sqm	7673.40
9.134.2.1.3I	Providing and fixing wire gauge shutters using stainless steel grade 304 wire gauge with wire of dia 0.5 mm and average width of aperture 1.4 mm in both directions for doors, windows and clerestory windows with necessary screws - 30 mm thick shutters - With ISI marked M.S.pressed butt hinges bright finished of required size - Kiln seasoned selected class of Irul wood	sqm	7474.91
9.134.2.1.3J	Providing and fixing wire gauge shutters using stainless steel grade 304 wire gauge with wire of dia 0.5 mm and average width of aperture 1.4 mm in both directions for doors, windows and clerestory windows with necessary screws - 30 mm thick shutters - With ISI marked M.S.pressed butt hinges bright finished of required size - Kiln seasoned selected class of Jack wood	sqm	7663.28
9.134.2.2.1 M	Providing and fixing wire gauge shutters using stainless steel grade 304 wire gauge with wire of dia 0.5 mm and average width of aperture 1.4 mm in both directions for doors, windows and clerestory windows with necessary screws - 30 mm thick shutters - With ISI marked stainless steel butt hinges of required size - Malabar 1st class teak wood	sqm	10163.62

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.134.2.2.2I	Providing and fixing wire gauge shutters using stainless steel grade 304 wire gauge with wire of dia 0.5 mm and average width of aperture 1.4 mm in both directions for doors, windows and clerestory windows with necessary screws - 30 mm thick shutters - With ISI marked stainless steel butt hinges of required size - Kiln seasoned and chemically treated Irul wood	sqm	7652.79
9.134.2.2.2J	Providing and fixing wire gauge shutters using stainless steel grade 304 wire gauge with wire of dia 0.5 mm and average width of aperture 1.4 mm in both directions for doors, windows and clerestory windows with necessary screws - 30 mm thick shutters - With ISI marked stainless steel butt hinges of required size - Kiln seasoned and chemically treated Jack wood	sqm	7841.16
9.134.2.2.3I	Providing and fixing wire gauge shutters using stainless steel grade 304 wire gauge with wire of dia 0.5 mm and average width of aperture 1.4 mm in both directions for doors, windows and clerestory windows with necessary screws - 30 mm thick shutters - With ISI marked stainless steel butt hinges of required size - Kiln seasoned selected class of Irul wood	sqm	7642.68
9.134.2.2.3J	Providing and fixing wire gauge shutters using stainless steel grade 304 wire gauge with wire of dia 0.5 mm and average width of aperture 1.4 mm in both directions for doors, windows and clerestory windows with necessary screws - 30 mm thick shutters - With ISI marked stainless steel butt hinges of required size - Kiln seasoned selected class of Jack wood	sqm	7831.05
9.135.1M	Providing and fixing fly proof stainless steel grade 304 wire gauge , to windows and clerestory windows using wire gauge with average width of aperture 1.4 mm in both directions with wire of dia 0.50 mm all complete - with Malabar Ist class teak wood beading 62 x 19 mm	sqm	3721.41
9.135.2	Providing and fixing fly proof stainless steel grade 304 wire gauge , to windows and clerestory windows using wire gauge with average width of aperture 1.4 mm in both directions with wire of dia 0.50 mm all complete - with 12 mm mild steel U beading	sqm	2538.95
9.136	Providing and fixing fire resistant door frame of section 143 x 57 mm having built in rebate made out of 16 SWG G.I.sheet (zinc coating not less than 120 gm / sqm) dully filled with vermiculite based concrete mix , suitable for mountaing 60	metre	2104.79

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	minutes fire rated door shutters. The frame is fitted with intumescent fire seal strip of size 10x4 mm (minimum) around the frame and fixing with dash fastener of approved size and make , including applying a coat of approved brand fire resistant primer etc. complete as per direction of Engineer-in-charge (Dash fastener to be paid for separately)		
9.137	Providing and fixing 50 mm thick glazed fire resistant door shutters of 60 minutes fire rating conforming to IS:3614 (Part-II), tested and certified as per laboratory approved by Engineer-in-charge, with suitable mounting on door frame, consisting of vertical styles, lock rail, top rail 100 mm wide, bottom rail 200 mm wide, made out of 16 SWG G.I.sheet (zinc coating not less than 120 gm/sqm) duly filled FR insulation material and fixing with necessary stainless steel ball bearing hinges of approved make, including applying a coat of approved fire resistant primer etc. all complete as per direction of Engineer-in-charge (panneling to be paid for separately).	sqm	9807.05
9.138	Providing and fixing glazing in fire resistant door shutters, fixed panels & partitions etc., with G.I. beading made out of 1.6 mm thick G.I. sheet (zinc coating not less than 120 gm/sqm) of size 20 x 33 mm screwed with M4 x 38 mm SS screws at distance 75 mm from the edges and 150 mm c/c , including applying a coat of approved fire resistant primer/powder coating of not less than 30 micron on G.I. beading, & special ceramic tape of 5 x 20 mm size etc complete in all respect as per NBC 2016, IS 16231 (Part 3):2016 and as per direction of Engineer-in-charge with glass of required thickness having 60 minutes of fire resistance both integrity & radiation control (EW60) and minimum 20 minutes of insulation (EI20). The manufacturer have to give test report/certification of fire glass and the glass should have the stamp showing the value of E, EW & EI. The glass shall be tested in approved NABL accredited lab or by any other accreditation body which operates in accordance with ISO/IEC 17011 and accredits labs as per ISO/IEC 17025 for testing and calibration scopes shall be eligible. The maximum glazing size shall not be more than 1100x2200 mm (w x h) or 2.42 sqm.	sqm	7159.82
9.138.1	Providing and fixing glazing in fire resistant door shutters , fixed panels , ventilators and partitions etc., with G.I. beading of appropriate size , made out of 20 SWG G.I.sheet (zinc coating not less than 120 gm / sq.m) , fire resistant sealant , including applying a coat of approved fire resistant primer on G.I.beading etc ., complete all - with clear fire resistant glass	sqm	48580.18

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	panes 6 mm thick of approved brand , having minimum 60 minutes fire resistance		
9.139	Providing and fixing panic bar / latch (Double point) fitted with a single body , Trim Latch & Lock on back side of the Panic Latch of reputed brand and manufacture to be approved by the Engineer-in-charge, all complete	Nos	10234.85
9.140.1	Providing and fixing plain lining with necessary screws / nuts & bolts / nails , including a coat of approved primer on one face , and fixed on wooden / steel frame work , complete as per direction of Engineer-in-charge (Frame work shall be paid for separately) - 12 mm thick commercial ply conforming to IS :1328 BWR type	sqm	1445.56
9.141	Providing and fixing PVC Door Frame of size 50x47 mm with a wall thickness of 5 mm (± 0.2 mm), made out of single piece extruded PVC profile, with mitred cut joints and joint with 2 nos of PVC bracket of size 190 mm x 100 mm long arms of cross section size 35 x 15 mm & self driven self tapping screws, the vertical door profiles to be reinforced with 40x20 mm M.S. rectangular tube of 0.8 mm , including providing EPDM rubber gasket weather seal throughout the frame, including jointing 5 mm PVC frame strip with PVC solvent cement on the back of the profile. The door frame to be fixed to the wall using 8 x100 mm long anchor fasteners complete, all as per manufacturer's specification and direction of Engineer -in- charge.	metre	1025.38
9.142.1	35 mm thick factory made solid panel PVC door shutter , made out of single piece extruded solid PVC profiles , 5 mm (± 0.2 mm) thick , having styles & rails (except lock rail) of size 95 mm x 35mm x 5mm , out of which 75 mm shall be flat and 20 mm shall be tapered (on both side) , having one side thickness of 15 mm integrally extruded on the hinge side of the profile for better screw holding power , including reinforcing with MS tube of size 40 mm x 20mm x 1 mm , joints of styles & rails to be mitred cut & joint with the help of PVC solvent cement , self driven self tapping screws & M.S. rectangular pipes bracket of size 190 mm x 100 mm of cross section size 35 mm x 17 mm x 1 mm at each corner . Single piece extruded 5mm thick solid PVC Lock rail of size 115 mm x 35 mm out of which 75 mm to be flat and 20 mm to be tapered at both ends , having 15 mm solid core in middle of rail section integrally extruded , fixing the styles & rails with the help of solvent and self driven self tapping screws of 125 mm X 11 mm , including providing 5 mm single piece solid PVC extruded sheet inserted	sqm	4653.93

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	in the door as panel , all complete as per manufacturer's specification and direction of Engineer-in-charge - Non decorative finish (matt finish)		
9.142.2	35 mm thick factory made solid panel PVC door shutter , made out of single piece extruded solid PVC profiles , 5 mm (+_ 0.2 mm) thick , having styles & rails (except lock rail) of size 95 mm x 35mm x 5mm , out of which 75 mm shall be flat and 20 mm shall be tapered (on both side) , having one side thickness of 15 mm integrally extruded on the hinge side of the profile for better screw holding power , including reinforcing with MS tube of size 40 mm x 20mm x 1 mm , joints of styles & rails to be mitered cut & joint with the help of PVC solvent cement , self driven self tapping screws & M.S. rectangular pipes bracket of size 190 mm x 100 mm of cross section size 35 mm x 17 mm x 1 mm at each corner . Single piece extruded 5mm thick solid PVC Lock rail of size 115 mm x 35 mm, out of which 75 mm to be flat and 20 mm to be tapered at both ends , having 15 mm solid core in middle of rail section integrally extruded , fixing the styles & rails with the help of solvent and self driven self tapping screws of 125 mm X 11 mm , including providing 5 mm single piece solid PVC extruded sheet inserted in the door as panel , all complete as per manufacturer's specification and direction of Engineer-in-charge Decorative finish (wood grained finish)	sqm	5521.74
9.143	Providing and Fixing factory made uPVC door frame, made of uPVC extruded sections, of size 65 mm x 55 mm with wall thickness 2.0 mm (± 0.2 mm), corners of the door frame to be mitred cut and jointed with plastic brackets and stainless steel screws, reinforcing hinge side vertical of the frames with PVC profile of Size 28 mm x 30 mm having wall thickness 2 mm (± 0.2 mm), including providing & fixing 3 nos of 125 mm long stainless steel hinges to the frame, fixing the frame with jamb with required number & size of anchor dash fastners, all complete as per manufacturer's specification and direction of Engineer-in-charge.	metre	793.79
9.144	Providing and fixing 37 mm thick factory made PVC door shutter, styles and rails made of PVC hollow section of size 100 mm x 37 mm with wall thickness 2 mm (± 0.2 mm), with inbuilt bead on one side, styles and rails mitred cut and joint at the corners by means of 2 nos of plastic brackets of size 75 mm x 220 mm at each corner and stainless steel screws, reinforcing the hinge side of style by inserting PVC profile of size 28 mm x 30 mm, with wall thickness 2 mm (± 0.2 mm).	sqm	5166.16

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	Lockrail of size 100 mm x 37 mm, wall thickness 2 mm (+ 0.2 mm) will be fixed to the vertical styles. Providing with PVC snapfit beads and panel of size 100 mm x 20 mm, and inserting 2 nos tie bar of 6 mm dia and fastening with nuts and washers complete, all as per manufacturer's specification and direction of Engineer-in-charge.		
9.145	Providing and Fixing factory made PVC door frame made of PVC extruded sections of size 75 mm x 53 mm, having wall thickness 2.0 mm ($\pm$ 0.2 mm). Both verticalssides of the frame reinforced with PVC profile of cross section size 28 mm x 30 mm x 2 mm thickness ($\pm$ 0.2 mm) and 75 mm x 200 mm long, including reinforcing both ends of the top frame with PVC profile. PVC Door Frame and PVC reinforcement profile to be mitred cut, jointed and fusion welded together, including providing and fixing 3 nos of 125 mm long stainless steel hinges to frame, fixing the frame with jamb with required nos & sizes of anchor dash fastener, all complete as per manufacturer's specification and direction of engineer- in-charge.	metre	850.70
9.146	Providing and fixing 37 mm thick factory made PVC door shutter , styles and rails made of PVC hollow extruded printed and laminated section having overall dimension 115 mm x 37 mm with wall thickness 2 mm (+- 0.2 mm) with in built beading on one side , the styles and rails mitred cut and joint at corners by inserting 2 nos PVC profile reinforcement of size 75 mm X 200 mm long with cross section size of 28 mm x 30 mm having wall thickness 2 mm (+- 0.2 mm). Styles , rails and reinforcements to be fusion welded together . Only hinge side vertical style to be reinforced with PVC profile reinforcement in full length. Printed and laminated PVC lock rail of size 110 mm x 37 mm having wall thickness 2 mm (+- 0.2 mm) to be welded horizontally with the vertical styles after inserting PVC profile reinforcement as in styles and rails , providing with PVC snap fit beading , panels of 100 x 20 mm printed & laminated and inserting 2 nos 6 mm dia bright steel rod horizontally with both side threaded and tightened with check nuts and washers complete , all as per manufacturer's specification direction of Engineer-in-charge	sqm	5450.68
9.147.A1.1	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever required) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series	sqm	8376.44

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design rquirements and conforming to IS: 3548 & IS:16231shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds - Two track two panels sliding window with aluminium channel for roller track, wool pile, nylon rollers with SS 304 body.- Using R2 series with frame (40mm & above) x (40mm & above) & sash (25mm & above) x (50mm & above) with zinc alloy (zamak) powder coated touch locks with hook (Height upto 1.2metre)		
9.147.A1.2	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to	sqm	8609.22

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds - Two track two panels sliding window with aluminium channel for roller track, wool pile, nylon rollers with SS 304 body.- Using R3 series with frame (55mm & above) x (40mm & above) & sash (30mm & above) x (55mm & above) with zinc alloy (zamak) powder coated handle on every panel along with multi point locking system (Height up to 1.8m)		
9.147.A1.3	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon	sqm	9042.79

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for : (i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds - Two track two panels sliding window with aluminium channel for roller track, wool pile, nylon rollers with SS 304 body.- Using R4 series with frame (64mm & above) x (45mm & above) & sash (44mm & above) x (55mm & above) with zinc alloy (zamak) powder coated handle on every panel along with multi point locking system (height above 1.8m)		
9.147.A2.1	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements	sqm	7716.00

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds - Two track four panels sliding windows with aluminium channel for roller track, wool pile, zinc alloy (zamak) powder coated handle on three panels along with multi-point locking system, nylon rollers with SS 304 body - Using R3 sries with frame (55mm & above) x (40mm x above) & sash (30mm & above) x (55mm & above) (height upto 1.8m)		
9.147.A2.2	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever required) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design rquirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds - Two track four panels sliding windows with aluminium channel for roller track, wool pile, zinc alloy (zamak) powder coated handle on three panels along with	sqm	8042.92

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	multi-point locking system, nylon rollers with SS 304 body - Using R4 sries with frame (64mm & above) x (45mm x above) & sash (44mm & above) x (55mm & above) (height above 1.8m)		
9.147.A3.1	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Two and half track three panels sliding window with two glazed & one wire mesh panels with aluminium channel for roller track, wool pile, nylon rollers with SS 304 body - Using R2 series with frame (65mm & above) x (40mm & above) & glazed sash (25mm & above)x (50mm & above) & fly screen sash (18mm & above) x (40mm x above) with zinc alloy (zamak) powder coated touch locks with hook (height upto 1.20m)	sqm	10112.90
9.147.A3.2	Providing and fixing factory made uPVC glazed /wire mesh	sqm	9925.90

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Two and half track three panels sliding window with two glazed & one wire mesh panels with aluminium channel for roller track, wool pile, nylon rollers with SS 304 body - Using R3 series with frame (85mm & above) x (40mm & above) & glazed sash (30mm & above)x (55mm & above) & fly screen sash (20mm & above) x (50mm x above) with zinc alloy (zamak) powder coated handle on every glazed panel along with multi-point locking system.(height upto 1.80m)		
9.147.A4.1	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape,	sqm	10820.52

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Three track three panels sliding window with two glazed & one wire mesh panels with aluminium channel for roller track, wool pile, nylon rollers with SS 304 body - Using R2 series with frame (70mm & above) x (40mm & above) & glazed sash (25mm & above)x (50mm & above) with zinc alloy (zamak) powder coated touch locks with hooks.(height upto 1.20m)		
9.147.A4.2	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to	sqm	10910.75

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Three track three panels sliding window with two glazed & one wire mesh panels with aluminium channel for roller track, wool pile, nylon rollers with SS 304 body - Using R3 series with frame (98mm & above) x (40mm & above) & both glazed and fly screen sash (30mm & above)x (55mm & above) with zinc alloy (zamak) powder coated handle on every glazed panels along with multi point locking system..(height upto 1.80m)		
9.147.A4.3	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and	sqm	11649.15

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Three track three panels sliding window with two glazed & one wire mesh panels with aluminium channel for roller track, wool pile, nylon rollers with SS 304 body - Using R4 series with frame (115mm & above) x (45mm & above) & both glazed and fly screen sash (44mm & above)x (55mm & above) with zinc alloy (zamak) powder coated handle on every glazed panels along with multi point locking system..(height above 1.80m)		
9.147.A5.1	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh /	sqm	8490.08

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Three track three panels sliding window with aluminium channel for roller track, wool pile, nylon rollers with SS 304 body - Using R2 series with frame (70mm & above) x (40mm & above) & sash (25mm & above) x(50mm & above) with zinc alloy (zamak) powder coated touch locks with hook.(height upto 1.20m)		
9.147.A5.2	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Three track three panels sliding window	sqm	8484.64

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	with aluminium channel for roller track, wool pile, nylon rollers with SS 304 body - Using R3 series with frame (98mm & above) x (40mm & above) & sash (30mm & above) x(55mm & above) with zinc alloy (zamak) powder coated handle on two end panels along with multi-point locking system (height upto 1.80m)		
9.147.A5.3	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever required) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design rquirements and conforming to IS: 3548 & IS:16231shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Three track three panels sliding window with aluminium channel for roller track, wool pile, nylon rollers with SS 304 body - Using R4 series with frame (115mm & above) x (45mm & above) & sash (44mm & above) x(55mm & above) with zinc alloy (zamak) powder coated handle on two end panels along with multi-point locking system (height above1.80m)	sqm	9212.82

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.147.B1.1	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Two track two panels sliding door with aluminium channel for roller track, wool pile, zinc alloy (Zamak) powder coated handle on every panel along with multi-point locking systems, adjustable nylon rollers with SS 304 body - Using R3 series with frame (55 mm & above) x (40mm & above) & sash (30mm & above) x(74mm & above) (height upto 2.50m)	sqm	7923.12
9.147.B1.2	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel	sqm	6967.30

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Two track two panels sliding door with aluminium channel for roller track, wool pile, zinc alloy (Zamak) powder coated handle on every panel along with multi-point locking systems, adjustable nylon rollers with SS 304 body - Using R4 series with frame (64mm & above) x (45mm & above) & sash (44mm & above) x(85mm & above) (height above 2.50m)		
9.147.B2.1	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers ,	sqm	7185.72

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Two track four panels sliding door with aluminium channel for roller track, wool pile, zinc alloy (Zamak) powder coated handle on three panels along with multi-point locking systems, adjustable nylon rollers with SS 304 body - Using R3 series with frame (55mm & above) x (40mm & above) & sash (30mm & above) x(74mm & above) (height upto 2.50m)		
9.147.B2.2	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever required) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all	sqm	6442.66

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Two track four panels sliding door with aluminium channel for roller track, wool pile, zinc alloy (Zamak) powder coated handle on three panels along with multi-point locking systems, adjustable nylon rollers with SS 304 body - Using R4 series with frame (64mm & above) x (45mm & above) & sash (44mm & above) x(85mm & above) (height above 2.50m)		
9.147.B3.1	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid	sqm	10120.07

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Three track three panels sliding door with two glazed & one wire mesh panels with Aluminium channel for roller track, wool pile, zinc alloy (Zamak) powder coated handle on two panels along with multi-point locking systems, adjustable nylon rollers with SS 304 body - Using R3 series with frame (98mm & above) x (40mm & above) & both glazed and fly screen sash (30mm & above) x (74mm & above). (Height upto 2.5 metre)		
9.147.B3.2	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design rquirements and conforming to IS: 3548 & IS:16231shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Three track three panels sliding door with two glazed & one wire mesh panels with Aluminium	sqm	8912.63

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	channel for roller track, wool pile, zinc alloy (Zamak) powder coated handle on two panels along with multi-point locking systems, adjustable nylon rollers with SS 304 body - Using R4 series with frame (115mm & above) x (45mm & above) & both glazed and fly screen sash (44mm & above) x (85mm & above). (Height above 2.5 metre)		
9.147.B4.1	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design rquirements and conforming to IS: 3548 & IS:16231shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Three track three panels sliding door with Aluminium channel for roller track, wool pile, zinc alloy (Zamak) powder coated handle on two panels along with multi-point locking systems, adjustable nylon rollers with SS 304 body - Using R3 series with frame (98mm & above) x (40mm & above) & sash (30mm & above) x (74mm x above) (Height upto 2.5 metre)	sqm	8221.17

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.147.B4.2	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Three track three panels sliding door with Aluminium channel for roller track, wool pile, zinc alloy (Zamak) powder coated handle on two panels along with multi-point locking systems, adjustable nylon rollers with SS 304 body - Using R4 series with frame (115mm & above) x (45mm & above) & sash (44mm & above) x (85mm x above) (Height above 2.5 metre)	sqm	7090.07
9.147.C1.1	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel	sqm	8585.20

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Fixed window / Ventilator without mullion / transom - Using R1 series with frame (33mm & above) x (35mm & above) (Height upto 0.90 metre)		
9.147.C1.2	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of	sqm	8098.19

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Fixed window / Ventilator without mullion / transom - Using R2 series with frame (39mm & above) x (39mm & above) (Height upto 1.20 metre)		
9.147.C1.3	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a	sqm	7325.83

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Fixed window / Ventilator without mullion / transom - Using R3 series with frame (55mm & above) x (45mm& above) (Height upto 2.50 metre)		
9.147.C1.4	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design rquirements and conforming to IS: 3548 & IS:16231shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Fixed window / Ventilator without mullion / transom - Using R4 series with frame (64mm & above) x (50mm & above) (Height above 2.50 metre)	sqm	5809.34
9.147.C2.1	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of	sqm	9661.91

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Fixed window / Ventilator with mullion / transom - Using R1 series with frame (33mm & above) x (35mm & above)& mullion (33mm & above) x (50mm& above) (Height upto 0.90 metre)		
9.147.C2.2	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers ,	sqm	8853.35

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Fixed window / Ventilator with mullion / transom - Using R2 series with frame (39mm & above) x (39mm & above)& mullion (39mm & above) x (60mm& above) (Height upto 1.2 metre)		
9.147.C2.3	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be	sqm	8192.71

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Fixed window / Ventilator with mullion / transom - Using R3 series with frame (55mm & above) x (45mm & above)& mullion (55mm & above) x (65mm& above) (Height upto 2.5 metre)		
9.147.C2.4	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Fixed window / Ventilator with mullion / transom - Using R4 series with frame (64mm & above) x	sqm	6279.19

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	(50mm & above)& mullion (64mm & above) x (70mm& above) (Height above 2.5 metre)		
9.147.D1.1	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Ventilator casement window single panel with or without fixed panel with S.S 304 friction hinges as per size and weight of sash single point locking zinc alloy (zamak) powder coated handles - Using R1 series with frame (33 mm & above) x (35mm& above) &sash / mullion (33mm & above) x (50mm & above) (Height upto 0.90 metre)	sqm	15107.41
9.147.D1.2	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series	sqm	13582.03

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Ventilator casement window single panel with or without fixed panel with S.S 304 friction hinges as per size and weight of sash single point locking zinc alloy (zamak) powder coated handles - Using R2 series with frame (39mm & above) x (39mm& above) &sash / mullion (39mm & above) x (60mm & above) (Height upto 1.20 metre)		
9.147.D1.3	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to	sqm	13349.26

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Ventilator casement window single panel with or without fixed panel with S.S 304 friction hinges as per size and weight of sash single point locking zinc alloy (zamak) powder coated handles - Using R3 series with frame (55mm & above) x (45mm& above) &sash / mullion (55mm & above) x (65mm & above) (Height above 1.20 metre)		
9.147.E1.1	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all	sqm	14871.19

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Casement window single panel with S.S 304 friction hinges as per size and weight of sash, multi-point locking system, zinc alloy (zamak) powder coated handles - Using R2 series with frame (39mm& above) x (39mm& above) & sash (39mm & above) x (60mm & above) - (Height upto 1.2 metre)		
9.147.E1.2	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a	sqm	14261.22

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	Government Engineering institute, to be provided by the manufacturer for : (i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Casement window single panel with S.S 304 friction hinges as per size and weight of sash, multi-point locking system, zinc alloy (zamak) powder coated handles - Using R3 series with frame (55mm& above) x (45mm& above) & sash (55mm & above) x (55mm & above) - (Height upto 1.8 metre)		
9.147.E1.3	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design rquirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for : (i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Casement window single panel with S.S 304 friction hinges as per size and weight of sash, multi-point locking system, zinc alloy (zamak) powder coated handles - Using R4 series with frame (64mm& above) x (50mm& above) & sash (64mm & above) x (70mm & above) - (Height upto 1.8	sqm	14486.92

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	metre)		
9.147.E2.1	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Casement window double panels with fixed mullion S.S 304 friction hinges as per size and weight of sash, multi-point locking system, zinc alloy (zamak) powder coated handles - Using R2 series with frame (39mm& above) x (39mm& above) & sash (39mm & above) x (60mm & above) & mullion (39mm & above) x (60mm & above) - (Height upto 1.2 metre)	sqm	13446.28
9.147.E2.2	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series	sqm	13294.22

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Casement window double panels with fixed mullion S.S 304 friction hinges as per size and weight of sash, multi-point locking system, zinc alloy (zamak) powder coated handles - Using R3 series with frame (55mm& above) x (45mm& above) & sash (55mm & above) x (65mm & above) & mullion (55mm & above) x (65mm & above) - (Height upto 1.8 metre)		
9.147.E2.3	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of	sqm	13252.30

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Casement window double panels with fixed mullion S.S 304 friction hinges as per size and weight of sash, multi-point locking system, zinc alloy (zamak) powder coated handles - Using R4 series with frame (64mm& above) x (50mm& above) & sash (64mm & above) x (70mm & above) & mullion (64mm & above) x (70mm & above) - (Height above 1.8 metre)		
9.147.E3.1	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and	sqm	12441.94

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Casement window double panels with french (False) Mullion with S.S 304 friction hinges as per size and weight of sash, multi-point locking system, zinc alloy (zamak) powder coated handles - Using R2 series with frame (39mm& above) x (39mm& above) & sash (39mm & above) x (60mm & above) & French (False) mullion (39mm & above) x (60mm & above) - (Height upto 1.2 metre)		
9.147.E3.2	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with /	sqm	12524.26

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for : (i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Casement window double panels with french (False) Mullion with S.S 304 friction hinges as per size and weight of sash, multi-point locking system, zinc alloy (zamak) powder coated handles - Using R3 series with frame (55mm & above) x (45mm & above) & sash (55mm & above) x (65mm & above) & French (False) mullion (55mm & above) x (60mm & above) - (Height upto 1.8 metre)		
9.147.E3.3	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for : (i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Casement window double panels with	sqm	12587.26

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	french (False) Mullion with S.S 304 friction hinges as per size and weight of sash, multi-point locking system, zinc alloy (zamak) powder coated handles - Using R4 series with frame (64mm& above) x (50mm& above) & sash (64mm & above) x (70mm & above) & French (False) mullion (64mm & above) x (60mm & above) - (Height upto 1.8 metre)		
9.147.E4.1	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design rquirements and conforming to IS: 3548 & IS:16231shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Casement cum fixed panel window having one single casement panel & one fixed panel with S.S 304 friction hinges as per size and weight of sash, multi-point locking systems, zinc alloy (zamak) power coated handles - Using R2 series with frame (39mm& above) x (39mm& above) & sash (39mm & above) x (60mm & above) & mullion (39mm & above) x (60mm & above) - (Height upto 1.2 metre ; each openable shutter upto 0.8m width)	sqm	10045.68

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.147.E4.2	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Casement cum fixed panel window having one single casement panel & one fixed panel with S.S 304 friction hinges as per size and weight of sash, multi-point locking systems, zinc alloy (zamak) power coated handles - Using R3 series with frame (55mm& above) x (45mm& above) & sash (55mm & above) x (65mm & above) & mullion (55mm & above) x (65mm & above) - (Height upto 1.8 metre ; each openable shutter upto 0.8m width)	sqm	9813.61
9.147.E4.3	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series	sqm	9963.25

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Casement cum fixed panel window having one single casement panel & one fixed panel with S.S 304 friction hinges as per size and weight of sash, multi-point locking systems, zinc alloy (zamak) power coated handles - Using R4 series with frame (64mm& above) x (50mm& above) & sash (64mm & above) x (70mm & above) & mullion (64mm & above) x (70mm & above) - (Height above 1.8 metre ; each openable shutter upto 0.8m width)		
9.147.E5.1	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of	sqm	10693.94

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Casement cum fixed panel window having single casement panel at both ends & middle fixed panel with S.S 304 friction hinges as per size and weight of sash, multi-point locking systems, zinc alloy (zamak) power coated handles - Using R2 series with frame (39mm & above) x (39mm& above) & sash (39mm & above) x (60mm & above) & mullion (39mm & above) x (60mm & above) - (Height upto 1.2 metre ; each openable shutter upto 0.8m width)		
9.147.E5.2	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners,	sqm	10644.31

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for : (i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Casement cum fixed panel window having single casement panel at both ends & middle fixed panel with S.S 304 friction hinges as per size and weight of sash, multi-point locking systems, zinc alloy (zamak) power coated handles - Using R3 series with frame (55mm & above) x (45mm & above) & sash (55mm & above) x (65mm & above) & mullion (55mm & above) x (65mm & above) - (Height upto 1.8 metre ; each openable shutter upto 0.8m width)		
9.147.E5.3	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of	sqm	9901.99

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Casement cum fixed panel window having single casement panel at both ends & middle fixed panel with S.S 304 friction hinges as per size and weight of sash, multi-point locking systems, zinc alloy (zamak) power coated handles - Using R4 series with frame (64mm & above) x (50mm & above) & sash (64mm & above) x (70mm & above) & mullion (64mm & above) x (70mm & above) - (Height upto 1.8 metre ; each openable shutter upto 0.8m width)		
9.147.E6.1	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a	sqm	25100.21

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Casement window with Double rebate frame with one Side hung glazed panel and one side hung wire mesh panel with S.S 304 friction hinges as per size and weight of sash, multi-point locking system, zinc alloy (zamak) powder coated handles on both glazed and fly screen panel - Using R3 series with frame (110mm & above) x (45mm x above) & glazed sash (55mm & above) x (65mm & above) & fly screen sash (30mm & above) x 55mm & above) & metal grill (if required to be paid separately)- (height upto 1.8 metre)		
9.147.E7.1	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Casement window with Double rebate frame with one Side hung glazed panel and one side hung wire	sqm	22349.32

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	mesh panel with S.S 304 friction hinges as per size and weight of sash, multi-point locking system, zinc alloy (zamak) powder coated handles on both glazed and fly screen panel - Using R3 series with frame (110mm & above) x (45mm x above) & glazed sash (55mm & above) x (65mm & above) & fly screen sash (30mm & above) x (55mm & above) & mullion (55mm x above) x (65mm & above) & metal grill (if required to be paid separately) (height upto 1.8 metre)		
9.147.E8.1	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Casement window with Double rebate frame with two Side hung glazed panel on outside and two side hung wire mesh panel on inside and french (False) mullion with S.S 304 friction hinges as per size and weight of sash, multi-point locking system, zinc alloy (zamak) powder coated handles with shoot bolt on both glazed and fly screen panel -	sqm	21371.20

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	Using R3 series with frame (110mm & above) x (45mm x above) & glazed sash (55mm & above) x (65mm & above) & fly screen sash (30mm & above) x (55mm & above) & french (False) mullion (55mm x above) x (60mm& above) & metal grill (if required to be paid separately) (height upto 1.8 metre)		
9.147.F1.1	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design rquirements and conforming to IS: 3548 & IS:16231shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Casement door single panel with zinc alloy (Zamak) 3D hinges, multi-point locking system with cylinder, zinc alloy (Zamak) powder coated handles on both sides. - Using R3 series with frame (55mm& above) x (50mm & above) & sash (55mm& above) x (85mm & above) (height upto 2.5 metre)	sqm	12160.47
9.147.F1.2	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-	sqm	11411.32

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Casement door single panel with zinc alloy (Zamak) 3D hinges, multi-point locking system with cylinder, zinc alloy (Zamak) powder coated handles on both sides. - Using R4 series with frame (64mm& above) x (55mm & above) & sash (64mm& above) x (100mm & above) (height above 2.5 metre)		
9.147.F2.1	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate	sqm	11584.11

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Casement door double panel with french (False) mullion with zinc alloy (Zamak) 3D hinges, multi-point locking system with cylinder, zinc alloy (Zamak) powder coated handles on both sides. - Using R3 series with frame (55mm& above) x (50mm & above) & sash (55mm& above) x (85mm & above) and french (False) mullion (55mm& above) x (60mm & above) (height upto 2.5 metre)		
9.147.F2.2	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners,	sqm	10882.11

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for : (i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Casement door double panel with french (False) mullion with zinc alloy (Zamak) 3D hinges, multi-point locking system with cylinder, zinc alloy (Zamak) powder coated handles on both sides. - Using R4 series with frame (64mm& above) x (55mm & above) & sash (64mm& above) x (100mm & above) and french (False) mullion (64mm& above) x (60mm & above) (height above 2.5 metre)		
9.147.F3.1	Providing and fixing factory made uPVC glazed /wire mesh windows /doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever require) extruded profiles having minimum wall thickness of 1.70 mm for series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN:12608 in any shape, colour and design dully reinforced with galvanized mild steel section made of required shape, and size as per CPWD specification, uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 :Part 1 to 14, plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame , sash and mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-charge. Section of steel reinforcement and cross sections of uPVC profiles to be	sqm	19833.12

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	as per design approved by Engineer-in-charge . - wire mesh / glazing of plain/ toughened / laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering institute, to be provided by the manufacturer for :(i) Sites with basic wind speed >45m/sec as per IS:875 - Part 3 (ii) Sites with structure height more than 20 m for all wind speeds- Casement door with double rebate frame with one side hung glazed panel and one side hung wire mesh panel with zinc alloy (Zamak) 3D hinges, multi-point locking system with cylinder, zinc alloy (Zamak) powder coated handles on both sides. Of glazed panel and zinc alloy (Zamak) powder coated handles along with multi-point locking system on one side of fly screen panel - Using R3 series with frame (110mm& above) x (45mm & above) & glazed sash (55mm& above) x (85mm & above) and fly screen sash (55mm& above) x (65mm & above) (height upto 2.5 metre)		
9.147.1.1	Providing and fixing factory made uPVC white colour casement / sliding window / door , made of extruded profiles. Profiles of frames and sash will be mitered cut and fusion welded at all corners , including drilling of holes for fixing hardware and drainage of water etc, making arrangement for fixing of hardware , EPDM gasket ,1.2 +- 0.2 mm thick galvanised steel profile to be inserted in required profile , frame will be fixed to the wall with 8 mm x 100 mm long fasteners , all complete (Glazing , hardware hinges and fitting etc. to be paid separately) Note: Each member of window to be measured separately with clear length - Casement Window (outward / Inward opening) with hinge System - Frame (50 mm X 50 mm)	metre	935.68
9.147.1.2	Providing and fixing factory made uPVC white colour casement / sliding window / door , made of extruded profiles. Profiles of frames and sash will be mitered cut and fusion welded at all corners , including drilling of holes for fixing hardware and drainage of water etc, making arrangement for fixing of hardware , EPDM gasket ,1.2 +- 0.2 mm thick galvanised steel profile to be inserted in required profile , frame will be fixed to the wall with 8 mm x 100 mm long fasteners , all complete (Glazing , hardware hinges and fitting etc. to be paid separately) Note: Each member of window to be measured separately with clear length - Casement Window (outward / Inward opening) with hinge System - Sash (Style and Rail) (62 mm x 34 mm)	metre	895.34

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.147.1.3	Providing and fixing factory made uPVC white colour casement / sliding window / door , made of extruded profiles. Profiles of frames and sash will be mitered cut and fusion welded at all corners , including drilling of holes for fixing hardware and drainage of water etc, making arrangement for fixing of hardware , EPDM gasket ,1.2 +- 0.2 mm thick galvanised steel profile to be inserted in required profile , frame will be fixed to the wall with 8 mm x 100 mm long fasteners , all complete (Glazing , hardware hinges and fitting etc. to be paid separately) Note: Each member of window to be measured separately with clear length - Casement Window (outward / Inward opening) with hinge System - Mullion (intermediate Section) (66 mm x 50 mm)	metre	989.47
9.147.1.4	Providing and fixing factory made uPVC white colour casement / sliding window / door , made of extruded profiles. Profiles of frames and sash will be mitered cut and fusion welded at all corners , including drilling of holes for fixing hardware and drainage of water etc, making arrangement for fixing of hardware , EPDM gasket ,1.2 +- 0.2 mm thick galvanised steel profile to be inserted in required profile , frame will be fixed to the wall with 8 mm x 100 mm long fasteners , all complete (Glazing , hardware hinges and fitting etc. to be paid separately) Note: Each member of window to be measured separately with clear length - Casement Window (outward / Inward opening) with hinge System - 'T' Profile (one vertical length in between two shutters) (24 mm x 34.5 mm)	metre	211.77
9.147.1.5	Providing and fixing factory made uPVC white colour casement / sliding window / door , made of extruded profiles. Profiles of frames and sash will be mitered cut and fusion welded at all corners , including drilling of holes for fixing hardware and drainage of water etc, making arrangement for fixing of hardware , EPDM gasket ,1.2 +- 0.2 mm thick galvanised steel profile to be inserted in required profile , frame will be fixed to the wall with 8 mm x 100 mm long fasteners , all complete (Glazing , hardware hinges and fitting etc. to be paid separately) Note: Each member of window to be measured separately with clear length - Casement Window (outward / Inward opening) with hinge System - Glazing bead (12 mm X 18 mm)	metre	264.35
9.147.2.1	Providing and fixing factory made uPVC white colour casement / sliding window / door , made of extruded profiles. Profiles of frames and sash will be mitered cut and fusion	metre	1069.82

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	welded at all corners , including drilling of holes for fixing hardware and drainage of water etc, making arrangement for fixing of hardware , EPDM gasket ,1.2 +- 0.2 mm thick galvanised steel profile to be inserted in required profile , frame will be fixed to the wall with 8 mm x 100 mm long fasteners , all complete (Glazing , hardware hinges and fitting etc. to be paid separately) Note: Each member of window to be measured separately with clear length - Casement Window (with friction hinge & outward opening) - Casement frame (67 mm x 62 mm)		
9.147.2.2	Providing and fixing factory made uPVC white colour casement / sliding window / door , made of extruded profiles. Profiles of frames and sash will be mitered cut and fusion welded at all corners , including drilling of holes for fixing hardware and drainage of water etc, making arrangement for fixing of hardware , EPDM gasket ,1.2 +- 0.2 mm thick galvanised steel profile to be inserted in required profile , frame will be fixed to the wall with 8 mm x 100 mm long fasteners , all complete (Glazing , hardware hinges and fitting etc. to be paid separately) Note: Each member of window to be measured separately with clear length - Casement Window (with friction hinge & outward opening) - Casement window Sash / Mullion (67 mm x 75 mm) (style , rail and intermediate section)	metre	1150.49
9.147.2.3	Providing and fixing factory made uPVC white colour casement / sliding window / door , made of extruded profiles. Profiles of frames and sash will be mitered cut and fusion welded at all corners , including drilling of holes for fixing hardware and drainage of water etc, making arrangement for fixing of hardware , EPDM gasket ,1.2 +- 0.2 mm thick galvanised steel profile to be inserted in required profile , frame will be fixed to the wall with 8 mm x 100 mm long fasteners , all complete (Glazing , hardware hinges and fitting etc. to be paid separately) Note: Each member of window to be measured separately with clear length - Casement Window (with friction hinge & outward opening) - Casement glazing bead (35 mm x 18 mm)	metre	358.45
9.147.3.1	Providing and fixing factory made uPVC white colour casement / sliding window / door , made of extruded profiles. Profiles of frames and sash will be mitered cut and fusion welded at all corners , including drilling of holes for fixing hardware and drainage of water etc, making arrangement for fixing of hardware , EPDM gasket ,1.2 +- 0.2 mm thick	metre	1237.91

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	galvanised steel profile to be inserted in required profile , frame will be fixed to the wall with 8 mm x 100 mm long fasteners , all complete (Glazing , hardware hinges and fitting etc. to be paid separately) Note: Each member of window to be measured separately with clear length - Sliding Window (Two Track , 2/4 Shutters) - Two Track Sliding Frame (67 mm x 52 mm)		
9.147.3.2	Providing and fixing factory made uPVC white colour casement / sliding window / door , made of extruded profiles. Profiles of frames and sash will be mitered cut and fusion welded at all corners , including drilling of holes for fixing hardware and drainage of water etc, making arrangement for fixing of hardware , EPDM gasket ,1.2 +- 0.2 mm thick galvanised steel profile to be inserted in required profile , frame will be fixed to the wall with 8 mm x 100 mm long fasteners , all complete (Glazing , hardware hinges and fitting etc. to be paid separately) Note: Each member of window to be measured separately with clear length - Sliding Window (Two Track , 2/4 Shutters) - Sliding Window sash (60 mm x 44 mm)	metre	1151.27
9.147.3.3	Providing and fixing factory made uPVC white colour casement / sliding window / door , made of extruded profiles. Profiles of frames and sash will be mitered cut and fusion welded at all corners , including drilling of holes for fixing hardware and drainage of water etc, making arrangement for fixing of hardware , EPDM gasket ,1.2 +- 0.2 mm thick galvanised steel profile to be inserted in required profile , frame will be fixed to the wall with 8 mm x 100 mm long fasteners , all complete (Glazing , hardware hinges and fitting etc. to be paid separately) Note: Each member of window to be measured separately with clear length - Sliding Window (Two Track , 2/4 Shutters) - Sliding interlock for Window (one vertical length in each shutter) (45.5 mm x 28 mm)	metre	336.16
9.147.3.4	Providing and fixing factory made uPVC white colour casement / sliding window / door , made of extruded profiles. Profiles of frames and sash will be mitered cut and fusion welded at all corners , including drilling of holes for fixing hardware and drainage of water etc, making arrangement for fixing of hardware , EPDM gasket ,1.2 +- 0.2 mm thick galvanised steel profile to be inserted in required profile , frame will be fixed to the wall with 8 mm x 100 mm long fasteners , all complete (Glazing , hardware hinges and fitting etc. to be paid separately) Note: Each member of window to be measured separately with clear length - Sliding Window (Two	metre	358.45

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	Track , 2/4 Shutters) - Sliding Glazing bead (35 mm x 18 mm)		
9.147.4.1	Providing and fixing factory made uPVC white colour casement / sliding window / door , made of extruded profiles. Profiles of frames and sash will be mitered cut and fusion welded at all corners , including drilling of holes for fixing hardware and drainage of water etc, making arrangement for fixing of hardware , EPDM gasket ,1.2 +- 0.2 mm thick galvanised steel profile to be inserted in required profile , frame will be fixed to the wall with 8 mm x 100 mm long fasteners , all complete (Glazing , hardware hinges and fitting etc. to be paid separately) Note: Each member of window to be measured separately with clear length - Sliding door (Two Track , 2/4 Shutters) - Two track Sliding frame (67 mm x 52 mm)	metre	1188.67
9.147.4.2	Providing and fixing factory made uPVC white colour casement / sliding window / door , made of extruded profiles. Profiles of frames and sash will be mitered cut and fusion welded at all corners , including drilling of holes for fixing hardware and drainage of water etc, making arrangement for fixing of hardware , EPDM gasket ,1.2 +- 0.2 mm thick galvanised steel profile to be inserted in required profile , frame will be fixed to the wall with 8 mm x 100 mm long fasteners , all complete (Glazing , hardware hinges and fitting etc. to be paid separately) Note: Each member of window to be measured separately with clear length - Sliding door (Two Track , 2/4 Shutters) - Sliding door Sash (80 mm x 44 mm)	metre	1475.78
9.147.4.3	Providing and fixing factory made uPVC white colour casement / sliding window / door , made of extruded profiles. Profiles of frames and sash will be mitered cut and fusion welded at all corners , including drilling of holes for fixing hardware and drainage of water etc, making arrangement for fixing of hardware , EPDM gasket ,1.2 +- 0.2 mm thick galvanised steel profile to be inserted in required profile , frame will be fixed to the wall with 8 mm x 100 mm long fasteners , all complete (Glazing , hardware hinges and fitting etc. to be paid separately) Note: Each member of window to be measured separately with clear length - Sliding door (Two Track , 2/4 Shutters) - Sliding Interlock for door (one vertical length in each shutter) (45.5 mm X 28 mm)	metre	336.16
9.147.4.4	Providing and fixing factory made uPVC white colour casement / sliding window / door , made of extruded profiles. Profiles of frames and sash will be mitered cut and fusion	metre	358.45

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	welded at all corners , including drilling of holes for fixing hardware and drainage of water etc, making arrangement for fixing of hardware , EPDM gasket ,1.2 +- 0.2 mm thick galvanised steel profile to be inserted in required profile , frame will be fixed to the wall with 8 mm x 100 mm long fasteners , all complete (Glazing , hardware hinges and fitting etc. to be paid separately) Note: Each member of window to be measured separately with clear length - Sliding door (Two Track , 2/4 Shutters) - Sliding Glazing bead (35 mm x 18 mm)		
9.147A.1	Providing and fixing factory made uPVC white colour casement /casement cum fixed glazed windows comprising of uPVC multi-chambered frame , sash and mullion (where ever required) extruded profiles duly reinforced with 1.60 + or - 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), uPVC extruded glazing beads of appropriate dimension , EPDM gasket , stainless steel (SS 304 grade) friction hinges , zinc alloy (white powder coated) casement handles, G.I fasteners 100 x8 mm size for fixing frame to finished wall , plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, mullion (if required) shall be also fusion welded including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealent over backer rod of required size and of approved quality , all complete as per approved drawing.(Single / double glass panes and silicon sealent shall be paid separately) - Casement window single panel with S.S.friction hinges (300x19x1.9mm) , made of (small series) frame 47 x 50 mm & sash 47 x 68 mm both having wall thickness of 1.9 + or - 0.2mm and single glass pane glazing bead of appropriate dimension (Area of window upto 0.75sqm) - (casement window size 0.50 x 1.35 m)	sqm	12079.51
9.147A.2	Providing and fixing factory made uPVC white colour casement /casement cum fixed glazed windows comprising of uPVC multi-chambered frame , sash and mullion (where ever required) extruded profiles duly reinforced with 1.60 + or - 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), uPVC extruded glazing beads of appropriate dimension , EPDM gasket , stainless steel (SS 304 grade) friction hinges , zinc alloy (white powder coated) casement handles, G.I fasteners 100 x8 mm size for fixing frame to finished wall , plastic packers , plastic caps and necessary	sqm	11245.12

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, mullion (if required) shall be also fusion welded including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealent over backer rod of required size and of approved quality , all complete as per approved drawing.(Single / double glass panes and silicon sealent shall be paid separately) - Casement window double panels with S.S. friction hinges (300 x 19 x 1.9 mm) made of (small series) frame 47 x 50 mm , sash 47 x 68 mm & mullion 47 x 68 mm all having wall thickness of 1.9 + or - 0.2 mm and single glazing bead of appropriate dimension. (Area of window above 0.75 sqm upto 1.50 sqm) - casement window size 1.00x1.35 m		
9.147A.3	Providing and fixing factory made uPVC white colour casement /casement cum fixed glazed windows comprising of uPVC multi-chambered frame , sash and mullion (where ever required) extruded profiles duly reinforced with 1.60 + or - 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), uPVC extruded glazing beads of appropriate dimension , EPDM gasket , stainless steel (SS 304 grade) friction hinges , zinc alloy (white powder coated) casement handles, G.I fasteners 100 x8 mm size for fixing frame to finished wall , plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, mullion (if required) shall be also fusion welded including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealent over backer rod of required size and of approved quality , all complete as per approved drawing.(Single / double glass panes and silicon sealent shall be paid separately) - Casement window double panels with top fixed with S.S. friction hinges (350 x 19 x 1.9 mm) made of (small series) frame 47 x 50 mm , sash 47 x 68 mm & mullion 47 x 68 mm all having wall thickness of 1.9 + or - 0.2mm and single glazing bead of appropriate dimension . (Area of window upto 2.50 sqm) - Casement window size 1.20x1.80m	sqm	12073.36
9.147A.4	Providing and fixing factory made uPVC white colour casement /casement cum fixed glazed windows comprising of uPVC multi-chambered frame , sash and mullion (where ever required) extruded profiles duly reinforced with 1.60 + or - 0.2	sqm	12548.58

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), uPVC extruded glazing beads of appropriate dimension , EPDM gasket , stainless steel (SS 304 grade) friction hinges , zinc alloy (white powder coated) casement handles, G.I fasteners 100 x8 mm size for fixing frame to finished wall , plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, mullion (if required) shall be also fusion welded including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealent over backer rod of required size and of approved quality , all complete as per approved drawing.(Single / double glass panes and silicon sealent shall be paid separately) - casement window single panel with S.S.friction hinges (400 x 19 x 1.9mm) made of (big series) frame 67 x 60 mm & sash 67 x 80 mm both having wall thickness of 2.3 + or - 0.2 mm and single glazing bead / double glazing bead of appropriate dimension . (Area of window above 0.75 sqm) - casement window size 0.70 x 1.5 m		
9.147A.5	Providing and fixing factory made uPVC white colour casement /casement cum fixed glazed windows comprising of uPVC multi-chambered frame , sash and mullion (where ever required) extruded profiles duly reinforced with 1.60 + or - 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), uPVC extruded glazing beads of appropriate dimension , EPDM gasket , stainless steel (SS 304 grade) friction hinges , zinc alloy (white powder coated) casement handles, G.I fasteners 100 x8 mm size for fixing frame to finished wall , plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, mullion (if required) shall be also fusion welded including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealent over backer rod of required size and of approved quality , all complete as per approved drawing.(Single / double glass panes and silicon sealent shall be paid separately) - Casement window double panels with S.S. friction hinges (350x19x1.9mm) made of (big series) frame 67 x 60 mm & sash / mullion 67 x 80mm both having wall thickness of 2.3 + or - 0.2 mm and single glazing bead / double glazing bead of appropriate dimension .(Area of window above 1.50 sqm)	sqm	12751.69

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.147A.6	Providing and fixing factory made uPVC white colour casement /casement cum fixed glazed windows comprising of uPVC multi-chambered frame , sash and mullion (where ever required) extruded profiles duly reinforced with 1.60 + or - 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), uPVC extruded glazing beads of appropriate dimension , EPDM gasket , stainless steel (SS 304 grade) friction hinges , zinc alloy (white powder coated) casement handles, G.I fasteners 100 x8 mm size for fixing frame to finished wall , plastic packers , plastic caps and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, mullion (if required) shall be also fusion welded including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality , all complete as per approved drawing.(Single / double glass panes and silicon sealant shall be paid separately) - Casement cum fixed panel window having both end single casement panel , middle fixed panels and at top completely fixed ventilator with S.S friction hinges (350 x 19 x 1.9) made of (big series) frame 67 x 60 mm , sash 67 x 80 mm , & mullion 67 x 80 mm all having wall thickness of 2.3 + or - 0.2mm and single glazing bead / double glazing bead of appropriate dimension. (Area of window above 3.00 sqm upto 5.00 sqm)	sqm	9418.14
9.147B.1	Providing and fixing factory made uPVC white colour fixed glazed windows / ventilators comprising of uPVC multi - chambered frame and mullion (where ever required) extruded profiles duly reinforced with 1.6 + or - 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), uPVC extruded glazing beads of appropriate dimension , EPDM gasket, G.I.fastners 100 x 8 mm size for fixing frame to finished wall , plastic packers , plastic caps and necessary stainless steel screws etc.Profile of frame shall be mitred cut and fusion welded at all corners , mullion (if required) shall be also fusion welded including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality , all complete as per approved drawing. (Single / double glass panes and silicon sealant shall be paid separately) - Fixed window / ventilator made of (small	sqm	7591.02

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	series) frame 47 x 50 mm & mullion 47 x 68 mm both having wall thickness of 1.9 + or - 0.2 mm and single glazing bead of appropriate dimension. (Area upto 0.75 sqm) - Fixed window size - 1.20x0.50 m		
9.147C.1	Providing and fixing factory made uPVC white colour casement / casement cum fixed glazed door comprising of uPVC multi-chambered frame ,sash and mullion (where ever required) extruded profiles duly reinforced with 1.60 + or - 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size accoring to uPVC profile), uPVC extruded glazing beads of appropriate dimension , EPDM gasket , zinc alloy (white powder coated) 3D hinges and one handle on each side of panels along with zinc plated mild steel multi point locking having transmission gear , cylinder with keeps and one side key, G.I.fastners 100 x8 mm size for fixing frame to finished wall and necessary stainless steel screws , etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners , mullion (if required) shall be also fusion welded including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealent over backer rod of required size and of approved quality , all complete as per approved drawing. (Single / double glass panes and silicon sealent shall be paid separately) - casement door with 3D hinges made of (big series) frame 67 x 64 mm & sash 67 x 110 mm both having wall thickness of 2.3 + or - 0.2mm and single glazing bead / double glazing bead of appropriate dimension.(Area of door upto 2.00 sqm) - casement door size 0.9 x 2.10	sqm	13329.43
9.147C.2	Providing and fixing factory made uPVC white colour casement / casement cum fixed glazed door comprising of uPVC multi-chambered frame ,sash and mullion (where ever required) extruded profiles duly reinforced with 1.60 + or - 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size accoring to uPVC profile), uPVC extruded glazing beads of appropriate dimension , EPDM gasket , zinc alloy (white powder coated) 3D hinges and one handle on each side of panels along with zinc plated mild steel multi point locking having transmission gear , cylinder with keeps and one side key, G.I.fastners 100 x8 mm size for fixing frame to finished wall and necessary stainless steel screws , etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners , mullion (if required) shall be also fusion welded including drilling of holes	sqm	11579.42

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealent over backer rod of required size and of approved quality , all complete as per approved drawing. (Single / double glass panes and silicon sealent shall be paid separately) - casement door with top hung ventilator with 3D and S.S .friction hinges (400x19x1.9mm) made of (big series) frame 67 x 64 mm & sash 67 x 110 mm & mullion 67 x 80 mm all having wall thickness of 2.3 + or - 0.2mm and single glazing bead / double glazing bead of appropriate dimension.(Area of door upto 2.50 sqm) - casement door size 0.9 x 2.70		
9.147D.1	Providing and fixing factory made uPVC white colour sliding glazed window upto 1.50m in height dimension comprising of uPVC multi - chambered frame with in-built roller track and sash extruded profiles duly reinforced with 1.60 + or - 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), appropriate dimension of uPVC extruded glazing beads and uPVC extruded interlocks, EPDM gasket, wool pile , zinc alloy (white powder coated) touch locks with hook , zinc alloy body with single nylon rollers (weight bearing capacity to be 40 kg), G.I. fastners 100 x8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, including drilling of holes for fixing hardware's and drainage of water etc.After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealent over backer rod of required size and of approved quality , all complete as per approved drawing.(Single / double glass panes , wire mesh and silicon sealent shall be paid separately) - Two track two panels sliding window made of (small series) frame 52 x 44 mm & sash 32 x 60 mm both having wall thickness of 1.9 + or - 0.2 mm and single glazing bead of appropriate dimension.(Area of window upto 1.75 sqm) - sliding window size 1.20x1.35 m	sqm	8273.10
9.147D.2	Providing and fixing factory made uPVC white colour sliding glazed window upto 1.50m in height dimension comprising of uPVC multi - chambered frame with in-built roller track and sash extruded profiles duly reinforced with 1.60 + or - 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), appropriate dimension of uPVC extruded glazing beads and uPVC extruded interlocks, EPDM gasket, wool pile , zinc alloy (white powder coated) touch locks with hook , zinc	sqm	10963.61

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	alloy body with single nylon rollers (weight bearing capacity to be 40 kg), G.I. fastners 100 x8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality , all complete as per approved drawing.(Single / double glass panes , wire mesh and silicon sealant shall be paid separately) - Three track three panels sliding window with fly proof SS wire mesh (Two nos. glazed & one no. wire mesh panels) made of (small series) frame 92 x 44 mm & sash 32 x 60 mm both having wall thickness of 1.9 + or - 0.2 mm and single glazing bead of appropriate dimension.(Area of window upto 1.75 sqm) - sliding window size 1.20x1.35 m		
9.147D.3	Providing and fixing factory made uPVC white colour sliding glazed window upto 1.50m in height dimension comprising of uPVC multi - chambered frame with in-built roller track and sash extruded profiles duly reinforced with 1.60 + or - 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), appropriate dimension of uPVC extruded glazing beads and uPVC extruded interlocks, EPDM gasket, wool pile , zinc alloy (white powder coated) touch locks with hook , zinc alloy body with single nylon rollers (weight bearing capacity to be 40 kg), G.I. fastners 100 x8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality , all complete as per approved drawing.(Single / double glass panes , wire mesh and silicon sealant shall be paid separately) - Two track two panels sliding window made of (big series) frame 67 x 50 mm & sash 46 x 62 mm both having wall thickness of 2.3 + or - 0.2 mm and single glazing bead / double glazing bead of appropriate dimension.(Area of window above 1.75 sqm upto 2.50 sqm) - sliding window size 1.50x1.35 m	sqm	8484.54
9.147D.4	Providing and fixing factory made uPVC white colour sliding glazed window upto 1.50m in height dimension comprising of uPVC multi - chambered frame with in-built roller track and	sqm	10453.77

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	sash extruded profiles duly reinforced with 1.60 + or - 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), appropriate dimension of uPVC extruded glazing beads and uPVC extruded interlocks, EPDM gasket, wool pile , zinc alloy (white powder coated) touch locks with hook , zinc alloy body with single nylon rollers (weight bearing capacity to be 40 kg), G.I. fastners 100 x8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality , all complete as per approved drawing.(Single / double glass panes , wire mesh and silicon sealant shall be paid separately) - Three track three panels sliding window with fly proof SS wire mesh (Two nos. glazed & one no. wire mesh panels) made of (bigl series) frame 116 x 45 mm & sash 46 x 62 mm both having wall thickness of 2.3+ or - 0.2 mm and single glazing bead / double glazing bead of appropriate dimension.(Area of window above 1.75 sqm) - sliding window size 1.80x1.35 m		
9.147D.5	Providing and fixing factory made uPVC white colour sliding glazed window upto 1.50m in height dimension comprising of uPVC multi - chambered frame with in-built roller track and sash extruded profiles duly reinforced with 1.60 + or - 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), appropriate dimension of uPVC extruded glazing beads and uPVC extruded interlocks, EPDM gasket, wool pile , zinc alloy (white powder coated) touch locks with hook , zinc alloy body with single nylon rollers (weight bearing capacity to be 40 kg), G.I. fastners 100 x8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality , all complete as per approved drawing.(Single / double glass panes , wire mesh and silicon sealant shall be paid separately) - Three track three panels sliding window made of (big series) frame 116 x45 mm & sash 46x62 mm both having wall thickness of 2.3 + or - 0.2 mm and single glazing bead / double glazing bead of appropriate	sqm	9917.47

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	dimension.(Area of window above 1.75 sqm) - sliding window size 1.80x1.35 m		
9.147E.1	Providing and fixing factory made uPVC white colour sliding glazed window above 1.50 m in height dimension comprising of uPVC multi - chambered frame with in-built roller track and sash extruded profiles duly reinforced with 1.60 + or - 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), appropriate dimension of uPVC extruded glazing beads , uPVC extruded interlocks and uPVC extruded Inline sash adaptor (if required), EPDM gasket , wool pile, zinc alloy (white powder coated) handle on one side of extreme panel along with zinc plated mild steel multi point locking having transmission gear with keeps , zinc alloy (white powder coated) touch lock with hook (if required for wire mesh panel), stainless steel (SS 304 grade) body with adjustable double nylon rollers (weight bearing capacity to be 120 kg), G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners , including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality, all complete as per approved drawing (Single / double glass panes , wire mesh and silicon sealant shall be paid separately) - Two track two panels sliding window made of (big series) frame 67 x 50 mm & sash 46 x 62 mm both having wall thickness of 2.3 + or - 0.2 mm and single glazing bead / double glazing bead of appropriate dimension. (Area of window above 2.50 sqm upto 4.00 sqm)	sqm	7977.53
9.147E.2	Providing and fixing factory made uPVC white colour sliding glazed window above 1.50 m in height dimension comprising of uPVC multi - chambered frame with in-built roller track and sash extruded profiles duly reinforced with 1.60 + or - 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), appropriate dimension of uPVC extruded glazing beads , uPVC extruded interlocks and uPVC extruded Inline sash adaptor (if required), EPDM gasket , wool pile, zinc alloy (white powder coated) handle on one side of extreme panel along with zinc plated mild steel multi point locking having transmission gear with keeps , zinc alloy (white powder coated) touch lock with hook (if required for wire mesh panel), stainless steel (SS 304 grade) body with adjustable double	sqm	7124.35

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	nylon rollers (weight bearing capacity to be 120 kg), G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners , including drilling of holes for fixing hardware's and draiage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealent over backer rod of required size and of approved quality, all complete as per approved drawing (Single / double glass panes , wire mesh and silicon sealent shall be paid separately) - Two track four panels sliding window made of (big series) frames 67 x 50 mm & sash 46 x 62 mm both having wall thickness of 2.3 +or- 0.2mm and single glazing bead / double glazing bead of appropriate dimension . (Area of window above 4.00 sqm upto 8.00 sqm)		
9.147F.1	Providing and fixing factory made uPVC white colour sliding glazed door comprising of uPVC multi-chambered frame with in -built roller track and sash extruded profiles duly reinforced with 1.60 + or - mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), appropriate dimension uPVC extruded glazing beads , uPVC extruded interlock and uPVC extruded Inline sash adaptor (if required), EPDM gasket , wool pile , zinc alloy (white powder coated) handle with key on one side of extreme panels along with zinc plated mild steel multi point locking having transmission gear with keeps, zinc alloy (white powder coated) crescent lock (if required), stainless steel (SS 304 grade) body with adjustable double nylon rollers (weight bearing capacity to be 120 kg), G.I.fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profile of frame and sash shall be mitred cut and fusion welded at all corners , including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealent over backer rod of required size and of approved quality, all complete as per approved drawing (Single / double glass panes, wire mesh and silicon sealent shall be paid separately) - Two track two panels sliding door made of (big series) frame 67 x 50 mm & sash 46 x 82 mm both having wall thickness of 2.3 + or - mm and single glazing bead / double glazing bead of appropriate dimension . (Area of door above 2.00 sqm upto 5.00 sqm)	sqm	7258.56
9.147F.2	Providing and fixing factory made uPVC white colour sliding glazed window above 1.50 m in height dimension comprising of uPVC multi - chambered frame with in-built roller track and	sqm	6501.57

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	sash extruded profiles duly reinforced with 1.60 + or - 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), appropriate dimension of uPVC extruded glazing beads , uPVC extruded interlocks and uPVC extruded Inline sash adaptor (if required), EPDM gasket , wool pile, zinc alloy (white powder coated) handle on one side of extreme panel along with zinc plated mild steel multi point locking having transmission gear with keeps , zinc alloy (white powder coated) touch lock with hook (if required for wire mesh panel), stainless steel (SS 304 grade) body with adjustable double nylon rollers (weight bearing capacity to be 120 kg), G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners , including drilling of holes for fixing hardware's and draiage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealent over backer rod of required size and of approved quality, all complete as per approved drawing (Single / double glass panes , wire mesh and silicon sealent shall be paid separately) -Two track four panels sliding door made of (big series) frame 67 x 50 mm & sash 46 x 82 mm both having wall thickness of 2.3 + or - 0.2mm and single glazing bead / double glazing bead of appropriate dimension. (Area of door above 8.00 sqm to 10.00 sqm)		
9.147F.3	Providing and fixing factory made uPVC white colour sliding glazed window above 1.50 m in height dimension comprising of uPVC multi - chambered frame with in-built roller track and sash extruded profiles duly reinforced with 1.60 + or - 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), appropriate dimension of uPVC extruded glazing beads , uPVC extruded interlocks and uPVC extruded Inline sash adaptor (if required), EPDM gasket , wool pile, zinc alloy (white powder coated) handle on one side of extreme panel along with zinc plated mild steel multi point locking having transmission gear with keeps , zinc alloy (white powder coated) touch lock with hook (if required for wire mesh panel), stainless steel (SS 304 grade) body with adjustable double nylon rollers (weight bearing capacity to be 120 kg), G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners , including drilling of holes for fixing hardware's and draiage of water etc. After fixing frame the gap between frame and adjacent finished	sqm	7303.43

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	wall shall be filled with weather proof silicon sealent over backer rod of required size and of approved quality, all complete as per approved drawing (Single / double glass panes , wire mesh and silicon sealent shall be paid separately) - Three track three panels sliding door made of (big series) frame 116 x 45 mm & sash 46 x 82 mm both having wall thickness of 2.3 + or - 0.2 mm and single glazing bead / double glazing bead of appropriate dimension . (Area of door above 5.00 sqm)		
9.147F.4	Providing and fixing factory made uPVC white colour sliding glazed window above 1.50 m in height dimension comprising of uPVC multi - chambered frame with in-built roller track and sash extruded profiles duly reinforced with 1.60 + or - 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), appropriate dimension of uPVC extruded glazing beads , uPVC extruded interlocks and uPVC extruded Inline sash adaptor (if required), EPDM gasket , wool pile, zinc alloy (white powder coated) handle on one side of extreme panel along with zinc plated mild steel multi point locking having transmission gear with keeps , zinc alloy (white powder coated) touch lock with hook (if required for wire mesh panel), stainless steel (SS 304 grade) body with adjustable double nylon rollers (weight bearing capacity to be 120 kg), G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners , including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealent over backer rod of required size and of approved quality, all complete as per approved drawing (Single / double glass panes , wire mesh and silicon sealent shall be paid separately) - Three track three panels sliding door with fly proof S.S. wire mesh (Two nos.glazed & one no.wire mesh panels) made of (big series) frame 116 x 45 mm & sash 46 x 82 mm both having wall thickness of 2.3 + or - 0.2 mm and single glazing bead / double galzing bead of appropriate dimension. (Area of door above 2.00 sqm upto 5.00 sqm)	sqm	9335.77
9.148.1	Providing and fixing stainless steel (SS - 304 grade) friction hinges to the side / top hung uPVC windows , of approved quality , with necessary stainless steel screws etc as per direction of Engineer-in-charge - 200 x 19 x 1.9 mm	each	481.76
9.148.2	Providing and fixing stainless steel (SS - 304 grade) friction	each	574.23

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	hinges to the side / top hung uPVC windows , of approved quality , with necessary stainless steel screws etc as per direction of Engineer-in-charge - 250 x 19 x 1.9 mm		
9.148.3	Providing and fixing stainless steel (SS - 304 grade) friction hinges to the side / top hung uPVC windows , of approved quality , with necessary stainless steel screws etc as per direction of Engineer-in-charge - 300 x 19 x 1.9 mm	each	732.15
9.148.4	Providing and fixing stainless steel (SS - 304 grade) friction hinges to the side / top hung uPVC windows , of approved quality , with necessary stainless steel screws etc as per direction of Engineer-in-charge - 350 x 19 x 1.9 mm	each	844.53
9.148.5	Providing and fixing stainless steel (SS - 304 grade) friction hinges to the side / top hung uPVC windows , of approved quality , with necessary stainless steel screws etc as per direction of Engineer-in-charge - 400 x 19 x 1.9 mm	each	1008.14
9.149	Providing and fixing casement handle made of zinc alloyed (white powder coated) for uPVC casement window with necessary screws etc. complete	each	303.17
9.150	Providing and fixing zinc alloyed (white powder coated) touch lock for uPVC sliding window with necessary screws etc., complete	each	281.82
9.151	Providing and fixing steel roller for uPVC sliding window with necessary screws etc . Complete	each	125.33
9.152	Providing and fixing steel roller for uPVC sliding door with necessary screws etc . Complete	each	227.76
9.153	Providing and fixing steel (white powder coated) crescent lock for uPVC sliding window / door with necessary screws etc.complete	each	253.37
9.154	Providing and fixing frame work for partitions / wall lining etc. made of 50 x 50 x 1.6 mm hollow MS tube , placed along the walls, ceiling and floor in a grid pattern with spacing @ 60 cm centre to centre both ways (vertically & horizontally) or at required spacing near opening , with necessary welding at junctions and fixing the frame to wall / ceiling / floors with steel dash fasteners of 8 mm dia , 75 mm long bolt , including	kg	205.30

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	making provision for opening for doors , windows , electrical conduits , switch boards etc., including providing with two coats of approved steel primer etc. complete all as per direction of Engineer-in-charge		
9.155	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors , windows and clerestory windows (area of opening for panel inserts excluding portion inside grooves or rebated to be measured). Panelling for panelled and glazed shutters 25 mm to 40 mm thick : Pre -laminated with decorative lamination on both side exterior grade - I MDF Board 12 mm thick confirming to IS : 14587	sqm	3156.18
9.156.1	Providing and fixing Pre-laminated medium density fibre board exterior grade (Grade -I) IS :14587 :1998 marked , to frame , backing or studding with screws etc .complete (Frames , backing or studding to be paid separately). - Pre -laminated with decorative lamination on both side exterior Grade - I MDF Board 12 mm thick confirming to IS :14587	sqm	1926.61
9.156.2	Providing and fixing Pre-laminated medium density fibre board exterior grade (Grade -I) IS :14587 :1998 marked , to frame , backing or studding with screws etc .complete (Frames , backing or studding to be paid separately). - Pre -laminated with decorative lamination on both side exterior Grade - I MDF Board 18 mm thick confirming to IS :14587	sqm	2261.96
9.157.1	Providing and fixing Pre -laminated medium density fibre board IS : 14587 : 1998 marked , with one side decorative lamination other side balancing lamination Grade I (exterior grade) in shelves with screws and fittings wherever required , edges to be sealed with PVC edge bending tape 2.00 mm thick of approved brand (fittings to be paid separately) - Pre -laminated with decorative lamination one side and other side balancing lamination exterior Grade - I MDF Board 18 mm thick confirming to IS :14587	sqm	2414.57
9.157.2	Providing and fixing Pre -laminated medium density fibre board IS : 14587 : 1998 marked , with one side decorative lamination other side balancing lamination Grade I (exterior grade) in shelves with screws and fittings wherever required , edges to be sealed with PVC edge bending tape 2.00 mm thick of approved brand (fittings to be paid separately) - Pre -laminated with decorative lamination one side and other side	sqm	3049.43

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	balancing lamination exterior Grade - I MDF Board 25 mm thick conforming to IS :14587		
9.158.1	Providing and fixing in wall lining medium density fibre board IS : 14587 : 1998 marked , Pre - laminated one side decorative lamination and other side balancing lamination , with necessary fixing arrangement and screws etc. complete - 12 mm thick	sqm	1878.15
9.158.2	Providing and fixing in wall lining medium density fibre board IS : 14587 : 1998 marked , Pre - laminated one side decorative lamination and other side balancing lamination , with necessary fixing arrangement and screws etc. complete - 18 mm thick	sqm	2292.85
9.158.3	Providing and fixing in wall lining medium density fibre board IS : 14587 : 1998 marked , Pre - laminated one side decorative lamination and other side balancing lamination , with necessary fixing arrangement and screws etc. complete - 25 mm thick	sqm	2957.94
9.159	Providing and fixing 25 mm thick pre-laminated medium density fibre board exterior grade (Grade -I) IS : 14587 : 1998 marked one side decorative and other side balancing lamination for cupboard shutters edges to be sealed with PVC edge bending tape 2.00 mm thick of approved brand including ISI marked nickeled plated bright finishing M.S.piano hinges IS : 3818 marked with necessary screw etc all complete	sqm	3219.59
9.160.1	Providing and fixing skirting with Pre - laminated medium density fibre board exterior grade (Grade -I) conforming to IS :14587 : 1998 marked with, (one side decorative and other side balancing lamination and edges to be sealed with PVC edge bending tape 2.00 mm thick of approved brand with necessary fixing arrangements and screws , including drilling necessary holes for rawl plugs etc all complete - 18 mm thick	sqm	2952.29
9.160.2	Providing and fixing skirting with Pre - laminated medium density fibre board exterior grade (Grade -I) conforming to IS :14587 : 1998 marked with, (one side decorative and other side balancing lamination and edges to be sealed with PVC edge bending tape 2.00 mm thick of approved brand with necessary fixing arrangements and screws , including drilling necessary holes for rawl plugs etc all complete - 25 mm thick	sqm	3617.37
9.161	Providing and fixing fire resistant door frame of section 50x 60 mm on horizontal side & 35 x 60 mm on vertical sides having	metre	2177.78

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	built in rebate made out of 1.6mm thick GI sheet (Zinc Coating not less than 120gm / sqm) suitable for mounting 120 minutes Fire Rated Glazed Door Shutters. The frame shall be filled with Mineral wool Insulation having density minimum 96Kg/cum. The frame will have a provision of G.I.Anchor fastners 14 nos (5 each on vertical style and 4 on horizontal style of size M10 x 80) suitable for fixing in the opening along with Factory made Template for SS Ball Bearing Hinges of Size 100x89x3mm for fixing of fire rated glazed shutter. The frame shall be finished with a approved fire resistant primer of Powder coating of not less than 30 micron in desired shade as per the direction of Engineer -in- charge(Cost of SS ball bearing hinges is excluded).- Door size -1710 x 2050 mm.		
9.162	Providing and fixing 60 mm thick glazed fire resistant door shutters of 120 minutes Fire Rating confirming to IS:3614(Part II) or EN1634-1:1999, tested and certified as per laboratory approved by Engineer-in-charge, with suitable mounting on door frame , consisting of vertical styles, top rail & side rail 60mm x 60mm wide and bottom rail of 110 mm x 60mm made out of 1.6mm thick G.I.sheet (zinc coating not less than 120gm/ sqm) duly filled mineral wool insulation having density minimum 96 kg / cum and fixing with necessary stainless steel ball bearing hinges of size 100x89x3mm of approved make , including applying a coat of approved fire resistant primer of powder coating not less than 30 micron etc all complete as per direction of Engineer-in-charge (panelling to be paid for seperately)- Door size -1710 x 2050 mm.	sqm	12070.46
9.163	Providing and fixing non load bearing fixed frame for fire resistant glazed partition for 120 minutes Fire Rating , made out to a profile of dimension 60mm x 70mm of 1.6mm thick galvanised steel sheet as per test evidence suitable for fixing fire rated glass for 120 minutes of both integrity & radiation control(EW120) & minimum 20 minutes of insulation (E120). The profile has to be fixed to the supporting construction by means of anchor fasteners of size M10x80, every 150mm from the edges and every 500 mm (approx) c/c. Linear measurement of frames shall be measured for payment. The frame shall be filled with mineral wool insulation of density minimum 96kg /cum and finished with a approved fire resistant primer of powder coating of not less than 30 micron in desired shade as per NBC 2016, IS 16231 (Part-3): 2016 and direction of Engineer-in-charge.	metre	2177.78
9.164	Providing and fixing glazing in fire resistant door shutters,	sqm	45875.63

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	fixed panels & partitions etc., with G.I.beading made out of 1.6mm thick G.I.Sheet (zinc coating not less than 120 gm / sqm) of size 20x33mm screwed with M4 X38mm SS screws at distance 75mm from the edge and 150 mm c/c , including applying a coat of approved fire resistant primer / powder coating not less than 30 micron on G.I.beading and special ceramic tape of 5 x 20mm size etc complete in all respect as per NBC 2016, IS 16231 (Part-3): 2016 and as per direction of Engineer-in-charge with glass of required thickness having 120minutes of fire resistants both integrity & radiation control (EW120) and minimum 20 minutes of insulation (EI 20). The manufacturer have to give test report / certification of fire glass and the glass should have the stamp showing the value of E. EW & EI. The glass shall be tested in approved NABL accredited lab or buy any other accreditation body which operates in accordance with ISO/IEC 17011 and accredited labs as per ISO/IEC 17025 for testing and calibration scopes shall be eligible, The maximum glazing size shall not be more than 1100x2200 mm (w x h) or 2.42 sqm		
9.165.1	Providing and fixing bright / matt finished Stainless Steel handles of approved quality & make with necessary screws etc all complete - 125 mm	no	206.85
9.165.1A	Providing and fixing of 65mm Navatal lock of 6 levers etc complete	each	688.56
9.165.1B	Providing and fixing of 65 mm Navatal lock of 7 levers with 3 keys etc complete	each	985.89
9.165.2	Providing and fixing bright / matt finished Stainless Steel handles of approved quality & make with necessary screws etc all complete - 100 mm	no	148.95
9.165.3	Providing and fixing bright / matt finished Stainless Steel handles of approved quality & make with necessary screws etc all complete - 75mm	no	97.31
9.166.1	Providing and fixing 18mm thick both sides Pre-laminated cement bonded wood particle board as per IS: 15786:2008 of approved brand and shade with suitable full threaded steel screws etc in partitions , boxes, shelves, racks and cupboard , kitchen cabinet under kitchen counter etc. all complete as per direction of Engineer-in-charge of Engineer -in-charge (Note: Fittings to be paid separately) - 18mm thick	sqm	1522.25

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.167	Providing and fixing 6mmthick both sides prelaminated cement bonded wood particle board as per IS:15786: 2008 of approved brand and shade with suitable full threaded steel screws etc on the backing of racks, drawer, cub-boards, kitchen cabinet and kitchen counter etc all complete as per direction of Engineer-in-charge	sqm	1135.30
9.168	Providing and fixing cupboard shutter with 19mm thick one side decorative and other side balancing lamination factory pressed BWP grade marine ply as per IS 710 of approved brand including 2 mm thick PVC edge banding tape with hot glue by edge bending machine etc with auto closing spring loaded hinges (hydraulic type) etc complete as per direction of Engineer-in-charge (payment of providing and fixing auto closing hinges shall be paid separately)	sqm	3135.22
9.169	Providing and fixing 19mm thick both side balancing lamination factory pressed BWP grade marine ply as per IS 710 of approved brand boxes, shelevs, racks, almirah, cupboard and drawer etc including nessery nails, screws, etc complete as per direction of Engineer-in-charge.	sqm	2863.90
9.170.1	Providing and fixing stainless steel fancy handle of approved make fixed with SS screws etc complete as per direction of Engineer-in-charge.- 200mm	no	202.51
9.171	Providing and fixing stainless steel soft closing spring hinges at zero degree hinges (hydraulic type) of approved make / brand to cupboard shutters with full threaded steel screws including making necessary recess in board and finished etc. complete as per direction of Engineer-in-charge.	no	295.55
9.172	Providing and fixing stainless steel soft closing heavy type telescopic drawer channels of approved make 500mm long with screws etc.complete as per direction of Engineer-in-charge.	set	951.13
9.173	Providing and fixing raedy made 304 grade stainless steel modular kitchen basket and accessories such as right angle basket, (Plain cup and saucer, plant, partition, bottle rack, thali,cutlery) kitchen utensil basket, Dinner set basket, kitchen grain basket, multi purpose basket as per site requirement including finishing (wherever required) and fittings. The same shall be fixed with necessary stainless steel nuts and bolts,	kg	585.48

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	Stainless steel screws & telescopic channel etc. as per direction of Engineer-in-charge. (For payment pupose only weight of stainless steel basket shall be considered excluding weight of all fixing accessories such as nuts, bolts, fasteners, telescopic basket channels etc., Payment of providing and fixing telescopic channel shall be paid separately)		
9.174	providing and fixing 2mm thick 16 to 19mm wide PVC edge binding tape of approved quality for cupboard / wardrope shutters including necessary synthetic resin hot pressed to edges on binding machine etc., complete as per direction of Engineer-in-charge	metre	70.92

10 . Steel Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
10.1	Structural steel work in single section , fixed with or without connecting plate, including cutting , hoisting , fixing in position and applying a priming coat of approved steel primer all complete	kg	133.82
10.2	Structural steel work riveted , bolted or welded in built up sections , trusses and framed work , including cutting, hoisting , fixing in position and applying a priming coat of approved steel primer all complete	kg	159.99
10.3	Providing and fixing in position collapsible steel shutters with vertical channels 20x10x2 mm and braced with flat iron diagonals 20x5 mm size, with top and bottom rail of T - iron 40x40x6mm , with 40mm dia steel pulleys, complete with bolts, nuts, locking arrangement , stoppers, handles , including applying a priming coat of approved steel primer	sqm	13623.96
10.4	Providing and fixing 1mm thick M.S.sheet sliding - shutters , with frame and diagonal braces of 40x40x6 mm angle iron , 3mm M.S.gusset plates at the junction and corners, 25 mm dia pulley, 40 x 40x6mm angle and T -iron guide at the top and bottom respectively , including applying a priming coat of approved steel primer	sqm	7648.37
10.5.1	Providing and fixing 1mm thick M.S.sheet door with frame of 40x40x6 mm angle iron and 3mm M.S.gusset plates at the junctions and corners , all necessary fittings complete, including applying a priming coat of approved steel primer - Using M.S.angles 40x40x6mm for diagonal braces	sqm	6992.87
10.5.2	Providing and fixing 1mm thick M.S.sheet door with frame of 40x40x6 mm angle iron and 3mm M.S.gusset plates at the junctions and corners , all necessary fittings complete, including applying a priming coat of approved steel primer - Using flats 30x6 mm for diagonal braces and central cross piece	sqm	6760.50
10.6.1	Supplying and fixing rolling shutters of approved make, made of required size M.S.laths, interlocked together through their entire length and jointed together at the end by end locks , mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength	sqm	4820.66

10 . Steel Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	conforming to ISS :4454 -part 1 and M.S.top cover of required thickness for rolling shutters - 80 x 1.25mm M.S.laths with 1.25 mm thick top cover		
10.6.2	Supplying and fixing rolling shutters of approved make, made of required size M.S.laths, interlocked together through their entire length and jointed together at the end by end locks , mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to ISS :4454 -part 1 and M.S.top cover of required thickness for rolling shutters - 80 x 1.20mm M.S.laths with 1.20 mm thick top cover	sqm	4107.45
10.6.3	Supplying and fixing rolling shutters of approved make, made of required size M.S.laths, interlocked together through their entire length and jointed together at the end by end locks , mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to ISS :4454 -part 1 and M.S.top cover of required thickness for rolling shutters - 80 x 0.90 mm M.S.laths with 0.90 mm thick top cover	sqm	3903.54
10.7	Providing and fixing ball bearing for rolling shutters	each	952.91
10.8.1	Extra for providing mechanical device chain and crank operation for operating rolling shutters - exceeding 10.00 sqm and upto 16.80 sqm in the area	sqm	1415.58
10.8.2	Extra for providing mechanical device chain and crank operation for operating rolling shutters - exceeding 16.80 sqm in area	sqm	1415.58
10.9	Extra for providing grilled rolling shutters manufactured out of 8mm dia M.S. bar instead of laths as per design approved by Engineer -in-charge (area of grill to be measured)	sqm	594.67
10.10.1	Fixing standard steel glazed doors, windows and ventilators in walls, including fixing of float glass panes with glazing clips	kg	93.49

10 . Steel Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	and special metal -sash putty of approved make , or metal beading with screws, (only steel windows, glass panes cut to size and glazing clips or metal beading with screws, shall be supplied by department free of cost - Fixing with 15x3 mm lugs 10cm long embedded in cement concrete block 15 x 10x10 cm of C.C 1:3:6 (1 cement : 3 fine aggregate : 6 graded stone aggregate 20 mm nominal size)		
10.10.2	Fixing standard steel glazed doors, windows and ventilators in walls, including fixing of float glass panes with glazing clips and special metal -sash putty of approved make , or metal beading with screws, (only steel windows, glass panes cut to size and glazing clips or metal beading with screws, shall be supplied by department free of cost - Fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately)	kg	42.91
10.11.1	Providing and fixing factory made ISI marked steel glazed doors, windows and ventilators, side /top/centre hung, with beading and all members such as F7D,F4B,K11 B and K12 B etc. complete of standard rolled steel sections, joints mitred and flash butt welded and sash bars tenoned and riveted, including providing and fixing of hinges, pivots, including priming coat of approved steel primer, but excluding the cost of other fittings , glass panes complete all as per approved design, (sectional weight of only steel members shall be measured for payment) - Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C.1:3:6 (1 cement :3 fine aggregate : 6 graded stone aggregate 20mm nominal size)	kg	193.36
10.11.2	Providing and fixing factory made ISI marked steel glazed doors, windows and ventilators, side /top/centre hung, with beading and all members such as F7D,F4B,K11 B and K12 B etc. complete of standard rolled steel sections, joints mitred and flash butt welded and sash bars tenoned and riveted, including providing and fixing of hinges, pivots, including priming coat of approved steel primer, but excluding the cost of other fittings , complete all as per approved design, (sectional weight of only steel members shall be measured for payment) - Fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately)	kg	189.97
10.12	Extra for providing and fixing steel beading of size 10x10x1.6mm (box type), approved shape and section with screws instead of glazing clips and metal sash putty, in steel	metre	119.41

10 . Steel Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	doors, windows, ventilators and composite units		
10.13.1	Providing and fixing T-iron frames for doors, windows and ventilators of mild steel Tee-sections , joints mitred and welded , including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer - Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 cement :3 fine aggregate : 6 graded stone aggregate 20mm nominal size)	kg	161.30
10.13.2	Providing and fixing T-iron frames for doors, windows and ventilators of mild steel Tee-sections , joints mitred and welded , including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer - Fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately)	kg	154.41
10.14.1.1	Providing and fixing pressed steel door frames conforming to IS : 4351, manufactured from commercial mild steel sheet of 1.60 mm thickness , including hinges , jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25mm, or base ties of 1.60 mm pressed, mild steel welded or rigidly fixed together by mechanical means, including M.S.pressed butt hinges 2.5mm thick with mortar guards, lock strike -plate and shock absorbers as specified and applying a coat of approved steel primer after pre - treatment of the surface as per direction of Engineer-in-charge- profile B - fixing with adjustable lugs with split end tail to each jamb	metre	606.06
10.14.1.2	Providing and fixing pressed steel door frames conforming to IS : 4351, manufactured from commercial mild steel sheet of 1.60 mm thickness , including hinges , jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25mm, or base ties of 1.60 mm pressed, mild steel welded or rigidly fixed together by mechanical means, including M.S.pressed butt hinges 2.5mm thick with mortar guards, lock strike -plate and shock absorbers as specified and applying a coat of approved steel primer after pre - treatment of the surface as per direction of Engineer-in-charge - profile B - fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately)	metre	594.68
10.14.2.1	Providing and fixing pressed steel door frames conforming to IS : 4351, manufactured from commercial mild steel sheet of 1.60 mm thickness , including hinges , jamb, lock jamb, bead	metre	635.93

10 . Steel Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	and if required angle threshold of mild steel angle of section 50x25mm, or base ties of 1.60 mm pressed, mild steel welded or rigidly fixed together by mechanical means, including M.S.pressed butt hinges 2.5mm thick with mortar guards, lock strike -plate and shock absorbers as specified and applying a coat of approved steel primer after pre - treatment of the surface as per direction of Engineer-in-charge - profile C - fixing with adjustable lugs with split end tail to each jamb		
10.14.2.2	Providing and fixing pressed steel door frames conforming to IS : 4351, manufactured from commercial mild steel sheet of 1.60 mm thickness , including hinges , jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25mm, or base ties of 1.60 mm pressed, mild steel welded or rigidly fixed together by mechanical means, including M.S.pressed butt hinges 2.5mm thick with mortar guards, lock strike -plate and shock absorbers as specified and applying a coat of approved steel primer after pre - treatment of the surface as per direction of Engineer-in-charge - profile C - fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately)	metre	624.56
10.14.3.1	Providing and fixing pressed steel door frames conforming to IS : 4351, manufactured from commercial mild steel sheet of 1.60 mm thickness , including hinges , jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25mm, or base ties of 1.60 mm pressed, mild steel welded or rigidly fixed together by mechanical means, including M.S.pressed butt hinges 2.5mm thick with mortar guards, lock strike -plate and shock absorbers as specified and applying a coat of approved steel primer after pre - treatment of the surface as per direction of Engineer-in-charge- profile E - fixing with adjustable lugs with split end tail to each jamb	metre	704.22
10.14.3.2	Providing and fixing pressed steel door frames conforming to IS : 4351, manufactured from commercial mild steel sheet of 1.60 mm thickness , including hinges , jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25mm, or base ties of 1.60 mm pressed, mild steel welded or rigidly fixed together by mechanical means, including M.S.pressed butt hinges 2.5mm thick with mortar guards, lock strike -plate and shock absorbers as specified and applying a coat of approved steel primer after pre - treatment of the surface as per direction of Engineer-in-charge- profile E - fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately)	metre	692.84

10 . Steel Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
10.15.1	Providing and fixing M.S.Tubular frames for doors, windows,ventilators and cupboard with rectangular / L-type sections ,made of 1.60 mm thick M.S.sheet , joints mitred,welded and grinded finish, with profiles of required size, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer - fixing with 15x3 mm lugs 10cm long embedded in cement concrete block 15x10x10 cm of C.C.1:3:6 (1 cement : 3 fine aggregate: 6 graded stone aggregate 20mm nominal size)	kg	243.67
10.15.2	Providing and fixing M.S.Tubular frames for doors, windows,ventilators and cupboard with rectangular / L-type sections ,made of 1.60 mm thick M.S.sheet , joints mitred,welded and grinded finish, with profiles of required size, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer - fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately)	kg	226.74
10.16.1	Steel work in built up tubular (round,square or rectangular hollow tubes etc.) trusses etc., including cutting , hoisting,fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete - hot finished welded type tubes	kg	235.97
10.16.2	Steel work in built up tubular (round,square or rectangular hollow tubes etc.) trusses etc., including cutting , hoisting,fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete - hot finished seamless type tubes	kg	244.93
10.16.3	Steel work in built up tubular (round,square or rectangular hollow tubes etc.) trusses etc., including cutting , hoisting,fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete - electric resistance or induction butt welded tubes	kg	244.93
10.17	Providing and fixing M.S. fan clamp type I or II of 16mm dia M.S. bar, bent to shape with hooked ends in R.C.C.slabs or beams during laying , including painting the exposed portion of loop, all as per standard design complete	each	275.34

10 . Steel Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
10.18	Providing and fixing circular / hexagonal cast iron or M.S. sheet box for ceiling fan clamp , of internal dia 140mm ,73mm height , top lid of 1.5 mm thick M.S.sheet with its top surface hacked for proper bonding, top lid shall be screwed into the cast iron / M.S.sheet box by means of 3.3 mm dia round headed screws, one lock at the corners, clamp shall be made of 12 mm dia M.S bar bent to shape as per standard drawing	each	260.99
10.19	Providing and fixing mild steel round holding down bolts with nuts and washer plates complete	kg	135.21
10.20	Providing and fixing bolts including nuts and washers complete	kg	218.90
10.21	Providing and fixing M.S.rivets of sizes in position	kg	342.81
10.22	Welding by gas or electric plant including transportation of plant at site etc.complete	cm	5.02
10.25.1	Steel work welded in built up sections / framed work , including cutting,hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required - in stringers, treads, landings etc. of stair cases, including use of chequered plate wherever required all complete	kg	146.83
10.25.2	Steel work welded in built up sections / framed work , including cutting,hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required - in gratings, frames, guard bar, ladder, railings, brackets,gates and similar works	kg	208.47
10.26.1	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing,staircase railing and similar works, including applying priming coat of approved steel primer - M.S.tube	kg	238.86
10.26.2	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing,staircase railing and similar works, including applying priming coat of approved steel primer - E.R.W.tubes	kg	258.46
10.26.3	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing,staircase railing and similar works, including applying priming coat of approved	kg	253.75

10 . Steel Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	steel primer - G.I.pipes		
10.27.1	Providing and fixing carbon steel galvanised (minimum coating 5 micron) dash fastener of 10 mm dia double threaded 6.8 grade (yield strength 480 N/sq.mm), counter sunk head, comprising of 10 m dia polyamide PA 6 grade sleeve,including drilling of hole in frame, concrete / masonry ,etc as direction of Engineer-in-charge ., - 10x60mm	each	157.34
10.27.2	Providing and fixing carbon steel galvanised (minimum coating 5 micron) dash fastener of 10 mm dia double threaded 6.8 grade (yield strength 480 N/sq.mm), counter sunk head, comprising of 10 m dia polyamide PA 6 grade sleeve,including drilling of hole in frame, concrete / masonry ,etc.,as direction of Engineer-in-charge - 10x80mm	each	165.88
10.27.3	Providing and fixing carbon steel galvanised (minimum coating 5 micron) dash fastener of 10 mm dia double threaded 6.8 grade (yield strength 480 N/sq.mm), counter sunk head, comprising of 10 m dia polyamide PA 6 grade sleeve,including drilling of hole in frame, concrete / masonry ,etc.,as direction of Engineer-in-charge - 10x120mm	each	203.44
10.27.4	Providing and fixing carbon steel galvanised (minimum coating 5 micron) dash fastener of 10 mm dia double threaded 6.8 grade (yield strength 480 N/sq.mm), counter sunk head, comprising of 10 m dia polyamide PA 6 grade sleeve,including drilling of hole in frame, concrete / masonry ,etc.,as direction of Engineer-in-charge - 10x140mm	each	225.49
10.27.5	Providing and fixing carbon steel galvanised (minimum coating 5 micron) dash fastener of 10 mm dia double threaded 6.8 grade (yield strength 480 N/sq.mm), counter sunk head, comprising of 10 m dia polyamide PA 6 grade sleeve,including drilling of hole in frame, concrete / masonry ,etc.,as direction of Engineer-in-charge - 10x160mm	each	269.45
10.28	Providing and fixing stainless steel (grade 304) railing made of hollow tubes, channels, plates etc., including welding ,grinding. Buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete. i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-	kg	917.17

10 . Steel Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	charge (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.,)		
10.29.1	Providing and fixing fly proof wire gauze to windows, clerestory windows & doors with M.S. flat 15x3 mm and nuts & bolts complete - galvanised M.S. wire gauze with 0.63 mm dia wire and 1.4mm aperture on both sides	sqm	1050.61
10.29.2	Providing and fixing fly proof wire gauze to windows, clerestory windows & doors with M.S. flat 15x3 mm and nuts & bolts complete - stainless steel (grade 304) wire gauze of 0.5mm dia wire and 1.4mm aperture on both sides	sqm	2416.66
10.30.1	Providing and fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows all complete with - 4.0 mm thick glass panes	sqm	1209.61
10.30.2	Providing and fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows all complete with - 5 mm thick glass panes	sqm	1428.70
10.31	Providing and fixing angle iron frames for doors, windows and ventilators of mild steel angle sections of size 35x35x5mm, joints mitred and welded by angle iron 35x35x5 mm or 35x5 mm flat pieces to the existing T-iron frame or to the wall with dash fastener, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer, all complete as per the direction of Engineer-in-charge	kg	147.13

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
11.1.1	Brick on edge flooring with bricks of class designation 3.5 on a bed of 12mm cement mortar , including filling the joints with same mortar , with common burnt clay non modular bricks - cement mortar 1:4 (1 cement : 4 fine aggregate)	sqm	1253.55
11.1.2	Brick on edge flooring with bricks of class designation 3.5 on a bed of 12mm cement mortar , including filling the joints with same mortar , with common burnt clay non modular bricks - cement mortar 1:6 (1 cement : 6 fine aggregate)	sqm	1205.26
11.2	Dry brick on edge flooring in required pattern with bricks of class designation 3.5 on a bed of 12 mm mud mortar, including filling joints with sand, with common burnt clay non modular bricks	sqm	1016.62
11.3.1	Cement concrete flooring 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc .complete - 40mm thick with 20mm nominal size stone aggregate	sqm	736.85
11.4	52 mm thick cement concrete flooring with concrete hardener topping , under layers 40mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20mm nominal size) and top layer 12 mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6mm nominal size) by volume,hardening compound mixed @ 2 litre per 50 kg of cement or as per manufacturer's specification . This includes cost of cement slurry, but excluding the cost of nosing of steps etc.complete	sqm	1148.40
11.5	62 mm thick cement concrete flooring with concrete hardener topping, under layer 50 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) and top layer 12 mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate , 6mm nominal size) by volume, hardening compound mixed @ 2 litre per 50 kg of cement or as per manufactures specifications. This includes cost of cement slurry , but excluding the cost of nosing of steps etc.complete	sqm	1240.54
11.6.1	Cement plaster skirting upto 30 cm height , with cement mortar 1:3 (1 cement : 3 fine aggregate) , finished with a floating coat of neat cement - 18mm thick	sqm	783.12

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
11.7	Cement concrete pavement with 1:2:4 (1 cement : 2 fine aggregate: 4 graded stone aggregate 20 mm nominal size) including finishing complete	cum	10546.11
11.8	Extra for making chequers of approved pattern on cement concrete floors , steps, landing , pavements etc.,	sqm	98.08
11.9.1	40 mm thick marble chips flooring rubbed and polished to granolithic finish , under layer 34 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size) and top layer 6mm thick with white, black, chocolate ,grey,yellow or green marble chips of sizes from 1mm to 4 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume including cement slurry etc.complete - dark shade pigment with ordinary cement	sqm	1289.02
11.9.2	40 mm thick marble chips flooring rubbed and polished to granolithic finish , under layer 34 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size) and top layer 6mm thick with white, black, chocolate ,grey,yellow or green marble chips of sizes from 1mm to 4 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume including cement slurry etc.complete - light shade pigment with white cement	sqm	1387.77
11.9.3	40 mm thick marble chips flooring rubbed and polished to granolithic finish , under layer 34 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size) and top layer 6mm thick with white, black, chocolate ,grey,yellow or green marble chips of sizes from 1mm to 4 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume including cement slurry etc.complete - medium shade pigment with 50 % white cement and 50% ordinary cement	sqm	1340.12
11.9.4	40 mm thick marble chips flooring rubbed and polished to granolithic finish , under layer 34 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size) and top layer 6mm thick with white,	sqm	1334.03

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	black, chocolate ,grey,yellow or green marble chips of sizes from 1mm to 4 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume including cement slurry etc.complete - white cement without any pigment		
11.9.5	40 mm thick marble chips flooring rubbed and polished to granolithic finish , under layer 34 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size) and top layer 6mm thick with white, black, chocolate ,grey,yellow or green marble chips of sizes from 1mm to 4 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume including cement slurry etc.complete - light shade pigment with ordinary cement	sqm	1305.18
11.9.6	40 mm thick marble chips flooring rubbed and polished to granolithic finish , under layer 34 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size) and top layer 6mm thick with white, black, chocolate ,grey,yellow or green marble chips of sizes from 1mm to 4 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume including cement slurry etc.complete - ordinary cement without any pigment	sqm	1249.02
11.10.1	40mm thick marble chips flooring, rubbed and polished to granolithic finish,under layer 31 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5mm nominal size) and top layer 9 mm thick with white , black , chocolate ,grey, yellow or green marble chips of sizes from 4 mm to 7 mm nominal size , laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder : 7 marble chips) by volume , including cement slurry etc.complete - dark shade pigment with ordinary cement	sqm	1266.57
11.10.2	40mm thick marble chips flooring, rubbed and polished to granolithic finish,under layer 31 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5mm nominal size) and top layer 9 mm thick with white , black , chocolate ,grey, yellow or green marble chips of sizes from 4 mm to 7 mm nominal size , laid in cement marble	sqm	1407.49

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder : 7 marble chips) by volume , including cement slurry etc.complete - light shade pigment with white cement		
11.10.3	40mm thick marble chips flooring, rubbed and polished to granolithic finish,under layer 31 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5mm nominal size) and top layer 9 mm thick with white , black , chocolate ,grey, yellow or green marble chips of sizes from 4 mm to 7 mm nominal size , laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder : 7 marble chips) by volume , including cement slurry etc.complete - medium shade pigment with 50% white cement and 50% ordinary cement	sqm	1339.34
11.10.4	40mm thick marble chips flooring, rubbed and polished to granolithic finish,under layer 31 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5mm nominal size) and top layer 9 mm thick with white , black , chocolate ,grey, yellow or green marble chips of sizes from 4 mm to 7 mm nominal size , laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder : 7 marble chips) by volume , including cement slurry etc.complete - white cement without any pigment	sqm	1327.40
11.10.5	40mm thick marble chips flooring, rubbed and polished to granolithic finish,under layer 31 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5mm nominal size) and top layer 9 mm thick with white , black , chocolate ,grey, yellow or green marble chips of sizes from 4 mm to 7 mm nominal size , laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder : 7 marble chips) by volume , including cement slurry etc.complete - light shade pigment with ordinary cement	sqm	1289.62
11.10.6	40mm thick marble chips flooring, rubbed and polished to granolithic finish,under layer 31 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5mm nominal size) and top layer 9 mm thick with white , black , chocolate ,grey, yellow or green marble chips of sizes from 4 mm to 7 mm nominal size , laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in	sqm	1209.53

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	proportion of 4:7 (4 cement marble powder : 7 marble chips) by volume , including cement slurry etc.complete - ordinary cement without any pigment		
11.11.1	40 mm thick marble chips flooring , rubbed and polished to granolithic finish , under layer 28 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size) and top layer 12mm thick with white, black,chocolate, grey yellow or green marble chips of size from 7mm to 10mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 2:3 (2 cement marble powder mix : 3 marble chips) by volume, including cement slurry etc.complete - dark shade pigment with ordinary cement	sqm	1305.58
11.11.2	40 mm thick marble chips flooring , rubbed and polished to granolithic finish , under layer 28 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size) and top layer 12mm thick with white, black,chocolate, grey yellow or green marble chips of size from 7mm to 10mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 2:3 (2 cement marble powder mix : 3 marble chips) by volume, including cement slurry etc.complete - light shade pigment with white cement	sqm	1503.03
11.11.3	40 mm thick marble chips flooring , rubbed and polished to granolithic finish , under layer 28 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size) and top layer 12mm thick with white, black,chocolate, grey yellow or green marble chips of size from 7mm to 10mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 2:3 (2 cement marble powder mix : 3 marble chips) by volume, including cement slurry etc.complete - medium shade pigment with 50 % white cement and 50% ordinary cement	sqm	1407.53
11.11.4	40 mm thick marble chips flooring , rubbed and polished to granolithic finish , under layer 28 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size) and top layer 12mm thick with white, black,chocolate, grey yellow or green marble chips of size from 7mm to 10mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 2:3 (2 cement marble powder mix : 3 marble chips) by volume, including cement slurry etc.complete - white cement	sqm	1497.88

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	without any pigment		
11.11.5	40 mm thick marble chips flooring , rubbed and polished to granolithic finish , under layer 28 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size) and top layer 12mm thick with white, black,chocolate, grey yellow or green marble chips of size from 7mm to 10mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 2:3 (2 cement marble powder mix : 3 marble chips) by volume, including cement slurry etc.complete - light shade pigment with ordinary cement	sqm	1337.85
11.11.6	40 mm thick marble chips flooring , rubbed and polished to granolithic finish , under layer 28 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size) and top layer 12mm thick with white, black,chocolate, grey yellow or green marble chips of size from 7mm to 10mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 2:3 (2 cement marble powder mix : 3 marble chips) by volume, including cement slurry etc.complete - ordinary cement without any pigment	sqm	1225.73
11.12.1.1	Marble chips skirting upto 30 cm height , rubbed and polished to granolithic finish, top layer 6mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from smallest to 4 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume - 18mm thick with under layer 12mm thick in cement plaster 1:3 (1 cement :3 fine aggregate) - dark shade pigment with ordinary cement	sqm	2190.73
11.12.1.2	Marble chips skirting upto 30 cm height , rubbed and polished to granolithic finish, top layer 6mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from smallest to 4 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume - 18mm thick with under layer 12mm thick in cement plaster 1:3 (1 cement :3 fine aggregate) - light shade pigment with white cement	sqm	2289.48
11.12.1.3	Marble chips skirting upto 30 cm height , rubbed and polished	sqm	2241.83

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	to granolithic finish, top layer 6mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from smallest to 4 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume - 18mm thick with under layer 12mm thick in cement plaster 1:3 (1 cement :3 fine aggregate) -medium shade pigment with 50% white cement and 50% ordinary cement		
11.12.1.4	Marble chips skirting upto 30 cm height , rubbed and polished to granolithic finish, top layer 6mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from smallest to 4 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume - 18mm thick with under layer 12mm thick in cement plaster 1:3 (1 cement :3 fine aggregate) - white cement without any pigment	sqm	2233.32
11.12.1.5	Marble chips skirting upto 30 cm height , rubbed and polished to granolithic finish, top layer 6mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from smallest to 4 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume - 18mm thick with under layer 12mm thick in cement plaster 1:3 (1 cement :3 fine aggregate) - light shade pigment with ordinary cement	sqm	2206.89
11.12.1.6	Marble chips skirting upto 30 cm height , rubbed and polished to granolithic finish, top layer 6mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from smallest to 4 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume - 18mm thick with under layer 12mm thick in cement plaster 1:3 (1 cement :3 fine aggregate) - ordinary cement without any pigment	sqm	2150.73
11.13.1	Providing and fixing glass strips in joints of terrazo / cement concrete floors - 40mm wide and 4mm thick	metre	89.63
11.14	Extra for laying terrazo flooring on staircase treads not exceeding 30 cm in width, including cost of forming, nosing etc	sqm	115.66

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
11.15.1	Crazy marble stone flooring, including filling the gaps with light shade pigment with white cement marble powder mixture (3 parts of white cement : 1 part of marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 white,black,or white and black marble chips of sizes from 1 mm to 4mm nominal size by volume),with under layer 25 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size), including rubbing,polishing and cement slurry etc.complete - 18mm thick crazy marble stone white , black or as specified	sqm	2164.80
11.21.1.1	Providing and fixing 10 mm thick acid and / or alkali resistant tiles of approved make and colour using acid and / or alkali resisting mortar bedding , and joints filled with acid and / or alkali resisting cement as per IS:4457 ,complete as per the direction of Engineer-in-charge- in flooring on a bed of 10mm thick mortar 1:4 (1 acid proof cement : 4 fine aggregate) - acid and alkali resistant tile	sqm	2060.50
11.21.2.1	Providing and fixing 10 mm thick acid and / or alkali resistant tiles of approved make and colour using acid and / or alkali resisting mortar bedding , and joints filled with acid and / or alkali resisting cement as per IS:4457 ,complete as per the direction of Engineer-in-charge - in dado / skirting on 12 mm thick mortar 1:4 (1 acid proof cement : 4 fine aggregate) - acid and alkali resistant tile	sqm	2233.28
11.22.1.1	Tile work in skirting, risers of steps and dado upto 2 m height ,over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 fine aggregate) and jointed with grey cement slurry @ 3.3 kg / sqm, including pointing in white cement mixed with pigment of matching shade complete - marble tiles (polished) Raj nagar - 8mm thick	sqm	1731.85
11.23.1	Marble stone flooring with 18mm thick marble stone as per sample of marble approved by Engineer-in-charge, over 20mm (average) thick base of cement mortar 1:4 (1 cement :4 fine aggregate) laid and jointed with grey cement slurry including rubbing and polishing complete with - Makrana white second quality	sqm	4623.26
11.23.2	Marble stone flooring with 18mm thick marble stone as per sample of marble approved by Engineer-in-charge over 20mm (average) thick base of cement mortar 1:4 (1 cement :4 fine aggregate) laid and jointed with grey cement slurry including	sqm	3003.59

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	rubbing and polishing complete with - Raj nagar plain		
11.23.3	Marble stone flooring with 18mm thick marble stone as per sample of marble approved by Engineer-in-charge over 20mm (average) thick base of cement mortar 1:4 (1 cement :4 fine aggregate) laid and jointed with grey cement slurry including rubbing and polishing complete with -Agaria white	sqm	4076.01
11.23.4	Marble stone flooring with 18mm thick marble stone as per sample of marble approved by Engineer-in-charge over 20mm (average) thick base of cement mortar 1:4 (1 cement :4 fine aggregate) laid and jointed with grey cement slurry including rubbing and polishing complete with - Black zebra	sqm	2602.76
11.23.5	Marble stone flooring with 18mm thick marble stone as per sample of marble approvedby Engineer-in-charge over 20mm (average) thick base of cement mortar 1:4 (1 cement :4 fine aggregate) laid and jointed with grey cement slurry including rubbing and polishing complete with - Udaipur green marble	sqm	3232.63
11.23.6	Marble stone flooring with 18mm thick marble stone as per sample of marble approvedby Engineer-in-charge over 20mm (average) thick base of cement mortar 1:4 (1 cement :4 fine aggregate) laid and jointed with grey cement slurry including rubbing and polishing complete with - Pink plain marble	sqm	3085.39
11.24	Extra for pre finished nosing to treads of steps of marble stone	metre	887.39
11.25	Extra for marble stone flooring in treads of steps and risers using single length up to 2.00 metre	sqm	990.00
11.26.1	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab,including rubbing and polishing complete with base of cement mortar 1:4 (1 cement : 4 fine aggregate) - 25 mm thick	sqm	2653.04
11.27	Kota stone slabs 20 mm thick in risers of steps , skirting , dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1cement :3 fine aggregate) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs,including rubbing and polishing complete	sqm	3061.51

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
11.28.1	40 mm thick fine dressed stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement :5 fine aggregate) with joints finished flush - Red sand stone	sqm	1277.67
11.28.2	40 mm thick fine dressed stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement :5 fine aggregate) with joints finished flush - White sand stone	sqm	1398.17
11.29.1	40 mm thick fine dressed stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement : 5 fine aggregate), including pointing with cement mortar 1:2 (1 cement : 2 stone dust) with an admixture of pigment to match the shade of stone - Red sand stone	sqm	1558.31
11.29.2	40 mm thick fine dressed stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement : 5 fine aggregate), including pointing with cement mortar 1:2 (1 cement : 2 stone dust) with an admixture of pigment to match the shade of stone - White sand stone	sqm	1678.81
11.30.1	40 mm thick rubbed stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement : 5 fine aggregate) with joints 3 mm thick, side buttered with cement mortar 1:2 (1 cement : 2 stone dust) admixed with pigment to match the shade of stone and pointing with same mortar - red sand stone	sqm	1720.90
11.30.2	40 mm thick rubbed stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement : 5 fine aggregate) with joints 3 mm thick, side buttered with cement mortar 1:2 (1 cement : 2 stone dust) admixed with pigment to match the shade of stone and pointing with same mortar - white sand stone	sqm	1841.40
11.31	Extra for pre finished nosing in treads of steps of Kota stone / sand stone slab	metre	256.07
11.32	Extra for Kota stone / sand stone in treads of steps and risers using single length above normal size up to 2.00 metre	sqm	52.35
11.33.1M	25mm wooden planking , tongued and grooved inflooring including fixing with iron screws complete with : Malabar Ist class teak wood	sqm	10381.27

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
11.33.2I	25mm wooden planking , tongued and grooved inflooring including fixing with iron screws complete with : Irul wood	sqm	6532.69
11.33.2J	25mm wooden planking , tongued and grooved inflooring including fixing with iron screws complete with : Jack wood	sqm	6808.35
11.34M	38 mm thick wood block flooring of Malabar 1st class teak wood laid over 25mm thick levelling layer of cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 10mm nominal size) to be paid separately coated with a thin layer of hot bitumen (blown type) @2.45 kg per sqm. Including fixing blocks in position after dipping in hot bitumen (blown type) upto half depth , planed, levelled smooth and finished complete	sqm	17837.00
11.35	Providing and fixing M.S.angle 50x50x5 mm to act as nosing with lugs of M.S.flat 10x5 mm , 10cm long, forked at end 60 cm apart (minimum three lugs to be provided), including necessary welding and applying a priming coat of approved primer on exposed surface etc. complete	kg	201.37
11.37	Providing and laying ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in colours such as white, Ivory, Grey, Fume red brown ,laid on 20mm thick cement mortar 1:4 (1 cement : 4 fine aggregate), jointing with grey cement slurry @ 3.3 kg/ sqm including pointing the joints with white cement and matching pigment etc., complete	sqm	1587.33
11.37A	Providing and fixing 1st quality ceramic glazed floor tiles conforming to IS:15622 (thickness to be specified by the manufacturer) of approved make in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-charge, in skirting, risers of steps and dados over 12mm thick bed of cement mortar 1:3 (1 cement : 3 fine aggregate) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete	sqm	1617.48
11.38	Providing and laying ceramic glazed floor tiles of size 300 x 300 mm (thickness to be specified by the manufacturer) , of 1st quality conforming to IS :15622, of approved make , in all colours, shades, except white , ivory, grey, fume red brown, laid on 20 mm thick bed of cement mortar 1:4 (1 cement : 4 fine aggregate), jointing with grey cement slurry @ 3.3 kg	sqm	1667.53

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	/sqm including pointing the joints with white cement and matching pigments etc., complete		
11.39	Providing and laying rectified glazed ceramic flooring tiles of size 300x300 mm or more (thickness to be specified by the manufacturer), of Ist quality conforming to IS :15622 , of approved make , in colours white, ivory, grey, fume red brown, laid on 20mm thick cement mortar 1:4 (1 cement : 4 fine aggregate) ,jointing with grey cement slurry @ 3.3 kg per sqm including grouting the joints with white cement and matching pigments etc., complete	sqm	1808.78
11.40	Providing and laying rectified glazed ceramic floor tiles of size 300x300 mm or more (thickness to be specified by the manufacturer) of 1st quality conforming to IS:15622 of approved make in all colours , shades, except white, ivory, grey, fume red brown, laid on 20mm thick cement mortar 1:4 (1 cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including pointing the joints with white cement and matching pigments etc., complete	sqm	1808.78
11.41.1	Providing and laying vitrified floor tiles of size 500x500 mm (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622 of approved make , in all colours and shades, laid on 20 mm thick cement mortar 1:4 (1 cement : 4 fine aggregate) ,jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching pigments etc., complete - size of tile 500x500mm	sqm	1693.32
11.41.2	Providing and laying vitrified floor tiles of size 600 x600 mm (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622 of approved make , in all colours and shades, laid on 20 mm thick cement mortar 1:4 (1 cement : 4 fine aggregate) ,jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching pigments etc., complete - size of tile600x600mm	sqm	1766.23
11.41.3	Providing and laying vitrified floor tiles of size 800 x 800 mm (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622 of approved make , in all colours and shades, laid on 20 mm thick cement mortar 1:4 (1 cement : 4 fine aggregate) , jointing with grey cement slurry @3.3 kg per sqmincluding grouting the	sqm	2054.91

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	joints with white cement and matching pigments etc., complete - size of tile 800x800mm		
11.41.4	Providing and laying vitrified floor tiles of size 1000 x1000 mm (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622 of approved make , in all colours and shades, laid on 20 mm thick cement mortar 1:4 (1 cement : 4 fine aggregate) ,jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching pigments etc., complete - size of tile1000x1000mm	sqm	2565.28
11.41A.1.1	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturere) with water absorption less than 0.08% and conforming to IS:15622, of approved brand and manufacturer, in all colours and shade, laid on 20mm thick cement mortar 1:4 (one cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching the pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge. Clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily - Double charge vitrified tiles polished finish of size - size of tile 600x600mm	sqm	1582.09
11.41A.1.2	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturere) wirh water absorption less than 0.08% and conforming to IS:15622, of approved brand and manufacturer, in all colours and shade, laid on 20mm thick cement mortar 1:4 (one cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching the pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge. Clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily - Double charge vitrified tiles polished finish of size - size of tile 800x800mm	sqm	1671.32
11.41A.1.3	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturere) wirh water absorption less than 0.08% and conforming to IS:15622, of approved brand and manufacturer, in all colours and shade, laid on 20mm thick cement mortar 1:4 (one cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm	sqm	1717.41

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	including grouting the joints with white cement and matching the pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge. Clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily - Double charge vitrified tiles polished finish of size - size of tile 600x1200mm		
11.41A.1.4	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622, of approved brand and manufacturer, in all colours and shade, laid on 20mm thick cement mortar 1:4 (one cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching the pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge. Clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily - Double charge vitrified tiles polished finish of size - size of tile 800x1600mm	sqm	2036.89
11.41A.1.5	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622, of approved brand and manufacturer, in all colours and shade, laid on 20mm thick cement mortar 1:4 (one cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching the pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge. Clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily - Double charge vitrified tiles polished finish of size - size of tile 1000x1000mm	sqm	1962.18
11.41A.2.1	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622, of approved brand and manufacturer, in all colours and shade, laid on 20mm thick cement mortar 1:4 (one cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching the pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge. Clips of required thickness, leveling	sqm	1636.35

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	system and rubber mallet for placing the tiles gently and easily - Glazed vitrified floor tiles polished finish of size - size of tile 600x600mm		
11.41A.2.2	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturere) wirh water absorption less than 0.08% and conforming to IS:15622, of approved brand and manufacturer, in all colours and shade, laid on 20mm thick cement mortar 1:4 (one cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching the pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge. Clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily - Glazed vitrified floor tiles polished finish of size - size of tile 600x1200mm	sqm	1959.00
11.41A.2.3	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturere) wirh water absorption less than 0.08% and conforming to IS:15622, of approved brand and manufacturer, in all colours and shade, laid on 20mm thick cement mortar 1:4 (one cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching the pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge. Clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily - Glazed vitrified floor tiles polished finish of size - size of tile 800x800mm	sqm	1882.71
11.41A.2.4	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturere) wirh water absorption less than 0.08% and conforming to IS:15622, of approved brand and manufacturer, in all colours and shade, laid on 20mm thick cement mortar 1:4 (one cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching the pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge. Clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily - Glazed vitrified floor tiles polished finish of size - size of tile 800x1200mm	sqm	2240.33

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
11.41A.2.5	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturere) wirh water absorption less than 0.08% and conforming to IS:15622, of approved brand and manufacturer, in all colours and shade, laid on 20mm thick cement mortar 1:4 (one cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching the pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge. Clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily - Glazed vitrified floor tiles polished finish of size - size of tile 1200x1200mm	sqm	2768.03
11.41A.3.1	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturere) wirh water absorption less than 0.08% and conforming to IS:15622, of approved brand and manufacturer, in all colours and shade, laid on 20mm thick cement mortar 1:4 (one cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching the pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge. Clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily - Glazed vitrified tiles Matt / Antiskid finish of size - size of tile 600x600mm	sqm	1595.02
11.41A.3.2	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturere) wirh water absorption less than 0.08% and conforming to IS:15622, of approved brand and manufacturer, in all colours and shade, laid on 20mm thick cement mortar 1:4 (one cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching the pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge. Clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily - Glazed vitrified tiles Matt / Antiskid finish of size - size of tile 600x1200mm	sqm	1957.41
11.41A.3.3	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturere) wirh water absorption less than 0.08% and conforming to IS:15622, of approved brand and manufacturer, in all colours and shade,	sqm	1877.94

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	laid on 20mm thick cement mortar 1:4 (one cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching the pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge. Clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily - Glazed vitrified tiles Matt / Antiskid finish of size - size of tile 800x800mm		
11.41A.3.4	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacture) with water absorption less than 0.08% and conforming to IS:15622, of approved brand and manufacturer, in all colours and shade, laid on 20mm thick cement mortar 1:4 (one cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching the pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge. Clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily - Glazed vitrified tiles Matt / Antiskid finish of size - size of tile 800x1200mm	sqm	2240.33
11.41A.3.5	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacture) with water absorption less than 0.08% and conforming to IS:15622, of approved brand and manufacturer, in all colours and shade, laid on 20mm thick cement mortar 1:4 (one cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching the pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge. Clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily - Glazed vitrified tiles Matt / Antiskid finish of size - size of tile 1200x1200mm	sqm	2240.33
11.42	Deduct for not using 20mm thick cement mortar 1:4 (1 cement : 4 fine aggregate) bedding in laying of floor tiles and jointing with grey cement slurry @ 3.3 kg / sqm	sqm	923.08
11.43	Fixing glazed /ceramic / Vitrified floor tiles with cement based high polymer modified quick - set tile adhesive (water based) conforming to IS:15477, in average 3 mm thickness - (Using 5 kg adhesive per sqm of tile area)	sqm	880.16

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
11.44	Crazy ceramic tile flooring , with under layer 12mm thick cement mortar 1:4 (1 cement : 4 fine aggregate) with joints not exceeding 5mm , including filling the gaps with ordinary cement mixture & mixing with synthetic polyester fibre, triangular in shape having specific gravity of 1.34 to 1.40, cross section size ranging from 10 to 40 micron & length upto 6mm, mixing fibre @ 125 grams per 50 kg of cement in cement mortar , including providing and mixing water proofing material in mortar @ 1kg per 50kg of cement , all complete as per direction of Engineer-in-charge	sqm	1092.89
11.45	Providing and laying 500 x 500 x 40 mm thick Turf paver (Turf pave XD) on 150mm thick sub grade of compacted bed of 20mm thick nominal size stone aggregate and base course and filling with 150 mm thick sand, including spreading , well ramming , consolidating and finishing smooth etc. all complete as direction of Engineer-in-charge	sqm	3764.91
11.46.1	Providing and laying vitrified tiles of size 500 x500 mm (thickness to be specified by manufacturer), with water absorption less than 0.08% and conforming to IS : 15622 , of approved make , in all colours & shade, in skirting ,riser of steps , over 12 mm thick bed of cement mortar 1:3 (1 cement :3 fine aggregate), jointing with grey cement slurry @3.3 kg per sqm including grouting the joint with white cement & matching pigments etc.complete - size of tile 500x500mm	sqm	1770.59
11.46.2	Providing and laying vitrified tiles of size 500 x500 mm (thickness to be specified by manufacturer), with water absorption less than 0.08% and conforming to IS : 15622 , of approved make , in all colours & shade, in skirting ,riser of steps , over 12 mm thick bed of cement mortar 1:3 (1 cement :3 fine aggregate), jointing with grey cement slurry @3.3 kg per sqm including grouting the joint with white cement & matching pigments etc.complete - size of tile 600x600mm	sqm	1843.50
11.46.3	Providing and laying vitrified tiles of size 500 x500 mm (thickness to be specified by manufacturer), with water absorption less than 0.08% and conforming to IS : 15622 , of approved make , in all colours & shade, in skirting ,riser of steps , over 12 mm thick bed of cement mortar 1:3 (1 cement :3 fine aggregate), jointing with grey cement slurry @3.3 kg per sqm including grouting the joint with white cement & matching pigments etc.complete - size of tile 800x800mm	sqm	2135.14

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
11.46.4	Providing and laying vitrified tiles of size 500 x500 mm (thickness to be specified by manufacturer), with water absorption less than 0.08% and conforming to IS : 15622 , of approved make , in all colours & shade, in skirting ,riser of steps , over 12 mm thick bed of cement mortar 1:3 (1 cement :3 fine aggregate), jointing with grey cement slurry @3.3kg per sqm including grouting the joint with white cement & matching pigments etc.complete - size of tile 1000x1000mm	sqm	2645.51
11.46A	Providing and fixing glazed screen printed border tile 75mm wide having thickness 5mm, of approved quality & make , in all shades ,design and prints, in dado, over 12mm thick bed of cement mortar 1:3 (1 cement : 3 fine aggregate) and jointing with grey cement slurry @ 3.3kg/sqm including pointing with white cement mixed with pigment of matching shade , all complete as approved by Engineer-in-charge	metre	206.17
11.47.1	Providing and laying vitrified tiles of size 500 x500 mm (thickness to be specified by the manufacturer), with water absorption less than 0.08% and conforming to IS: 15622, of approved brand & manufacturer , in all colours and shade, in skirting, riser of steps, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS: 15477, in average 6mm thickness , including grouting of joints (payment for grouting of joints to be made separately) - size of tile 500x500mm	sqm	2238.98
11.47.2	Providing and laying vitrified tiles of size 600 x600 mm (thickness to be specified by the manufacturer), with water absorption less than 0.08% and conforming to IS: 15622, of approved brand & manufacturer , in all colours and shade, in skirting, riser of steps, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS: 15477, in average 6mm thickness , including grouting of joints (payment for grouting of joints to be made separately) - size of tile 600x600mm	sqm	2311.88
11.47.3	Providing and laying vitrified tiles of size 800 x800 mm (thickness to be specified by the manufacturer), with water absorption less than 0.08% and conforming to IS: 15622, of approved brand & manufacturer , in all colours and shade, in skirting, riser of steps, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS: 15477, in average 6mm thickness , including grouting of joints (payment for grouting of joints to be made separately) - size of tile 800x800mm	sqm	2603.53

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
11.47.4	Providing and laying vitrified tiles of size 1000 x1000 mm (thickness to be specified by the manufacturer), with water absorption less than 0.08% and conforming to IS: 15622, of approved brand & manufacturer , in all colours and shade, in skirting, riser of steps, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS: 15477, in average 6mm thickness , including grouting of joints (payment for grouting of joints to be made separately) - size of tile 1000x1000mm	sqm	3113.90
11.48.1	Grouting the joints of flooring tiles having joints of 3mm width,using epoxy grout mix of 0.70kg of organic coated filler of desired shade (0.10kg of hardener and 0.20 kg of resin per kg) , including filling / grouting and finishing complete as per direction of Engineer-in-charge - size of tile 500x500 mm	sqm	480.43
11.48.2	Grouting the joints of flooring tiles having joints of 3mm width,using epoxy grout mix of 0.70kg of organic coated filler of desired shade (0.10kg of hardener and 0.20 kg of resin per kg) , including filling / grouting and finishing complete as per direction of Engineer-in-charge - size of tile 600x600 mm	sqm	398.62
11.48.3	Grouting the joints of flooring tiles having joints of 3mm width,using epoxy grout mix of 0.70kg of organic coated filler of desired shade (0.10kg of hardener and 0.20 kg of resin per kg) , including filling / grouting and finishing complete - size of tile 800x800 mm	sqm	316.83
11.48.4	Grouting the joints of flooring tiles having joints of 3mm width,using epoxy grout mix of 0.70kg of organic coated filler of desired shade (0.10kg of hardener and 0.20 kg of resin per kg) , including filling / grouting and finishing complete - size of tile 1000x1000 mm	sqm	225.49
11.49.1	Providing and laying vitrified tiles in floor with different sizes (thickness to be specified by the manufacturer) , with water absorption less than 0.08% and conforming to IS: 15622, of approved brand & manufacturer , in all colours and shade, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS : 15477, in average 6mm thickness , including grouting of joints (payment for grouting of joints to be made separately) - size of tile 500x500 mm	sqm	2044.08

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
11.49.2	Providing and laying vitrified tiles in floor with different sizes (thickness to be specified by the manufacturer) , with water absorption less than 0.08% and conforming to IS: 15622, of approved brand & manufacturer , in all colours and shade, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS : 15477, in average 6mm thickness , including grouting of joints (payment for grouting of joints to be made separately) - size of tile 600x600 mm	sqm	2116.98
11.49.3	Providing and laying vitrified tiles in floor with different sizes (thickness to be specified by the manufacturer) , with water absorption less than 0.08% and conforming to IS: 15622, of approved brand & manufacturer , in all colours and shade, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS : 15477, in average 6mm thickness , including grouting of joints (payment for grouting of joints to be made separately) - size of tile 800x800 mm	sqm	2408.63
11.49.4	Providing and laying vitrified tiles in floor with different sizes (thickness to be specified by the manufacturer) , with water absorption less than 0.08% and conforming to IS: 15622, of approved brand & manufacturer , in all colours and shade, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS : 15477, in average 6mm thickness , including grouting of joints (payment for grouting of joints to be made separately) - size of tile 1000x1000 mm	sqm	2919.00
11.49A	Providing and laying full body vitrified tiles in floor of minimum thickness 15mm with water absorption less than 0.06% and conforming to IS:15622, of approved make brand and manufacturer, laid on 20mm thick base cement mortar 1:4 (1 cement : 4 fine aggregate) jointing with grey cement slurry @3.3kg per sqm including grouting the joints with white cement and matching pigments etc. The slab must be cut with the zero chipping diamond cutter only. Laying of slab will be done with the help of notch trowel, wedge, clips of required thickness, vaccum cups for lifting, levelling system and rubber mallet for placing the slab gently and easily. Size of tile 800x2400mm of all colours and shades	sqm	3652.20
11.50	Deduct for not grouting the joints with white cement and matching pigment in the items of fixing of vitrified tiles	sqm	11.72

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
11.51.1	Providing and laying machine cut, mirror polished , italian marble stone flooring laid in required pattern in liner portion of the building all complete as per architectural drawings, with 18mm thick stone slab laid over 20mm (average) thick base of cement mortar 1:4 (1 cement : 4 fine aggregate) laid and jointed with white cement slurry @ 4.4kg/sqm including pointing with white cement slurry admixed with pigment to match the marble shade including rubbing,curing and polishing etc., all complete as specified and as per direction of Engineer-in-charge- 18 mm thick Italian marble stone slab, Perlato,Rosso verona, Fire red or dark emperadore etc	sqm	9087.01
11.52.1	Providing and laying machine cut , mirror polished marble stone flooring , in required design (simple geometrical, abstract etc) and in patterns in combination with italian marble stones of different colours ,shades and finished surface texture etc.,in linear portions of the building all complete as per the architectural drawings , with 18mm thick stone slab laid over 20mm (average) thick base of cement mortar 1:4 (1 cement : 4 fine aggregate) laid and jointed with white cement slurry @ 4.4 kg / sqm including pointing with white cement slurry admixed with pigment to match the marble shade including rubbing,curing and polishing etc. all complete as specified as per direction of Engineer-in-charge - 18mm thick italian marble stone slab , Perlato,Rosso verona, Fire red or dark emperadore etc	sqm	9515.94
11.53	Providing and fixing glass mosaaic tiles on finished plain wall surface of size 20 mm x 20mm x 4mm in all colour, design, fixing in customize design as per direction of Engineer-in-charge. The glass mosaaic tiles to be fixed on the wall surface with the help of approved adhesive applied at the rate of 2.5 kg per sqm and grouting of the same. The rate is inclusive of all operation, material and required pattern approved as per direction of Engineer-in-charge	sqm	3374.46
11.54.1	Providing and fixing removable raised/false access flooring with system and its components of approved make for different plenum height with possible height adjustment upto 50 mm, comprising of modular load bearing floor panels supported on G.I. rectangular stinger frame work and G.I. Pedestal etc. all complete, as per the architectural drawings, as specified and as per direction of Engineer-in-charge consisting of: (a) Providing at required spacing to form modular framework, pedestals made out of GI tube of thickness minimum 2 mm and 25 mm outer diameter, fully welded on to the G.I. Base plate of	sqm	7068.98

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	size 100mm x 100mm x 3mm at the bottom of the pedestal tube, G.I. pedestal head of size 75mmx75mmx3.5 mm welded with GI fully threaded stud 16mm outer diameter with two GI Check nuts screwed on the stud for level adjustment upto 50mm, locking and stabilizing the pedestal head in position at the required level. The pedestals shall be fixed to the subfloor (base) through base plate using epoxy based adhesive of approved make or the machine screw with rawl plug. (b) Stringers system in all steel construction hot dipped galvanized of rectangular size 570x20x30x0.80mm thick having holes at both ends for securing the stringers on to the pedestal head using fully threaded screws ensuring maximum lateral stability in all directions, the grid formed by the pedestal and stringer assembly shall receive the floor panel, this system shall provide adequate solid, rigid support for access floor panel, the system shall provide a minimum clear uninterrupted clearance between the bottom of the floor for electrical conduits and wiring etc. all complete as per the architectural drawings, as specified and as per direction of Engineer-in-charge. (c) Providing and fixing Access Floor panel of 600x600x32 mm medium grade Filled Steel anti static high pressure Lamination of 800H grade (FS800H). Access Floor panel shall be steel welded construction with an enclosed bottom pan with uniform pattern of 64 hemispherical cones. The top and bottom plates of Steel Gauges: top 0.6 mm and bottom 0.7 mm fused spot welded together (minimum 64 welds in each dome and 20 welds along each flange). The panel should be Corroresist epoxy coated for lifetime rust protection and cavity formed by the top and bottom plate is filled with Pyrogrip noncombustible Portland cementitious core mixed with lightweight foaming compound. The access floor shall be factory finished with Anti-static High Pressure laminate with Non Warp technology upto 1mm thickness for superior adhesion and Surface flatness within 0.75mm. The panel is to withstand a Concentrated Load of 363 kgs applied on area 25mm x 25mm without collapse in the centre of the panel which is placed on four steel blocks. The panel will withstand and Uniformly Distributed Load (UDL) minimum 1250 kg/sqm and an impact load of 50kg all complete as per the approved manufacturers specification and as per the direction of Engineer-in-charge. All specification must be printed on the side of the panel to ensure the quality of the product.-300 mm Finished Floor Height (FFH)		
11.54.2	Providing and fixing removable raised/false access flooring with system and its components of approved make for different plenum height with possible height adjustment upto 50 mm,	sqm	7435.17

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	comprising of modular load bearing floor panels supported on G.I. rectangular stinger frame work and G.I. Pedestal etc. all complete, as per the architectural drawings, as specified and as per direction of Engineer-in-charge consisting of: (a) Providing at required spacing to form modular framework, pedestals made out of GI tube of thickness minimum 2 mm and 25 mm outer diameter, fully welded on to the G.I. Base plate of size 100mm x 100mm x 3mm at the bottom of the pedestal tube, G.I. pedestal head of size 75mmx75mmx3.5 mm welded with GI fully threaded stud 16mm outer diameter with two GI Check nuts screwed on the stud for level adjustment upto 50mm, locking and stabilizing the pedestal head in position at the required level. The pedestals shall be fixed to the subfloor (base) through base plate using epoxy based adhesive of approved make or the machine screw with rawl plug. (b) Stringers system in all steel construction hot dipped galvanized of rectangular size 570x20x30x0.80mm thick having holes at both ends for securing the stringers on to the pedestal head using fully threaded screws ensuring maximum lateral stability in all directions, the grid formed by the pedestal and stringer assembly shall receive the floor panel, this system shall provide adequate solid, rigid support for access floor panel, the system shall provide a minimum clear uninterrupted clearance between the bottom of the floor for electrical conduits and wiring etc. all complete as per the architectural drawings, as specified and as per direction of Engineer-in-charge. (c) Providing and fixing Access Floor panel of 600x600x32 mm medium grade Filled Steel anti static high pressure Lamination of 800H grade (FS800H). Access Floor panel shall be steel welded construction with an enclosed bottom pan with uniform pattern of 64 hemispherical cones. The top and bottom plates of Steel Gauges: top 0.6 mm and bottom 0.7 mm fused spot welded together (minimum 64 welds in each dome and 20 welds along each flange). The panel should be Corroresist epoxy coated for lifetime rust protection and cavity formed by the top and bottom plate is filled with Pyrogrip noncombustible Portland cementitious core mixed with lightweight foaming compound. The access floor shall be factory finished with Anti-static High Pressure laminate with Non Warp technology upto 1mm thickness for superior adhesion and Surface flatness within 0.75mm. The panel is to withstand a Concentrated Load of 363 kgs applied on area 25mm x 25mm without collapse in the centre of the panel which is placed on four steel blocks. The panel will withstand and Uniformly Distributed Load (UDL) minimum 1250 kg/sqm and an impact load of 50kg all complete as per the approved manufacturers specification and as per the direction of Engineer-in-charge. All specification		

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	must be printed on the side of the panel to ensure the quality of the product.-450 mm Finished Floor Height (FFH)		
11.55.1	Providing and laying flamed finish Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as per direction of Engineer-in-charge :Flamed finish granite stone slab Jet Black, Cherry Red, Elite Brown, Cat Eye or equivalent.	sqm	5178.71
11.56.1	Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18mm thick stone slab over 20mm (average) thick base of cement mortar 1:4 (1 cement : 4 fine aggregate) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as per direction of Engineer-in-charge - Polished granite stone slab of colour black, cherry/ ruby red or equivalent	sqm	4582.06
11.56.2	Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18mm thick stone slab over 20mm (average) thick base of cement mortar 1:4 (1 cement : 4 fine aggregate) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as per direction of Engineer-in-charge - Polished granite stone slab of all colour and texture except black, cherry /ruby red	sqm	3489.88
11.61	Providing and laying 22 mm thick factory made pre-polished cement concrete flooring tiles of required colour and design over 20 mm thick cement mortar 1:4 (1 cement : 4 sand) and jointed with cement slurry mixed with an admixture of pigment to match the shade of the tile.	sqm	1887.17

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
11.62	Providing and fixing PVC corner beading of required size to suit the thickness of the wall tile at the corner joints of dado works	metre	226.11
11.63.1	Providing and fixing homogeneous Polyvinyl chloride sheet in flooring and skirting in approved pattern on a smooth and damp proof base using rubber based adhesives of approved quality including rolling with light wooden roller weighing about 5 kg. All complete - 1.5 mm thick sheet	sqm	927.46
11.63.2	Providing and fixing homogeneous Polyvinyl chloride tile in flooring and skirting in approved pattern on a smooth and damp proof base using rubber based adhesives of approved quality including rolling with light wooden roller weighing about 5 kg. All complete - 1.5 mm thick tiles	sqm	1105.22
11.63.3	Providing and fixing homogeneous Polyvinyl chloride sheet in flooring and skirting in approved pattern on a smooth and damp proof base using rubber based adhesives of approved quality including rolling with light wooden roller weighing about 5 kg. All complete - 2 mm thick sheet	sqm	1032.02
11.63.4	Providing and fixing homogeneous Polyvinyl chloride tile in flooring and skirting in approved pattern on a smooth and damp proof base using rubber based adhesives of approved quality including rolling with light wooden roller weighing about 5 kg. All complete - 2 mm thick tiles	sqm	1135.09
11.63.5	Rubber sheet flooring plain or marble of required colour on a smooth and damp proof base using rubber adhesive of approved quality including pressing the sheets / tiles with a suitable tool to get a smooth surface all complete - 3.2 mm thick	sqm	582.40

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
12.1.1	Providing corrugated G.S.sheet roofing including vertical /curved surface fixed with polymer coated J or L hooks, bolts and nuts 8mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead including a coat of approved steel primer and two coats of approved paint on overlapping of sheets complete (up to any pitch in horizontal / vertical or curved surfaces), excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required - 1.00 mm thick with zinc coating not less than 275 gm /sq.m	sqm	1548.82
12.1.2	Providing corrugated G.S.sheet roofing including vertical /curved surface fixed with polymer coated J or L hooks, bolts and nuts 8mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead including a coat of approved steel primer and two coats of approved paint on overlapping of sheets complete (up to any pitch in horizontal / vertical or curved surfaces), excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required - 0.80 mm thick with zinc coating not less than 275 gm /sq.m	sqm	1347.45
12.1.3	Providing corrugated G.S.sheet roofing including vertical /curved surface fixed with polymer coated J or L hooks, bolts and nuts 8mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead including a coat of approved steel primer and two coats of approved paint on overlapping of sheets complete (up to any pitch in horizontal / vertical or curved surfaces), excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required - 0.63 mm thick with zinc coating not less than 275 gm /sq.m	sqm	1176.00
12.2.1	Extra for straight cutting in C.G.S sheet roofing for making opening of area exceeding 40 sq.decimeter for chimney stacks,skylight etc. - 1.00mm thick	metre	140.13
12.2.2	Extra for straight cutting in C.G.S sheet roofing for making opening of area exceeding 40 sq.decimeter for chimney stacks,skylight etc. - 0.80 mm thick	metre	112.10
12.2.3	Extra for straight cutting in C.G.S sheet roofing for making opening of area exceeding 40 sq.decimeter for chimney stacks,skylight etc. - 0.63mm thick	metre	112.10

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
12.3.1	Extra for circular cutting in C.G.S. sheet roofing for making opening of area exceeding 40 square.decimetre - 1.00mm thick	metre	804.97
12.3.2	Extra for circular cutting in C.G.S. sheet roofing for making opening of area exceeding 40 square.decimetre - 0.80 mm thick	metre	642.95
12.3.3	Extra for circular cutting in C.G.S. sheet roofing for making opening of area exceeding 40 square.decimetre - 0.63 mm thick	meter	642.95
12.4.1	Providing ridges or hips of width 60 cm overall width plain G.S.sheet fixed with polymer coated J or L hooks, bolts and nuts 8 mm dia G.I.limpet and bitumen washers complete - 0.80mm thick with zinc coating not less than 275 gm /sq.m	metre	1152.11
12.4.2	Providing ridges or hips of width 60 cm overall width plain G.S.sheet fixed with polymer coated J or L hooks, bolts and nuts 8 mm dia G.I.limpet and bitumen washers complete - 0.63mm thick with zinc coating not less than 275 gm /sq.m	metre	1060.63
12.5.1	Providing valleys of 90cm wide overall in plain G.S.sheet fixed with polymer coated J or L hooks, bolts and nuts 8mm dia G.I.limpet and bitumen washers complete - 1.60 mm thick with zinc coating not less than 350 gm / sq.m	metre	1855.81
12.6.1	Providing and fixing of 40 cm overall width plain G.S.sheet fixed with polymer coated J, or L hooks, bolts and nuts , G.I.limpet and bitumen washer complete , bent to shape and fixed in wall with cement mortar 1:3 (1 cement : 3 fine aggregate) - 1.00 mm thick with zinc coating not less than 275 gm / sq.m	metre	931.97
12.7.1	Providing and fixing 15cm wide ,45cm overall semi circular plain G.S. sheet gutter with iron brackets 40x3 mm size, bolts, nuts and washers etc., including making necessary connections with rain water pipes complete - 0.80 mm thick with zinc coating not less than 275 gm / sq.m	metre	1190.78
12.7.2	Providing and fixing 15cm wide ,45cm overall semi circular plain G.S. sheet gutter with iron brackets 40x3 mm size, bolts, nuts and washers etc., including making necessary connections with rain water pipes complete - 0.63 mm thick with zinc coating not less than 275 gm / sq.m	metre	1114.61

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
12.8	Providing reinforced by organic fibres and /or inorganic synthetic fibres cement 6mm thick corrugated sheets (as per IS:14871) roofing upto any pitch and fixing with polymer coated J or L hooks , bolts and nuts 8mm dia G.I. plain and bitumen washers or with self drilling fastener and EPDM washers etc. complete (excluding the cost of purlins, rafters and trusses), including cutting sheets to size and shape wherever required	sqm	873.29
12.9	Extra for straight cutting in reinforced by organic fibres and /or inorganic synthetic fibres cement corrugated, semi corrugated 6mm thick sheet roofing for making openings of area exceeding 40 square decimeter for chimney stacks, skylights etc	metre	112.10
12.10	Extra for circular cutting in reinforced by organic fibres and /or inorganic synthetic fibres cement corrugated / semi corrugated 6mm thick sheet roofing for making openings of area exceeding 40 square decimeter	metre	309.68
12.11	Extra for providing and fixing wind ties of 40x6 mm flat iron section	metre	237.48
12.12.1	Providing and fixing ridges and hips in fibre cement reinforced by organic fibres and /or inorganic synthetic fibres roofing with suitable fixing accessories or self drilling fastener and EPDM washer etc. complete - corrugated serrated adjustable ridges	metre	680.42
12.12.2	Providing and fixing ridges and hips in fibre cement reinforced by organic fibres and /or inorganic synthetic fibres roofing with suitable fixing accessories or self drilling fastener and EPDM washer etc. complete - Plain wing adjustable ridges	metre	680.42
12.12.3	Providing and fixing ridges and hips in fibre cement reinforced by organic fibres and /or inorganic synthetic fibres roofing with suitable fixing accessories or self drilling fastener and EPDM washer etc. complete - close fitting adjustable ridges	metre	863.07
12.12.4	Providing and fixing ridges and hips in fibre cement reinforced by organic fibres and /or inorganic synthetic fibres roofing with suitable fixing accessories or self drilling fastener and EPDM washer etc. complete - unserrated adjustable hips	metre	699.25
12.13.1	Providing and fixing fibre cement reinforced by organic fibres and / or inorganic synthetic fibres roofing accessories in all	metre	432.72

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	colours with polymer coated J or L hooks,bolts and nuts and or G.I.seam bolts and nuts , G.I.plain and bitumen washers or with self drilling fastener and EPDM washer etc.complete - corrugated apron pieces		
12.13.2	Providing and fixing fibre cement reinforced by organic fibres and / or inorganic synthetic fibres roofing accessories in all colours with polymer coated J or L hooks,bolts and nuts and or G.I.seam bolts and nuts , G.I.plain and bitumen washers or with self drilling fastener and EPDM washer etc.complete - Eave's filler pieces	metre	281.14
12.13.3	Providing and fixing fibre cement reinforced by organic fibres and / or inorganic synthetic fibres roofing accessories in all colours with polymer coated J or L hooks,bolts and nuts and or G.I.seam bolts and nuts , G.I.plain and bitumen washers or with self drilling fastener and EPDM washer etc.complete - North light curves	metre	549.47
12.13.4	Providing and fixing fibre cement reinforced by organic fibres and / or inorganic synthetic fibres roofing accessories in all colours with polymer coated J or L hooks,bolts and nuts and or G.I.seam bolts and nuts , G.I.plain and bitumen washers or with self drilling fastener and EPDM washer etc.complete - Ventilator curves	metre	747.82
12.13.5	Providing and fixing fibre cement reinforced by organic fibres and / or inorganic synthetic fibres roofing accessories in all colours with polymer coated J or L hooks,bolts and nuts and or G.I.seam bolts and nuts , G.I.plain and bitumen washers or with self drilling fastener and EPDM washer etc.complete - Barge boards	metre	700.21
12.13.6	Providing and fixing fibre cement reinforced by organic fibres and / or inorganic synthetic fibres roofing accessories in all colours with polymer coated J or L hooks,bolts and nuts and or G.I.seam bolts and nuts , G.I.plain and bitumen washers or with self drilling fastener and EPDM washer etc.complete - Ridge finials	pair	260.73
12.13.7	Providing and fixing fibre cement reinforced by organic fibres and / or inorganic synthetic fibres roofing accessories in all colours with polymer coated J or L hooks,bolts and nuts and or G.I.seam bolts and nuts , G.I.plain and bitumen washers or with self drilling fastener and EPDM washer etc.complete -Special	each	614.12

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	north light curves		
12.13.8	Providing and fixing fibre cement reinforced by organic fibres and / or inorganic synthetic fibres roofing accessories in all colours with polymer coated J or L hooks, bolts and nuts and or G.I. seam bolts and nuts , G.I. plain and bitumen washers or with self drilling fastener and EPDM washer etc. complete - S type louvers	metre	617.90
12.14	Providing flat iron brackets 50x3 mm size with necessary bolts , nuts and washers etc., for fixing G.S sheets gutters with purlins	metre	120.88
12.15.1	Painting top of roofs with bitumen of approved quality @ 17kg per 10 sq.m impregnated with a coat of fine aggregate at 60 cum per 10 sq.m including cleaning the slab surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil complete - with residual type petroleum bitumen of grade VG-10	sqm	202.85
12.19.1	Providing and laying brick tiles over mummy roofs grouted with cement mortar 1:3 (1 cement : 3 fine aggregate) mixed with 2% of integral water proofing compound by weight of cement , over 12 mm layer of cement mortar 1:3 (1 cement : 3 fine aggregate) and finished neat - with common burnt clay F.P.S (non modular) bricks tiles class designation 10	sqm	733.84
12.20	Providing and laying pressed clay tiles (as per approved pattern 18mm nominal thickness of approved size) on roofs jointed with cement mortar 1:4 (1 cement : 4 fine aggregate) mixed with 2% integral water proofing compound , laid over a bed of 20mm thick cement mortar 1:4 (1 cement : 4 fine aggregate) and finished neat complete	sqm	831.52
12.20L	Lime concrete terracing on roofs of required thickness laid to fall with 25mm nominal size brick aggregate and 50% lime mortar 1:2 (1 lime putty : 2 surkhi) rammed and finished with gur and belgiri treatment complete including rounding of junctions with Parapet wall complete	cum	11697.54
12.21.1	Providing gola 75x75 mm in cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 stone aggregate 10mm and down gauge) including finishing with cement mortar 1:3 (1 cement : 3 fine aggregate) as per standard design - In 75x75 mm deep chase	metre	354.21

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
12.22	Making khurras 45x45cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate of 20mm nominal size) over P.V.C. sheet 1m x1m x 400 micron , finished with 12 mm cement plaster 1:3 (1cement : 3 fine aggregate) and a coat of neat cement , rounding the edges, making and finishing the outlet complete	each	354.44
12.23.1.1	Providing sand stone slab for roofing and laying them in cement mortar 1:4 (1 cement : 4 fine aggregate) over wooden karries or RCC battens or structural steel sections (Karries or battens or structural steel sections to be paid separately). Including pointing the ceiling joints with cement mortar 1:3 (1 cement : 3 fine aggregate) complete - Red sand stone slab - 40 to 50 mm thick	sqm	1213.67
12.23.2.1	Providing sand stone slab for roofing and laying them in cement mortar 1:4 (1 cement : 4 fine aggregate) over wooden karries or RCC battens or structural steel sections (Karries or battens or structural steel sections to be paid separately). Including pointing the ceiling joints with cement mortar 1:3 (1 cement : 3 fine aggregate) complete - White sand stone slab - 40 to 50 mm thick	sqm	1368.59
12.24.1.1	Providing and fixing insulating board ceiling of approved quality with necessary nails etc. complete (frame work to be paid separately) - Natural colour insulating board - 12mm thick	sqm	1060.02
12.24.2.1	Providing and fixing insulating board ceiling of approved quality with necessary nails etc. complete (frame work to be paid separately) - White face insulating board - 12 mm thick	sqm	1207.12
12.24.3.1	Providing and fixing insulating board ceiling of approved quality with necessary nails etc. complete (frame work to be paid separately) - Flame retardant face insulating board - 12 mm thick	sqm	1077.24
12.25.1	Providing and fixing flat pressed 3 layer medium density particle board or graded particle board (grade I) IS : 3087 marked in ceiling with necessary nails etc, complete (frame work to be paid separately) - 12 mm thick	sqm	1524.80
12.26.1	Providing and fixing plain multipurpose cement board (High pressure steam cured),, with suitable screws for cement particle	sqm	1111.66

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	board in ceiling etc .complete (frame work to be paid separately) - 6mm thick cement fibre board, Type - B. category III as per IS 14862 - 2000		
12.26.2	Providing and fixing plain mutipurpose cement board (high pressure steam cured) with suitable screws for cement particle board in ceiling etc.complete (frame work to be paid separately)- 6mmthick Cement bonded wood particle board as per IS :14276	sqm	1232.16
12.27.1	Extra for circular cutting including wastages in ceiling with - 2nd class teak wood planks 20mm thick	metre	503.66
12.27.1M	Extra for circular cutting including wastages in ceiling with - Malabar Ist class teak wood planks 20mm thick	metre	1399.26
12.27.2.1	Extra for circular cutting including wastages in ceiling with - natural colour insulating board - 12mm thick	metre	579.92
12.27.3.1	Extra for circular cutting including wastages in ceiling with - White face insulating board - 12mm thick	metre	598.22
12.27.4.1	Extra for circular cutting including wastages in ceiling with - Flame retardant face insulating board - 12mm thick	metre	582.06
12.27.5.1	Extra for circular cutting including wastages in ceiling with - Standard quality hard board sheet - 3mm thick	metre	585.37
12.27.5.2	Extra for circular cutting including wastages in ceiling with - standard quality hard board sheet - 4.5mm thick	metre	594.91
12.31.1	Providing 10mm thick plaster of paris (gypsum anhydrous) ceiling upto a height of 5 m above floor level , over forest teak wood strips 25x6mm with 10mm gap in between and reinforced with rabbit wire mesh fixed to wooden frame (frame work to be paid separately) - Flat surfaces	sqm	1878.50
12.31.2	Providing 10mm thick plaster of paris (gypsum anhydrous) ceiling upto a height of 5 m above floor level , over forest teak wood strips 25x6mm with 10mm gap in between and reinforced with rabbit wire mesh fixed to wooden frame (frame work to be paid separately) - Curved surfaces	sqm	2298.89

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
12.32	Extra for sunk or raised mouldings in the plaster of paris (Gypsum anhydrous) ceiling	sqm	739.55
12.33	Extra for providing plaster of paris (gypsum anhydrous) ceiling above 5 metres height from floor level	sqm per metre height	318.61
12.34	Providing and fixing thermal insulation of ceiling (under deck insulation) with resin bonded fibre glass wool conforming to IS:8183, density 24kg /cum , 50mm thick, wrapped in 200 G Virgin polythene bags, fixed to ceiling with metallic cleats (50x50x3mm) @ 60 cm and wire mesh of 12.5 mm x 24 gauge wire and mesh, for top most ceiling of building	sqm	888.72
12.35	Providing and fixing thermal insulation with resin bonded fibre glass wool conforming to IS: 8183, density 16 kg / cum, 50mm thick, wrapped in 200 G Virgin polythene bags placed over existing false ceiling and held in position by criss crossing GI wire	sqm	402.18
12.36.1	Thermal insulation of roofing with expanded polystyrene fixed with suitable adhesive to the false ceiling - with type N- Normal 50mm thick	sqm	364.59
12.36.2	Thermal insulation of roofing with expanded polystyrene fixed with suitable adhesive to the false ceiling - with type SE - self extinguishing type 50mm thick	sqm	439.70
12.39.1	Providing lead caulked joints to sand cast iron rain water pipes and fittings:100 mm dia pipe	joint	685.58
12.39.2	Providing lead caulked joints to sand cast iron rain water pipes and fittings:150 mm dia pipe	joint	946.31
12.41.1	Providing and fixing on wall face unplasticised rigid PVC rain water pipes conforming to IS: 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10mm gap for thermal expansion, (i) Single socketed pipes - 75mm diameter	metre	378.94
12.41.2	Providing and fixing on wall face unplasticised rigid PVC rain water pipes conforming to IS: 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10mm	metre	602.84

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	gap for thermal expansion, (i) Single socketed pipes - 110 mm diameter		
12.42.1.1	Providing and fixing on wall face unplasticised - PVC moulded fittings / accessories for unplasticised rigid PVC rain water pipes conforming to IS:13592 Type A, including jointing with seal ring conforming to IS: 5382, leaving 10mm gap for thermal expansion -Coupler - 75mm	each	163.85
12.42.1.2	Providing and fixing on wall face unplasticised - PVC moulded fittings / accessories for unplasticised rigid PVC rain water pipes conforming to IS:13592 Type A, including jointing with seal ring conforming to IS: 5382, leaving 10mm gap for thermal expansion - Coupler - 110mm	each	226.26
12.42.2.1	Providing and fixing on wall face unplasticised - PVC moulded fittings / accessories for unplasticised rigid PVC rain water pipes conforming to IS:13592 Type A, including jointing with seal ring conforming to IS: 5382, leaving 10mm gap for thermal expansion - Single pushfit coupler - 75mm	each	163.85
12.42.2.2	Providing and fixing on wall face unplasticised - PVC moulded fittings / accessories for unplasticised rigid PVC rain water pipes conforming to IS:13592 Type A, including jointing with seal ring conforming to IS: 5382, leaving 10mm gap for thermal expansion - Single pushfit coupler - 110mm	each	260.40
12.42.3.1	Providing and fixing on wall face unplasticised - PVC moulded fittings / accessories for unplasticised rigid PVC rain water pipes conforming to IS:13592 Type A, including jointing with seal ring conforming to IS: 5382, leaving 10mm gap for thermal expansion - Single tee with door - 75 x75x75mm	each	265.36
12.42.3.2	Providing and fixing on wall face unplasticised - PVC moulded fittings / accessories for unplasticised rigid PVC rain water pipes conforming to IS:13592 Type A, including jointing with seal ring conforming to IS: 5382, leaving 10mm gap for thermal expansion - Single tee with door - 110x110x110mm	each	433.83

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
12.42.4.1	Providing and fixing on wall face unplasticised - PVC moulded fittings / accessories for unplasticised rigid PVC rain water pipes conforming to IS:13592 Type A, including jointing with seal ring conforming to IS: 5382, leaving 10mm gap for thermal expansion - Single tee without door -75x75x75mm	each	232.63
12.42.4.2	Providing and fixing on wall face unplasticised - PVC moulded fittings / accessories for unplasticised rigid PVC rain water pipes conforming to IS:13592 Type A, including jointing with seal ring conforming to IS: 5382, leaving 10mm gap for thermal expansion - Single tee without door -110x110x110mm	each	398.25
12.42.5.1	Providing and fixing on wall face unplasticised - PVC moulded fittings / accessories for unplasticised rigid PVC rain water pipes conforming to IS:13592 Type A, including jointing with seal ring conforming to IS: 5382, leaving 10mm gap for thermal expansion - bend 87.5 degree - 75mm bend	each	173.82
12.42.5.2	Providing and fixing on wall face unplasticised - PVC moulded fittings / accessories for unplasticised rigid PVC rain water pipes conforming to IS:13592 Type A, including jointing with seal ring conforming to IS: 5382, leaving 10mm gap for thermal expansion - bend 87.5 degree - 110 mm bend	each	229.11
12.42.6.1	Providing and fixing on wall face unplasticised - PVC moulded fittings / accessories for unplasticised rigid PVC rain water pipes conforming to IS:13592 Type A, including jointing with seal ring conforming to IS: 5382, leaving 10mm gap for thermal expansion - shoe (plain) - 75mm shoe	each	294.74
12.42.6.2	Providing and fixing on wall face unplasticised - PVC moulded fittings / accessories for unplasticised rigid PVC rain water pipes conforming to IS:13592 Type A, including jointing with seal ring conforming to IS: 5382, leaving 10mm gap for thermal expansion - shoe (plain) - 110mm shoe	each	506.52
12.43.1	Providing and fixing unplasticised - PVC pipe clips of approved design to unplasticised- PVC rain water pipes by means of 50x50x50mm hard wood plugs , screwed with M.S.	each	457.78

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	screws of required length, including cutting brickwork and fixing in cement mortar 1:4 (1 cement : 4 fine aggregate) and making good the wall etc., complete - 75mm		
12.43.2	Providing and fixing unplasticised - PVC pipe clips of approved design to unplasticised- PVC rain water pipes by means of 50x50x50mm hard wood plugs , screwed with M.S. screws of required length, including cutting brickwork and fixing in cement mortar 1:4 (1 cement : 4 fine aggregate) and making good the wall etc., complete - 110mm	each	499.04
12.44	Providing and fixing to the inlet mouth of rain water pipe cast iron grating 15cm diameter and weighing not less than 440 grams	each	47.40
12.45.1	Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S.sheets and galvanized with zinc coating of 120 gms / sqm (both side inclusive) as per IS:277 and consisting of angle cleats of size 25mm wide x1.6mm thick with flanges of 27mm and 37mm , at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5mm dia x50mm long with 6mm dia bolts ,other flange of cleat fixed to the angle hangers of 25x10x0.50mm of required length with nuts and bolts of required size and other end of angle hanger fixed with intermediate G.I channels 45x15x0.9mm running at the spacing of 1200 mm centre to centre , to which the ceiling section 0.5mm thick bottom wedge of 80mm with tapered flanges of 26 mm each having clips of 10.5mm, at 450mm centre to centre ,shall be fixed in a direction perpendicular to G.I.intermediate channel with connecting clips made out of 2.64mm dia x 230mm long G.I. wire at every junction, including fixing perimeter channels 0.5mm thick 27mm high having flanges of 20mm and 30mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450mm centre , with 25mm long dry wall screws @ 230 mm interval , including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x25mm at 230mm C/C , including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound, jointing tapes, finishing with jointing compound in 3 layers covering upto 150mm on both sides of joint and two coats of primer suitable for board , all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of	sqm	1972.01

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	perimetre channels suitably fixed , all complete as per drawings, specifications and direction of the Engineer-in-charge . But excluding the cost of painting with - 12.5mm thick tapered edge gypsum plain board conforming to IS: 2095 -part-I:2011 (Board with BIS certification marks)		
12.45.2	Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S.sheets and galvanized with zinc coating of 120 gms / sqm (both side inclusive) as per IS:277 and consisting of angle cleats of size 25mm wide x1.6mm thick with flanges of 27mm and 37mm , at 1200 mm cenetre to centre, one flange fixed to the ceiling with dash fastener 12.5mm dia x50mm long with 6mm dia bolts ,other flange of cleat fixed to the angle hangers of 25x10x0.50mm of required length with nuts and bolts of required size and other end of angle hanger fixed with intermediate G.I channels 45x15x0.9mm running at the spacing of 1200 mm centre to centre , to which the ceiling section 0.5mm thick bottom wedge of 80mm with tapered flanges of 26 mm each having clips of 10.5mm, at 450mm centre to centre ,shall be fixed in a direction perpenticular to G.I.intermediate channel with connecting clips made out of 2.64mm dia x 230mm long G.I. wire at every junction, including fixing perimeter channels 0.5mm thick 27mm high having flanges of 20mm and 30mm long, the perimetre of ceiling fixed to wall/partition with the help of rawl plugs at 450mm centre , with 25mm long dry wall screws @ 230 mm interval , including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x25mm at 230mm C/C , including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound, jointing tapes, finishing with jointing compound in 3 layers covering upto 150mm on both sides of joint and two coats of primer suitable for board , all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimetre channels suitably fixed , all complte as per drawings, specifications and direction of the Engineer-in-charge. But excluding the cost of painting with - 12.5mm thick tapered edge glass reinforced gypsum (GRG) board conforming to IS:2095 - (Part-3) 1996(boards with BIS certification marks)I	sqm	1954.86
12.45.3	Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S.sheets and galvanized with zinc coating of 120 gms / sqm (both side inclusive) as per IS:277	sqm	2013.86

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	and consisting of angle cleats of size 25mm wide x1.6mm thick with flanges of 27mm and 37mm , at 1200 mm cenetre to centre, one flange fixed to the ceiling with dash fastener 12.5mm dia x50mm long with 6mm dia bolts ,other flange of cleat fixed to the angle hangers of 25x10x0.50mm of required length with nuts and bolts of required size and other end of angle hanger fixed with intermediate G.I channels 45x15x0.9mm running at the spacing of 1200 mm centre to centre , to which the ceiling section 0.5mm thick bottom wedge of 80mm with tapered flanges of 26 mm each having clips of 10.5mm, at 450mm centre to centre ,shall be fixed in a direction perpenticular to G.I.intermediate channel with connecting clips made out of 2.64mm dia x 230mm long G.I. wire at every junction, including fixing perimeter channels 0.5mm thick 27mm high having flanges of 20mm and 30mm long, the perimetre of ceiling fixed to wall/partition with the help of rawl plugs at 450mm centre , with 25mm long dry wall screws @ 230 mm interval , including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x25mm at 230mm C/C , including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound, jointing tapes, finishing with jointing compound in 3 layers covering upto 150mm on both sides of joint and two coats of primer suitable for board , all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimetre channels suitably fixed , all complte as per drawings, specifications . But excluding the cost of painting with - 12.5mm thick tapered edge gypsum moisture resistant board		
12.45.4	Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S.sheets and galvanized with zinc coating of 120 gms / sqm (both side inclusive) as per IS:277 and consisting of angle cleats of size 25mm wide x1.6mm thick with flanges of 27mm and 37mm , at 1200 mm cenetre to centre, one flange fixed to the ceiling with dash fastener 12.5mm dia x50mm long with 6mm dia bolts ,other flange of cleat fixed to the angle hangers of 25x10x0.50mm of required length with nuts and bolts of required size and other end of angle hanger fixed with intermediate G.I channels 45x15x0.9mm running at the spacing of 1200 mm centre to centre , to which the ceiling section 0.5mm thick bottom wedge of 80mm with tapered flanges of 26 mm each having clips of 10.5mm, at 450mm centre to centre ,shall be fixed in a direction perpenticular to G.I.intermediate channel with	sqm	3250.65

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	connecting clips made out of 2.64mm dia x 230mm long G.I. wire at every junction, including fixing perimeter channels 0.5mm thick 27mm high having flanges of 20mm and 30mm long, the perimetre of ceiling fixed to wall/partition with the help of rawl plugs at 450mm centre , with 25mm long dry wall screws @ 230 mm interval , including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x25mm at 230mm C/C , including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound, jointing tapes, finishing with jointing compound in 3 layers covering upto 150mm on both sides of joint and two coats of primer suitable for board , all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimetre channels suitably fixed , all complete as per drawings, specifications . But excluding the cost of painting with - Fully perforated gypsum plaster board of size 1200 x 2400 x12.5mm having approx. 15% perforated area with perforation size and pattern as approved by the Engineer-in-charge and as per manufacturer's specification , with all 4 side tapered and backed by acoustical tissue with NRC value not less than 0.60		
12.46	Providing and fixing to the inlet mouth of rain water pipe PTMT (an engineering thermoplastic) grating square (Slit) 150mm square with a height of 8mm and weighing not less than 100 gms	each	161.92
12.47.1	Providing & fixing UV stabilised fibre glass reinforced plastic sheet roofing upto any pitch, including fixing with polymer coated 'J' or 'L' hooks, bolts & nuts 8mm dia G.I. plain / bitumen washers complete but excluding the cost of purlins , rafters ,trusses etc. The sheets shall be manufactured out of 2400 TEX panel roving incorporating minimum 0.3% ultra - violet stabiliser in resin system under approximately 2400 psi and hot cured. They shall be of uniform pigmentation and thickness without air pockets and shall conform to IS 10192 and IS 12866. The sheets shall be opaque or translucent, clear or pigmented , textured or smooth as specified - 2mm thick corrugated (2.5" or 4.2 " or 6") or step-down (2" or 3" or 6") as specified	sqm	1725.34
12.47.2	Providing & fixing UV stabilised fibre glass reinforced plastic sheet roofing upto any pitch, including fixing with polymer coated 'J' or 'L' hooks, bolts & nuts 8mm dia G.I. plain / bitumen washers complete but excluding the cost of purlins ,	sqm	1512.18

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	rafters ,trusses etc. The sheets shall be manufactured out of 2400 TEX panel rovigis incorporating minimum 0.3% ultra - violet stabiliser in resin system under approximately 2400 psi and hot cured. They shall be of uniform pigmentation and thickness without air pockets and shall conform to IS 10192 and IS 12866. The sheets shall be opaque or translucent, clear or pigmented , textured or smooth as specified - 2mm thick flat		
12.48	Providing & fixing on roof pressed clay tile (Mangalore tile) of 20mm nominal thickness and of approved size and as per approved pattern on steel frame work complete (steel frame work to be paid separately)	sqm	717.47
12.49	Providing & laying on roof pressed clay tile ridge (Mangalore tile) of 20mm thickness and of approved pattern on steel frame work complete (steel frame work to be paid separately)	metre	209.33
12.50	Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-Charge) of total coated thickness 0.50mm (base metal of minimum 0.45mm thickness with total coating thickness of 0.05mm) with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	sqm	884.74
12.51.1	Providing and fixing precoated galvanised steel sheet roofing accessories of total coated thickness 0.50mm (base metal of minimum 0.45mm thickness with total coating thickness of 0.05mm , zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both sides of the sheet and polyster top coat 15-18 microns using self drilling / self tapping screws complete - Ridges plain (500 - 600mm)	metre	935.61
12.51.2	Providing and fixing precoated galvanised steel sheet roofing accessories of total coated thickness 0.50mm (base metal of minimum 0.45mm thickness with total coating thickness of	metre	858.28

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	0.05mm, zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both sides of the sheet and polyster top coat 15-18 microns using self drilling / self tapping screws complete - Flashings / Aprons (upto 600 mm)		
12.51.3	Providing and fixing precoated galvanised steel sheet roofing accessories of total coated thickness 0.50mm (base metal of minimum 0.45mm thickness with total coating thickness of 0.05mm , zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both sides of the sheet and polyster top coat 15-18 microns using self drilling / self tapping screws complete -North light curves	metre	987.47
12.51.4	Providing and fixing precoated galvanised steel sheet roofing accessories of total coated thickness 0.50mm (base metal of minimum 0.45mm thickness with total coating thickness of 0.05mm , zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both sides of the sheet and polyster top coat 15-18 microns using self drilling / self tapping screws complete - Barge board (Upto 300 mm)	metre	803.45
12.51.5	Providing and fixing precoated galvanised steel sheet roofing accessories of total coated thickness 0.50mm (base metal of minimum 0.45mm thickness with total coating thickness of 0.05mm, zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both sides of the sheet and polyster top coat 15-18 microns using self drilling / self tapping screws complete - Crimp curve	sqm	1038.25
12.51.6	Providing and fixing precoated galvanised steel sheet roofing accessories of total coated thickness 0.50mm (base metal of minimum 0.45mm thickness with total coating thickness of 0.05mm, zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both sides of the sheet and polyster top coat 15-18 microns using self drilling / self tapping screws complete - Gutter (600 mm over all girth)	metre	1548.27
12.52.1	Providing and fixing tiled false ceiling of approved materials of size 595x595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanized @ 120 grams per sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38mm made from 0.30mm thick	sqm	2516.65

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	(minimum) sheet , spaced at 1200mm centre to centre and cross "T" of size 24x25mm made of 0.30 mm thick (minimum) sheet , 1200 mm long spaced between main "T" at 600 mm centre to centre to form a grid of 1200x600mm and secondary cross "T" of length 600 mm and size 24 x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting / making , opening for services like diffusers , grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27x37x25x1.6mm fixed to ceiling with 12.5mm dia and 50mm long dash fasteners , 4mm GI adjustable rods with galvanised butterfly level clips of size 85x30x0.8mm spaced at 1200mm centre to centre along main T, bottom exposed width of 24 mm of all T - sections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as per direction of Engineer-in-charge- GI metal ceiling lay in plain Tegular edge global white color tiles of size 595x595mm, and 0.5mm thick with 8mm drop: made of GI sheet having galvanizing of 100 gms/sqm (both sides inclusive) and electro statically polyester powder coated of thickness 60 microns (minimum) , including factory painted after bending		
12.52.2	Providing and fixing tiled false ceiling of approved materials of size 595x595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanized @ 120 grams per sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38mm made from 0.30mm thick (minimum) sheet , spaced at 1200mm centre to centre and cross "T" of size 24x25mm made of 0.30 mm thick (minimum) sheet , 1200 mm long spaced between main "T" at 600 mm centre to centre to form a grid of 1200x600mm and secondary cross "T" of length 600 mm and size 24 x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting / making , opening for services like diffusers , grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27x37x25x1.6mm fixed to ceiling with 12.5mm dia and 50mm long dash fasteners , 4mm GI adjustable rods with galvanised butterfly level clips of size 85x30x0.8mm spaced at 1200mm centre to centre along main T, bottom exposed width of 24 mm	sqm	2666.02

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	of all T - sections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as per direction of Engineer-in-charge- GI metal ceiling lay in perforated Tegular edge global white color tiles of size 595x595 mm and 0.5 mm thick with 8mm drop; made of GI sheet having galvanising of 100 gms / sqm (both sides inclusive) and 20% perforation area with 1.8mm dia holes and having NRC (Noise Reduction Coefficient) of 0.5, electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending and perforation, and backed with a black glass fiber acoustical fleece		
12.52.3	Providing and fixing tiled false ceiling of approved materials of size 595x595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanized @ 120 grams per sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38mm made from 0.30mm thick (minimum) sheet , spaced at 1200mm centre to centre and cross "T" of size 24x25mm made of 0.30 mm thick (minimum) sheet , 1200 mm long spaced between main "T" at 600 mm centre to centre to form a grid of 1200x600mm and secondary cross "T" of length 600 mm and size 24 x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting / making , opening for services like diffusers , grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27x37x25x1.6mm fixed to ceiling with 12.5mm dia and 50mm long dash fasteners , 4mm GI adjustable rods with galvanised butterfly level clips of size 85x30x0.8mm spaced at 1200mm centre to centre along main T, bottom exposed width of 24 mm of all T - sections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as per direction of Engineer-in-charge - 12.5 mm thick square edge PVC laminated gypsum tile of size 595x595mm , made of gypsum plaster board , manufactured from natural gypsum as per IS:2095 part I and laminated with white 0.16mm thick fire retardant PVC film on the face side and 12 micron metalized polyester on the back side with all edges sealed with the face side PVC film which goes around and wraps the edges and is bonded to the edges and the back side metalized polyester film so as to make the tile a completely sealed unit	sqm	2845.28

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
12.52.4	Providing and fixing tiled false ceiling of approved materials of size 595x595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanized @ 120 grams per sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38mm made from 0.30mm thick (minimum) sheet , spaced at 1200mm centre to centre and cross "T" of size 24x25mm made of 0.30 mm thick (minimum) sheet , 1200 mm long spaced between main "T" at 600 mm centre to centre to form a grid of 1200x600mm and secondary cross "T" of length 600 mm and size 24 x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting / making , opening for services like diffusers , grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27x37x25x1.6mm fixed to ceiling with 12.5mm dia and 50mm long dash fasteners , 4mm GI adjustable rods with galvanised butterfly level clips of size 85x30x0.8mm spaced at 1200mm centre to centre along main T, bottom exposed width of 24 mm of all T - sections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as per direction of Engineer-in-charge - 12.5 mm thick fully Perforated gypsum board tile made from plaster board having glass fibre conforming to IS: 2095 part I , of size 595x595 mm, having perforation of 9.7x9.7mm at 19.4 mm c/c with centre borders of 48 mm and the side borders of 30mm , backed with non woven tissue on the back side , having an NRC (Noise Reduction Coefficient) of 0.79, with 50 mm resin bonded glass wool backing	sqm	2199.97
12.53	Providing and fixing 15mm thick densified tegular edged eco friendly light weight calcium silicate false ceiling tiles of approved texture of size 595x595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanised steel sections (galvanising @ 120 grams per sqm including both side) consisting of main 'T' runner suitably spaced at joints to get required length and of size 24x38 mm made from 0.33 mm thick (minimum) sheet, spaced 1200 mm centre to centre , and cross 'T' of size 24 x28 mm made out of 0.33 mm (minimum) sheet, 1200 mm long spaced between main 'T' at 600 mm centre to centre to form a grid of 1200 x600 mm and secondary cross 'T' of length 600 mm and size 24x28 mm made of 0.33 mm thick (minimum) sheet to be inter locked at middle of the 1200x600mm panel to from grid of size 600x600 mm,	sqm	2961.43

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	resting on periphery walls / partitions on a perimetre wall angle pre-coated steel of size 24x24x3000 mm made of 0.4mm thick (minimum) sheet with the help of rawl plugs at 450 mm centre to centre with 25 mm long dry wall screws @ 230mm interval and laying 15mm thick densified edges calcium silicate ceiling tiles of approved texture (Spintone /Cosmos/hexa) in the grid, including , cutting / making opening for services like diffusers , grills, light fittings, fixtures , smoke detectors etc., wherever required. Main 'T' runners to be suspended from ceiling using G.I.slotted cleats of size 25x35x1.6mm fixed to ceiling with 12.5mm dia and 50mm long dash fasteners, 4mm G.I.adjustable rods with galvanised steel level clips of size 85x30x0.8mm, spaced at 1200mm centre to centre along main 'T' , bottom exposed with 24mm of all T-sections shall be pre - painted with polyster baked paint, for all heights, as per specifications, drawings and as per direction of Engineer-in-charge.		
12.54.1	Providing and fixing GI clip in metal ceiling system of 600x600mm module which includes providing and fixing 'C' wall angle of size 20x30x20 mm made of 0.5mm thick pre painted steel along the perimetre of the room with help of nylon sleeves and wooden screws at 300mm centre to centre , suspending the main C carrier of size 10x38x10mm made of G.I.steel 0.7mm thick from the soffit with help of soffit cleat 37x27x25x1.6mm ,rawl plugs of size 38x12mm and C carrier suspension clip and main carrier bracket at 1000 mmc/c . Inverted triangle shaped Spring Tee having height of 24mm and width of 34mm made of GI steel 0.45 mm thick is then fixed to the main C carrier and in direction perpendicular to it at 600mm centres with help of suspension brackets. Wherever the main C carrier and spring T have to join, C carrier and spring T connectors have to be used. All sections to be galvanized @ 120 gms/sqm (both side inclusive) , fixing with clip in tiles into spring 'T' with - GI Metal ceiling clip in plain Beveled edge global white color tiles of size 600x600 and 0.5mm thick with 25mm height, made of GI sheet having galvanizing of 100 gms/sqm (both sides inclusive) and electro statically polyster powder coated of thickness 60microns (minimum), including factory painted after bending	sqm	2827.32
12.54.2	Providing and fixing GI clip in metal ceiling system of 600x600mm module which includes providing and fixing 'C' wall angle of size 20x30x20 mm made of 0.5mm thick pre painted steel along the perimetre of the room with help of nylon sleeves and wooden screws at 300mm centre to centre , suspending the main C carrier of size 10x38x10mm made of	sqm	2902.01

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	G.I. steel 0.7mm thick from the soffit with help of soffit cleat 37x27x25x1.6mm ,rawl plugs of size 38x12mm and C carrier suspension clip and main carrier bracket at 1000 mm/c . Inverted triangle shaped Spring Tee having height of 24mm and width of 34mm made of GI steel 0.45 mm thick is then fixed to the main C carrier and in direction perpendicular to it at 600mm centres with help of suspension brackets. Wherever the main C carrier and spring T have to join, C carrier and spring T connectors have to be used. All sections to be galvanized @ 120 gms/sqm (both side inclusive) , fixing with clip in tiles into spring 'T' with - GI metal ceiling clip in plain beveled edge global white color tiles of size 600x600 and 0.5mm thick with 25mm height , made of GI sheet having galvanising of 100gms /sqm (both sides inclusive) and 20% perforation area with 1.8 mm dia holes and having NRC of 0.5, electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending and perforation		
12.55	Providing and fixing heat resistant terrace tiles (300mm x 300mm x 20mm) with SRI (solar refractive index) > 78, solar reflection > 0.70 and initial emittance > 0.75 on waterproof and sloped surface of terrace, laid on 20 mm thick cement sand mortar in the ratio of 1:4 (1 cement : 4 fine aggregate) and grouting the joints with mix of white cement & marble powder in ratio of 1:1, including rubbing and polishing of the surface upto 3 cuts complete , including providing skirting upto 150mm height along the parapet walls in the same manner	sqm	2490.49
12.56	Providing and laying roof insulation with 40mm thick impervious sprayed, closed cell free rigid Polyurethane foam over deck insulation conforming to IS - 12432 Pt.III (density of foam being 40-45 kg/ cum), over a coat polyurethane primer applied @ 6-8 sqm per litre , laying 400 G polythene sheet over PUF spray and providing a wearing course of 40mm thick cement screed 1:2:4 (1 cement : 2 fine aggregate: 4 stone aggregate 20mm nominal size) in chequered rough finish, in panels of 2.5 m x 2.5 m and embedding with 24 G wire netting and sealing the joints with polymerized mastic, all complete as per direction of Engineer-in-charge.	sqm	1750.46
12.57	Providing and fixing thermal insulation with resin bonded fibre glass wool conforming to IS: 8183 having density 24kg/cum, 50mm thick , wrapped in 200 G Virgin polythene bags fixed to wall with screw , rawel plug & washers and held in position by criss crossing GI wire etc. complete and as per direction of	sqm	515.85

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	Engineer-in-charge.		
12.58.1	Providing and fixing tiled false ceiling of specified materials of size 595x595 mm in true horizontal level, suspended on interlocking metal grid of hot dipped galvaized steel sections (galvanized @ 120 grams / sqm , both side inclusive) consisting of main "T" runner with suitable spaced joints to get required length and of size 24x38 mm made from 0.30mm thick (minimum) sheet, spaced at 1200 mm centre to centre and cross "T" of size 24x25 mm made of 0.30mm thick (minimum) sheet, 1200 mm long spaced between main "T" at 600mm centre to centre to form a grid of 1200x600mm and secondary cross "T" of length 600 mm and size 24 x 25 mm made of 0.30mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting / making, opening for services like diffusers , grills , light fittings , fixtures , smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27x37x25x1.6mm fixed to ceiling with 12.5 mm dia and 50mm long dash fasteners, 4mm GI adjustable rods with galvanized butterfly level clips of size 85x30x0.8mm spaced at 1200 mm centre to centre along main T, bottom exposed width of 24mm of all T-sections shall be pre-painted with polyster paint, all complete for all heights as per specifications , drawings and as per direction of Engineer-in-charge - 8 mm thick fully perforated calcium silicate board made with Calcareous & Siliceous materials reinforced with cellulose fiber manufactured through autoclaving process to give stable crystalline structure with minimum compressive strength 225 kg / sq.cm, bending strength 100 kg / sq.cm of size 595x595 mm, having perforation of dia. 10mm with minimum perforated area 18 % with non woven tissue on the back side, having an NRC (Noise Reduction Coefficient) of 0.85, with 50 mm thick rockwool of 48 kg / cum backing	sqm	2733.24
12.59.1	Providing & fixing false ceiling at all height including providing & fixing of framework made of special section, power pressed from M.S.sheets and galvanised with zinc coating of 120 gms / sqm (both side inclusive) as per IS: 277 and consisting of angle cleat of size 25mm wide x 1.6mm thick with flanges of 27mm and 37mm ,at 1200mm c/c , one flange fixed to the ceiling with dash fastener 12.5mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50mm of required length with nuts & bolts of required size and other end of angle hanger fixed with	sqm	2037.64

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	intermediate G.I. channels 45x15x0.90mm running at the spacing of 1200mm c/c , to which the ceiling section 0.5mm thick bottom wedge of 80mm with tapered flanges of 26 mm each having lips of 10.5mm , at 450mm c/c , shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clip made out of 2.64mm dia X 230mm long G.I .wire at every junction , including fixing perimeter channels 0.50mm thick 27mm high having flanges 20mm and 30mm long, the perimeter of ceiling fixed to wall/ partitions with the help of rawl plugs at 450mm centre, with 25mm long dry wall screws @ 230mm interval, including fixing of calcium silicate board to ceiling sections and perimeter channels with the help of dry wall screws of size 3.5X25mm at 230mm c/c , including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compounds, jointing tapes, finishing with jointing compounds in three layers covering upto 150mm on both sides of joints and two coats of primer suitable for boards, all as per manufacture's specification and also including the cost of making opening for light fittings, grills, diffusers, cut outs made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer-in-charge but excluding the cost of painting with - 8mm thick Calcium Silicate Board made with Calcareous & Siliceous materials reinforced with cellulose fiber manufactured through autoclaving process		
12.60	Providing and fixing thermal insulation of ceiling (under deck insulation) with resin bonded rockwool conforming to IS: 8183, density 48 kg / cum, 50mm thick , wrapped in 200 G Virgin Polythene bags fixed to ceiling with metallic cleats (50x50x3mm) @ 60 cm and wire mesh of 12.5mm x24gauge wire mesh, for top most ceiling of building	sqm	962.27
12.61	Providing and fixing thermal insulation with resin bonded rock wool, conforming to IS: 8183, density 48kg/cum , 50mm thick , wrapped in 200 G virgin polythene bags placed over existing false ceiling and held in position by criss - crossing GI wire	sqm	583.71
12.62	Providing and fixing thermal insulation with resin bonded rockwool conforming to IS: 8183, having density 48kg/cum , 50mm thick, wrapped in 200 G Virgin polythene bags fixed to wall with screw, rawel plug & washers and held and in position by criss crossing GI wire etc. complete as per direction of Engineer-in-charge.	sqm	589.40
12.63	Providing and applying two coats of High Albedo paint having	sqm	471.61

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	minimum Solar Reflective Index (SRI) 108 (with solar reflectance & thermal emittance tested as per ASTM C 1549 and ASTM C 1371 respectively), VOC less than 10cc/gm. The coating thickness and the methodology of application shall be strictly as per manufacture's specification and as approved by Engineer-in-charge. Surface preparation includes cleaning with metal wire brush to remove all dust, fungus etc. washing with water all complete .The contractor shall give guarantee for the performance of SRI and also the durability of coating, all complete as per direction of Engineer-in-charge.		
12.64.1	Providing & fixing at all heights, levels and locations Mill finish aluminium alloy roofing sheets of alloy IS designation 31500, temper Hx8 conforming to IS 737 and dimensions as per IS code 2676 with characteristics of good formability and corrosion resistance, The profile sheets shall be fixed to truss members in slope or required pitch of curvature with Hex cap headed self drilling/ tapping Stainless steel screws M6, 50 mm long with 3mm EPDM seal washer etc, all inclusive of labour, scaffolding, T&P and sundries etc. complete as per directons (Cost of truss/frame work shall be paid separately)- 0.56mm, Aluminium troughed profile with center to center pitch of 200mm, depth of 32 mm, overall profile width 1092 mm, cover width 1000mm	sqm	1140.50
12.64.2	Providing & fixing at all heights, levels and locations Mill finish aluminium alloy roofing sheets of alloy IS designation 31500, temper Hx8 conforming to IS 737 and dimensions as per IS code 2676 with characteristics of good fromability and corrosion resistance, The profile sheets shall be fixed to truss members in slope or required pitch of curvature with Hex cap headed self drilling/ tapping Stainless steel screws M6, 50 mm long with 3mm EPDM seal washer etc, all inclusive of labour, scaffolding, T&P and sundries etc. complete as per directons (Cost of truss/frame work shall be paid separately)- 0.71mm, Aluminium troughed profile with center to center pitch of 200mm, depth of 32 mm, overall profile width 1092 mm, cover width 1000mm	sqm	1378.71
12.64.3	Providing & fixing at all heights, levels and locations Mill finish aluminium alloy roofing sheets of alloy IS designation 31500, temper Hx8 conforming to IS 737 and dimensions as per IS code 2676 with characteristics of good fromability and corrosion resistance, The profile sheets shall be fixed to truss members in slope or required pitch of curvature with Hex cap headed self drilling/ tapping Stainless steel screws M6, 50 mm	sqm	1727.53

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	long with 3mm EPDM seal washer etc, all inclusive of labour, scaffolding, T&P and sundries etc. complete as per directons (Cost of truss/frame work shall be paid separately)- 0.91mm, Aluminium troughed profile with center to center pitch of 200mm, depth of 32 mm, overall profile width 1092 mm, cover width 1000mm		
12.64.4	Providing & fixing at all heights, levels and locations Mill finish aluminium alloy roofing sheets of alloy IS designation 31500, temper Hx8 conforming to IS 737 and dimensions as per IS code 2676 with characteristics of good fromability and corrosion resistance, The profile sheets shall be fixed to truss members in slope or required pitch of curvature with Hex cap headed self drilling/ tapping Stainless steel screws M6, 50 mm long with 3mm EPDM seal washer etc, all inclusive of labour, scaffolding, T&P and sundries etc. complete as per directons (Cost of truss/frame work shall be paid separately)- 0.56mm Aluminium profile with center to center pitch of 175mm, depth of 46 mm, top crest width of 41mm, bottom valley width of 80mm, overall profile width of 1144mm, cover width 1050mm	sqm	1445.15
12.64.5	Providing & fixing at all heights, levels and locations Mill finish aluminium alloy roofing sheets of alloy IS designation 31500, temper Hx8 conforming to IS 737 and dimensions as per IS code 2676 with characteristics of good fromability and corrosion resistance, The profile sheets shall be fixed to truss members in slope or required pitch of curvature with Hex cap headed self drilling/ tapping Stainless steel screws M6, 50 mm long with 3mm EPDM seal washer etc, all inclusive of labour, scaffolding, T&P and sundries etc. complete as per directons (Cost of truss/frame work shall be paid separately)- 0.71mm Aluminium profile with center to center pitch of 175mm, depth of 46 mm, top crest width of 41mm, bottom valley width of 80mm, overall profile width of 1144mm, cover width 1050mm	sqm	1775.14
12.64.6	Providing & fixing at all heights, levels and locations Mill finish aluminium alloy roofing sheets of alloy IS designation 31500, temper Hx8 conforming to IS 737 and dimensions as per IS code 2676 with characteristics of good fromability and corrosion resistance, The profile sheets shall be fixed to truss members in slope or required pitch of curvature with Hex cap headed self drilling/ tapping Stainless steel screws M6, 50 mm long with 3mm EPDM seal washer etc, all inclusive of labour, scaffolding, T&P and sundries etc. complete as per directons	sqm	2222.00

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	(Cost of truss/frame work shall be paid separately)- 0.91mm Aluminium profile with center to center pitch of 175mm, depth of 46 mm, top crest width of 41mm, bottom valley width of 80mm, overall profile width of 1144mm, cover width 1050mm		
12.64.7	Providing & fixing at all heights, levels and locations Mill finish aluminium alloy roofing sheets of alloy IS designation 31500, temper Hx8 conforming to IS 737 and dimensions as per IS code 2676 with characteristics of good formability and corrosion resistance, The profile sheets shall be fixed to truss members in slope or required pitch of curvature with Hex cap headed self drilling/ tapping Stainless steel screws M6, 50 mm long with 3mm EPDM seal washer etc, all inclusive of labour, scaffolding, T&P and sundries etc. complete as per directons (Cost of truss/frame work shall be paid separately)- 0.56mm Aluminium Circular (sinusoidal) profile with centre to center pitch of 75 mm, depth of 19mm, overall profile width150mm, cover width 1150mm	sqm	1116.44
12.64.8	Providing & fixing at all heights, levels and locations Mill finish aluminium alloy roofing sheets of alloy IS designation 31500, temper Hx8 conforming to IS 737 and dimensions as per IS code 2676 with characteristics of good formability and corrosion resistance, The profile sheets shall be fixed to truss members in slope or required pitch of curvature with Hex cap headed self drilling/ tapping Stainless steel screws M6, 50 mm long with 3mm EPDM seal washer etc, all inclusive of labour, scaffolding, T&P and sundries etc. complete as per directons (Cost of truss/frame work shall be paid separately)- 0.71mm Aluminium Circular (sinusidal) profile with centre to center pitch of 75 mm, depth of 19mm, overall profile width1250mm, cover width 1150mm	sqm	1383.30
12.64.9	Providing & fixing at all heights, levels and locations Mill finish aluminium alloy roofing sheets of alloy IS designation 31500, temper Hx8 conforming to IS 737 and dimensions as per IS code 2676 with characteristics of good formability and corrosion resistance, The profile sheets shall be fixed to truss members in slope or required pitch of curvature with Hex cap headed self drilling/ tapping Stainless steel screws M6, 50 mm long with 3mm EPDM seal washer etc, all inclusive of labour, scaffolding, T&P and sundries etc. complete as per directons (Cost of truss/frame work shall be paid separately)- 0.91mm Aluminium Circular (sinusoidal) profile with centre to center pitch of 75 mm, depth of 19mm, overall profile width1250mm,	sqm	1753.34

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	cover width 1150mm		
12.65.1	Providing & fixing at all heights, levels and locations colour finish Aluminium alloy roofing sheets of alloy IS designation 31500, temper Hx8 conforming to IS 737 and dimensions as per IS code 2676 with characteristics of good formability and corrosion resistance. The profile sheets shall be fixed to truss members in slope or required pitch or curvature with Hex cap headed self drilling / tapping stainless steel screws M6, 50mm long with 3 mm EPDM seal washer etc. all inclusive of labour, scaffolding, T&P and sundries etc. complete as per direction of Engineer-in-charges.(Cost of truss/ frame work shall be paid separately) - 0.56mm, aluminium Colour coated troughed profile with center to center pitch of 200mm, depth of 32mm, overall profile width 1092 mm, cover width 1000mm	sqm	1295.82
12.65.2	Providing & fixing at all heights, levels and locations colour finish Aluminium alloy roofing sheets of alloy IS designation 31500, temper Hx8 conforming to IS 737 and dimensions as per IS code 2676 with characteristics of good formability and corrosion resistance. The profile sheets shall be fixed to truss members in slope or required pitch or curvature with Hex cap headed self drilling / tapping stainless steel screws M6, 50mm long with 3 mm EPDM seal washer etc. all inclusive of labour, scaffolding, T&P and sundries etc. complete as per direction of Engineer-in-charges.(Cost of truss/ frame work shall be paid separately) - 0.71mm, aluminium Colour coated troughed profile with center to center pitch of 200mm, depth of 32mm, overall profile width 1092 mm, cover width 1000mm	sqm	1572.12
12.65.3	Providing & fixing at all heights, levels and locations colour finish Aluminium alloy roofing sheets of alloy IS designation 31500, temper Hx8 conforming to IS 737 and dimensions as per IS code 2676 with characteristics of good formability and corrosion resistance. The profile sheets shall be fixed to truss members in slope or required pitch or curvature with Hex cap headed self drilling / tapping stainless steel screws M6, 50mm long with 3 mm EPDM seal washer etc. all inclusive of labour, scaffolding, T&P and sundries etc. complete as per direction of Engineer-in-charges.(Cost of truss/ frame work shall be paid separately) - 0.91mm, aluminium Colour coated troughed profile with center to center pitch of 200mm, depth of 32mm, overall profile width 1092 mm, cover width 1000mm	sqm	1972.75
12.65.4	Providing & fixing at all heights, levels and locations colour finish Aluminium alloy roofing sheets of alloy IS designation	sqm	1628.81

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	31500, temper Hx8 conforming to IS 737 and dimensions as per IS code 2676 with characteristics of good formability and corrosion resistance. The profile sheets shall be fixed to truss members in slope or required pitch or curvature with Hex cap headed self drilling / tapping stainless steel screws M6, 50mm long with 3 mm EPDM seal washer etc. all inclusive of labour, scaffolding, T&P and sundries etc. complete as per direction of Engineer-in-charges.(Cost of truss/ frame work shall be paid separately) - 0.56mm, aluminium Colour coated profile with center to center pitch of 175mm, depth of 46 mm, top crest width of 41mm, bottom valley width of 80mm, overall profile width of 1144mm, cover width 1050mm		
12.65.5	Providing & fixing at all heights, levels and locations colour finish Aluminium alloy roofing sheets of alloy IS designation 31500, temper Hx8 conforming to IS 737 and dimensions as per IS code 2676 with characteristics of good formability and corrosion resistance. The profile sheets shall be fixed to truss members in slope or required pitch or curvature with Hex cap headed self drilling / tapping stainless steel screws M6, 50mm long with 3 mm EPDM seal washer etc. all inclusive of labour, scaffolding, T&P and sundries etc. complete as per direction of Engineer-in-charges.(Cost of truss/ frame work shall be paid separately) - 0.71mm, aluminium Colour coated profile with center to center pitch of 175mm, depth of 46 mm, top crest width of 41mm, bottom valley width of 80mm, overall profile width of 1144mm, cover width 1050mm	sqm	2046.69
12.65.6	Providing & fixing at all heights, levels and locations colour finish Aluminium alloy roofing sheets of alloy IS designation 31500, temper Hx8 conforming to IS 737 and dimensions as per IS code 2676 with characteristics of good formability and corrosion resistance. The profile sheets shall be fixed to truss members in slope or required pitch or curvature with Hex cap headed self drilling / tapping stainless steel screws M6, 50mm long with 3 mm EPDM seal washer etc. all inclusive of labour, scaffolding, T&P and sundries etc. complete as per direction of Engineer-in-charges.(Cost of truss/ frame work shall be paid separately) - 0.91mm, aluminium Colour coated profile with center to center pitch of 175mm, depth of 46 mm, top crest width of 41mm, bottom valley width of 80mm, overall profile width of 1144mm, cover width 1050mm	sqm	2558.87
12.65.7	Providing & fixing at all heights, levels and locations colour finish Aluminium alloy roofing sheets of alloy IS designation 31500, temper Hx8 conforming to IS 737 and dimensions as	sqm	1344.23

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	per IS code 2676 with characteristics of good formability and corrosion resistance. The profile sheets shall be fixed to truss members in slope or required pitch or curvature with Hex cap headed self drilling / tapping stainless steel screws M6, 50mm long with 3 mm EPDM seal washer etc. all inclusive of labour, scaffolding, T&P and sundries etc. complete as per direction of Engineer-in-charges.(Cost of truss/ frame work shall be paid separately) - 0.56mm, aluminium profile with center to center pitch of 175mm, depth of 28.5 mm, 987mm, overall profile width, cover width 900mm		
12.65.8	Providing & fixing at all heights, levels and locations colour finish Aluminium alloy roofing sheets of alloy IS designation 31500, temper Hx8 conforming to IS 737 and dimensions as per IS code 2676 with characteristics of good formability and corrosion resistance. The profile sheets shall be fixed to truss members in slope or required pitch or curvature with Hex cap headed self drilling / tapping stainless steel screws M6, 50mm long with 3 mm EPDM seal washer etc. all inclusive of labour, scaffolding, T&P and sundries etc. complete as per direction of Engineer-in-charges.(Cost of truss/ frame work shall be paid separately) - 0.71mm, aluminium profile with center to center pitch of 177.5mm, depth of 28.5 mm, 987mm, overall profile width, cover width 900mm	sqm	1684.18
12.66.1	Providing and fixing of Pre-coated colour or mill finish Aluminium Roofing Accessories in 0.71 mm thickness, Alloy 31500 (IS designation) (aluminium alloy (AA) 3004 (ISO designation) For color, coating shall be 5-7 microns epoxy primer on both sides of the sheet and polyester top coat 15-18 microns, using self drilling/tapping SS screws of size 6 x 50mm with 3mm thick EPDM seal and SS plain washer complete: Precoated / mill finish aluminium ridges plain (500-600mm)	metre	1174.32
12.66.2	Providing and fixing of Pre-coated colour or mill finish Aluminium Roofing Accessories in 0.71 mm thickness, Alloy 31500 (IS designation) (aluminium alloy (AA) 3004 (ISO designation) For color, coating shall be 5-7 microns epoxy primer on both sides of the sheet and polyester top coat 15-18 microns, using self drilling/tapping SS screws of size 6 x 50mm with 3mm thick EPDM seal and SS plain washer complete: Precoated / mill finish aluminium flashings / Aprons (Upto 600 mm)	metre	1071.83
12.66.3	Providing and fixing of Pre-coated colour or mill finish Aluminium Roofing Accessories in 0.71 mm thickness, Alloy	metre	1157.67

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	31500 (IS designation) (aluminiumj alloy (AA) 3004 (ISO designation) For color, coating shall be 5-7 microns epoxy primer on both sides of the sheet and polyester top coat 15-18 microns, using self drilling/tapping SS screws of size 6 x 50mm with 3mm thick EPDM seal and SS plain washer complete: Precoated / mill finish aluminium North light curves		
12.66.4	Providing and fixing of Pre-coated colour or mill finish Aluminium Roofing Accessories in 0.71 mm thickness, Alloy 31500 (IS designation) (aluminiumj alloy (AA) 3004 (ISO designation) For color, coating shall be 5-7 microns epoxy primer on both sides of the sheet and polyester top coat 15-18 microns, using self drilling/tapping SS screws of size 6 x 50mm with 3mm thick EPDM seal and SS plain washer complete: Precoated /mill finish aluminium Barge board (upto 200 mm)	metre	892.69
12.66.5	Providing and fixing of Pre-coated colour or mill finish Aluminium Roofing Accessories in 0.71 mm thickness, Alloy 31500 (IS designation) (aluminiumj alloy (AA) 3004 (ISO designation) For color, coating shall be 5-7 microns epoxy primer on both sides of the sheet and polyester top coat 15-18 microns, using self drilling/tapping SS screws of size 6 x 50mm with 3mm thick EPDM seal and SS plain washer complete: Precoated / mill finish aluminium Crimp curve	sqm	1003.26
12.66.6	Providing and fixing of Pre-coated colour or mill finish Aluminium Roofing Accessories in 0.71 mm thickness, Alloy 31500 (IS designation) (aluminiumj alloy (AA) 3004 (ISO designation) For color, coating shall be 5-7 microns epoxy primer on both sides of the sheet and polyester top coat 15-18 microns, using self drilling/tapping SS screws of size 6 x 50mm with 3mm thick EPDM seal and SS plain washer complete: Precoated / mill finish aluminium Gutter (600mm over all girth)	metre	2037.82
12.75	Providing and laying water proofing for roof portion - Clean the surface using wire brush to remove fungus sticking on the tile surface . Remove the laitance and plaster residues with a chisel & hammer and repair any broken structure with civil work . Apply one coat Acrylic penetrating primer. Lay one coat of 3-4 mm thick Fibre reinforced Acrylic plaster Elastomeric plaster on the flat area . Provide a seal coat with a flexible acrylic penetaring primer again.	sqm	906.21
12.76	Providing and laying water proofing for parapet wall - Clean the surface using wire brush to remove fungus sticking on the	sqm	692.82

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	tile surface . Remove the laitance and plaster residues with a chisel & hammer and repair any broken structure with civil work . Apply one coat Acrylic penetrating primer. Lay one coat of 3-4 mm thick Fibre reinforced Acrylic plaster Elastomeric plaster on the flat area . Provide a seal coat with a flexible acrylic penetrating primer again		
12.77	Chipping and rackout the damaged pressed clay tile joints on roofs and fill the joints with cement mortar 1:4 (1 cement : 4 fine aggregate) admixed with latex SBR @ 2kg per bag of cement and neat finishing complete . The rate includes cost of cement , admixture , labour etc.	Rmt	109.54
12.78	Over the RCC terrace , pressed clay tiles , asbestoscement sheet , mangalore tiles roof , G.I sheet water proofing by applying a coat of bituminous primer by brush and providing & laying one layer of WP SHIELD P 3180 , 3 mm thick membrane reinforced with 180 GSM non woven polyster matt , laid by torching the wp shield by welding method using gas burner roll forward and press firmly against the substrate to bond , seal the joints and edges heat both the overlaps and pressed. The rate included necessary cleaning the surface with wire or coir brush, cost of materials tools tackles, labour etc all complte	sqm	987.31
12.81	Providing high impact poly corbonate diamond trafford sheet of 2.25mm thick roofing upto any pitch and fixing with polymer coated J or L hooks, bolts and nuts 8mm dia G.I plain and bitumen washers or with self drilling fastener and EPDM washers etc. complete (excluding the cost of purlins, rafters and trusses), including cutting sheets to size and shape wherever required	sqm	9110.76

13 . Finishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
13.1.1	12mm cement plaster of mix -1:4 (1 cement : 4 fine aggregate)	sqm	421.39
13.1.1A	12mm thick plastering using with volcanic glass sand and cement with mix ratio of 50kg of cement with 10kg of volcanic glass sand with 29 liters of water	sqm	766.01
13.1.2	12mm cement plaster of mix -1:6 (1 cement : 6 fine aggregate)	sqm	405.37
13.2.1	15mm cement plaster on the rough side of single or half brick wall of mix - 1:4 (1cement : 4 fine aggregate)	sqm	485.60
13.2.2	15mm cement plaster on the rough side of single or half brick wall of mix - 1:6 (1cement : 6 fine aggregate)	sqm	466.47
13.3.1	20mm cement plaster of mix -1:4 (1 cement : 4 fine aggregate)	sqm	575.11
13.3.2	20mm cement plaster of mix -1:6 (1 cement : 6 fine aggregate)	sqm	550.19
13.4.1	12 mm cement plaster of mix 1:4 (1 cement :4 course sand)	sqm	421.39
13.4.2	12 mm cement plaster of mix 1:6 (1 cement :6 course sand)	sqm	405.37
13.5.1	15mm cement plaster on rough side of single or half brick wall of mix - 1:4 (1 cement : 4 fine aggregate)	sqm	485.60
13.5.2	15mm cement plaster on rough side of single or half brick wall of mix - 1:6 (1 cement : 6 fine aggregate)	sqm	466.47
13.6.1	20mm cement plaster of mix 1:4 (1 cement : 4 fine aggregate)	sqm	575.11
13.6.2	20mm cement plaster of mix 1:6 (1 cement : 6 fine aggregate)	sqm	550.19
13.7.1	12mm cement plaster finished with a floating coat of neat cement of mix - 1:3 (1 cement :3 fine aggregate)	sqm	528.65
13.7.2	12mm cement plaster finished with a floating coat of neat cement of mix - 1:4 (1 cement :4 fine aggregate)	sqm	512.63

13 . Finishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
13.8.1	15 mm cement plaster on rough side of single or halfbrick wall finished with a floating coat of neat cement of mix - 1:3 (1 cement : 3 fine aggregate)	sqm	595.98
13.8.2	15 mm cement plaster on rough side of single or halfbrick wall finished with a floating coat of neat cement of mix - 1:4 (1 cement : 4 fine aggregate)	sqm	576.84
13.8.3	12 mm cement plaster of mix 1:5 (1 cement : 5 fine aggregate)	sqm	411.52
13.9.1	cement plaster 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement - 12mm cement plaster	sqm	528.65
13.9.2	cement plaster 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement - 20mm cement plaster	sqm	691.27
13.9.2A	15 mm cement plaster on the rough side of single or half brick wall of mix 1:5 (1 cement : 5 fine aggregate)	sqm	473.09
13.9.3	24mm thick flooring in roof usinv volcanic glass sand and cement with a mix ratio of 50kg of cement with 10kg of volcnic glass sand mixed with 29 liters of water	sqm	1404.72
13.10	15 mm cement plaster 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement on the rough side of single or halfbrick wall	sqm	595.98
13.11	18mm cement plaster in two coats under layer 12mm thick cement plaster 1:5 (1 cement : 5 fine aggregate) finished with a top layer 6mm thick cement plaster 1:6 (1 cement : 6 fine aggregate)	sqm	617.70
13.12	18 mm cement plaster in two coats under layer 12mm thick cement plaster 1:5 (1 cement : 5 fine aggregate) and a top layer 6mm thick cement plaster 1:3 (1cement : 3 fine aggregate) finished rough with sponge	sqm	633.72
13.13	12mm cement plaster 1:2 (1cement :2 stone dust)	sqm	433.89
13.14	15mm cement plaster 1:2 (1 cement : 2 stone dust) on the rough side of single or half brick wall	sqm	500.53

13 . Finishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
13.15	20mm cement plaster 1:2 (1 cement : 2 stone dust)	sqm	594.56
13.16.1	6mm cement plaster of mix 1:3 (1 cement : 3 fine aggregate)	sqm	358.84
13.17	6 mm cement plaster 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement and thick coat of lime wash on top of walls when dry for bearing of R.C.C. slabs and beams	sqm	470.72
13.18	Neat cement punning	sqm	92.95
13.19.1	Rough cast plaster upto 10 m height above ground level with a mixture of sand and gravel or crushed stone from 6mm to 10mm nominal size, dashed over and including the fresh plaster in two layers, under layer 12mm cement plaster 1:4 (1 cement : 4 fine aggregate) and top layer 10mm cement plaster 1:3 (1 cement : 3 fine aggregate) mixed with 10% finely grounded hydrated lime by volume of cement - Ordinary cement finish using ordinary cement	sqm	1055.22
13.20	Pebble dash plaster upto 10m height above ground level with a mixture of washed pebble or crushed stone 6mm to 12.5mm nominal size, dashed over and including fresh plaster in two layers under layer 12mm cement plaster 1:4 (1 cement : 4 fine aggregate) and top layer 10mm cement plaster with cement mortar 1:3(1cement : 3 fine aggregate) mixed with 10% finely grounded hydrated lime by volume of cement	sqm	989.97
13.21	Extra for providing and mixing water proofing material in cement plaster work in proportion recommended by the manufacturers	per bag	20.96
13.22	Extra for plastering exterior walls of height more than 10 m from ground level for every additional height of 3 m or part thereof	sqm	96.73
13.23.1	Extra for plastering on circular work not exceeding 6 m in radius - in one coat	sqm	55.24
13.23.2	Extra for plastering on circular work not exceeding 6 m in radius - in two coat	sqm	83.62
13.24.1	Extra for plastering done on moulding cornices or architraves	sqm	836.41

13 . Finishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	including neat finish to line and level - in one coat		
13.24.2	Extra for plastering done on moulding cornices or architraves including neat finish to line and level - in two coats	sqm	1379.51
13.25.1	Extra for plastering - spherical ceiling	sqm	205.94
13.25.2	Extra for plastering - groined ceiling	sqm	222.52
13.25.3	Extra for plastering - flying soffits	sqm	136.83
13.26	Providing and applying plaster of paris putty of 2mm thickness over plastered surface to prepare the surface even and smooth complete	sqm	308.38
13.27	Extra for lining out plaster to imitate stone or concrete blocks walling	sqm	133.54
13.28.1	12mm thick plain cement mortar bands in cement mortar 1:4 (1cement : 4 fine aggregate) - flush band	cm per metre	8.91
13.28.2	12mm thick plain cement mortar bands in cement mortar 1:4 (1cement : 4 fine aggregate) - sunk band	cm per metre	9.73
13.28.3	12mm thick plain cement mortar bands in cement mortar 1:4 (1cement : 4 fine aggregate) - raised band	cm per metre	11.08
13.28.4	12mm thick plain cement mortar bands in cement mortar 1:4 (1cement : 4 fine aggregate) - moulded band	cm per metre	19.03
13.29.1	18 mm thick plain cement mortar band in cement mortar 1:4 (1 cement : 4 fine aggregate) - flush band	cm per metre	10.83
13.29.2	18 mm thick plain cement mortar band in cement mortar 1:4 (1 cement : 4 fine aggregate) - sunk band	cm per metre	11.91
13.29.3	18 mm thick plain cement mortar band in cement mortar 1:4 (1	cm per	13.55

13 . Finishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	cement : 4 fine aggregate) - raised band	metre	
13.29.4	18 mm thick plain cement mortar band in cement mortar 1:4 (1 cement : 4 fine aggregate) - moulded band	cm per metre	25.36
13.30	18mm thick moulded cement mortar band in two coats under layer 12mm thick with cement mortar 1:5 (1 cement : 5 fine aggregate) top layer 6mm thick with cement mortar 1:4 (1 cement : 4 fine aggregate)	cm per metre	25.27
13.31.1	Pointing on brick work or brick flooring with cement mortar 1:3 (1 cement : 3 fine aggregate) - flush / ruled/ struck or weathered pointing	sqm	304.57
13.31.2	Pointing on brick work or brick flooring with cement mortar 1:3 (1 cement : 3 fine aggregate) - raised and cut pointing	sqm	496.90
13.32.1	Pointing on tile brick work with cement mortar 1:3 (1 cement : 3 fine aggregate) - flush/ruled/struck or weathered pointing	sqm	415.51
13.33.1	Pointing on stone work with cement mortar 1:3 (1 cement : 3 fine aggregate) - flush/ruled pointing	sqm	454.37
13.33.2	Pointing on stone work with cement mortar 1:3 (1 cement : 3 fine aggregate) - raised and cut pointing	sqm	826.83
13.34	Raised and cut pointing on stone work in white cement mortar 1:3 (1 whitecement : 3 marble dust)	sqm	863.75
13.35.1	Pointing on stone slab ceiling with cement mortar 1:2 (1 cement : 2 fine aggregate) - flush / ruled pointing	sqm	252.36
13.36	Extra for pointing on walls on the outside at height more than 10 m from ground level for every additional height of 3 m or part there of	sqm	7.62
13.37.1	White washing with lime to give an even shade - new work (three or more coats)	sqm	45.81
13.38	Satna lime wash on walls with one coat	sqm	17.71

13 . Finishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
13.39.1	Colour washing such as green, blue or buff to give an even shade - New work (two or more coats) with a base coat of white washing with lime	sqm	59.87
13.39.2	Colour washing such as green, blue or buff to give an even shade - New work (two or more coats) with a base coat of whiting	sqm	59.39
13.41.1	Distempering with 1st quality acrylic distemper (ready mixed) having VOC content less than 50 gram/litre, of approved manufacturer and of required shade and colour all complete to achieve even shade and colour :New work (two or more coats) over and including water thinnable priming coat with cement primer having VOC content less than 50 gram/litre	sqm	229.32
13.44.1	Finishing walls with water proofing cement paint of required shade - New work (Two or more coats applied @ 3.84 kg / 10 sqm)	sqm	137.39
13.45.1	Finishing walls with textured exterior paint of required shade - New work (Two or more coats applied @ 3.28 ltr / 10 sqm) over and including priming coat of exterior primer applied @ 2.20 kg / 10 sqm	sqm	361.39
13.46.1	Finishing walls with acrylic smooth exterior paint of required shade - New work (two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 0.90 litre / 10 sqm	sqm	194.93
13.47.1	Finishing walls with premium acrylic smooth exterior paint with silicone additives of required shade - New work (two or more coats applied @1.43 ltr / 10 sqm over and including priming coat of exterior primer applied @0.90 litre / 10sqm)	sqm	227.76
13.48.1	Finishing with deluxe multi surface paint system for interiors and exteriors using primer as per manufacture's specification - Two or more coats applied on walls @ 1.25 ltr / 10 sqm over and including one coat of special primer applied @ 0.75 ltr / 10 sqm	sqm	217.28
13.48.2	Painting wood work with deluxe multi surface paint of required shade. Two or more coat applied @0.90 ltr / 10sqm over an under coat of primer applied @ 0.75 ltr / 10 sqm of approved brand and manufacture	sqm	198.83

13 . Finishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
13.48.3	Painting steel work with deluxe multi surface paint to give an even shade. Two or more coat applied @ 0.90 ltr / 10 sqm over an under coat of primer applied @ 0.80 ltr / 10 sqm of approved brand and manufacture	sqm	196.31
13.48A.1	Finishing walls with ready mixed Premium acrylic emulsion paint (company depot tinted) having VOC less than 50gm/litre and UV resistance as per IS 15489:2004, Alkali& fungal resistance , dire resistance exterior paint of required shade with silicon additives- New work (Two or more coats applied @ 1.43 litre / 10 sqm over and including priming coat of exterior primer applied @0.90 litre / 10 sqm.	sqm	206.81
13.50.2	Applying priming coat - with ready mixed aluminium primer of approved brand and manufacture on resinous wood and plywood	sqm	89.05
13.50.3	Applying priming coat - with ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron / steel works	sqm	81.64
13.50.4	Applying priming coat - with ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel work (second coat)	sqm	43.95
13.51.1	Painting with silicon & acrylic emulsion based water thinnable sealer of approved brand and manufacture on wet or patchy portion of plastered surfaces - one coat	sqm	170.53
13.51.2	Painting with silicon & acrylic emulsion based water thinnable sealer of approved brand and manufacture on wet or patchy portion of plastered surfaces -two coats	sqm	271.86
13.52.1	Finishing with epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface , etc.complete - on steel work	sqm	302.45
13.52.2	Finishing with epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface , etc.complete - on concrete work	sqm	297.23

13 . Finishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
13.53.1	Painting on G.S.sheet with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade - New work (two or more coats) including a coat of approved steel primer but excluding a coat of mordant solution	sqm	214.78
13.54.1	Applying a coat of mordant solution on G.S.sheet - with a solution of 38 gms of copper acetate in a litre of soft water	sqm	71.80
13.54.2	Applying a coat of mordant solution on G.S.sheet - with a solution made of 13 gms of hydrochloric acid in a solution of 13 gms each of copper chloride, copper nitrate and ammonium chloride dissolved in a litre of soft water	sqm	71.67
13.55.1	Painting (two or morecoats) on rain water, soil,waste and vent pipes and fittings with black anticorrosive bitumastic paint of approved brand and manufacture, over and including a priming of ready mixed zinc chromate yellow primer on new work - 100 mm diameter pipes	metre	89.34
13.55.2	Painting (two or morecoats) on rain water, soil,waste and vent pipes and fittings with black anticorrosive bitumastic paint of approved brand and manufacture, over and including a priming of ready mixed zinc chromate yellow primer on new work - 150 mm diameter pipes	metre	133.05
13.56.1	Painting (two or more coats) on rain water, soil, waste and vent pipes and fittings with synthetic enamel paint of approved brand and manufacture and required colour over a priming coat of approved steel primer on new work - 100mm diameter pipes	metre	95.13
13.56.2	Painting (two or more coats) on rain water, soil, waste and vent pipes and fittings with synthetic enamel paint of approved brand and manufacture and required colour over a priming coat of approved steel primer on new work - 150mm diameter pipes	metre	141.63
13.57.1	Painting with oil type wood preservative of approved brand and manufacture - New work (two or more coats)	sqm	62.75
13.58	Providing and applying two coats of fire retardant paint on cleaned wood / ply surface @ 3.5 sqm per litre per coat including preparation of base surface as per recommendations of manufacturer to make the surface fire retardant	sqm	429.39

13 . Finishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
13.59	Coal tarring two coats on new work using 0.16 litre and 0.12 litre coal tar per sqm in the first coat and second coat respectively	sqm	81.29
13.61.1	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade - Two or more coats on new work	sqm	183.72
13.62.1	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade - Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture	sqm	274.35
13.63.1	Painting with aluminium paint of approved brand and manufacture to give an even shade - Two or more coats on new work	sqm	175.74
13.64.1	Painting with acid proof paint of approved brand and manufacture of required colour to give an even shade - Two or more coats on new work	sqm	192.47
13.65.1	painting with black anti-corrosive bitumastic paint of approved brand and manufacture to give an even shade - Two or more coats on new work	sqm	167.46
13.67.1	Varnishing with varnish of approved brand and manufacture - Two or more coats of glue sizing with copal varnish over an under coat of flatting varnish	sqm	294.74
13.67.2	Varnishing with varnish of approved brand and manufacture - Two or more coats of glue sizing with spar varnish or an under coat of flatting varnish	sqm	296.16
13.68.1	French spirit polishing - Two or more coats on new works including a coat of wood filler	sqm	531.73
13.69.1	Polishing on wood work with ready mixed wax polish of approved brand and manufacture - New work	sqm	232.55
13.70	Floor polishing on masonry or concrete floors with wax polish of approved brand and manufacture	sqm	112.50

13 . Finishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
13.71	Lettering with black japan paint of approved brand and manufacture	letter per cm height	7.30
13.72	Washed stone grit plaster on exterior walls height upto 10 metre above ground level, in two layers , under layer 12mm cement plaster 1:4 (1 cement : 4 fine aggregate), furrowing the under layer with scratching tool, applying cement slurry on the under layer @ 2 kg of cement per square metre,top layer 15mm cement plaster 1:1/2:2 (1 cement : 1/2 fine aggregate : 2 stone chipping 10mm nominal size), in panels with groove all around as per approved pattern including scrubbing and washing the top layer with brushes and water to expose the stone chippings , complete as per specification and direction of Engineer-in-charge (payment for providing grooves shallbe made separately)	sqm	1349.99
13.73.1	Forming groove of uniform size in the top layer of washed stone grit plaster as per approved pattern using wooden battens, nailed to the under layer, including removal of wooden battens, repair to the edges of panels and finishing the groove complete as per specifications - 15mm wide and 15mm deep groove	metre	82.81
13.73.1I	Forming groove of uniform size in the top layer of washed stone grit plaster as per approved pattern using wooden battens, nailed to the under layer, including removal of wooden battens, repair to the edges of panels and finishing the groove complete as per specifications - 15mm wide and 15mm deep groove - Using Irul wood	metre	92.91
13.73.1J	Forming groove of uniform size in the top layer of washed stone grit plaster as per approved pattern using wooden battens, nailed to the under layer, including removal of wooden battens, repair to the edges of panels and finishing the groove complete as per specifications - 15mm wide and 15mm deep groove - Using Jack wood	metre	93.37
13.73.2	Forming groove of uniform size in the top layer of washed stone grit plaster as per approved pattern using wooden battens, nailed to the under layer, including removal of wooden battens, repair to the edges of panels and finishing the groove complete as per specifications - 20mm wide and 15mm deep groove	metre	82.81
13.73.2I	Forming groove of uniform size in the top layer of washed stone grit plaster as per approved pattern using wooden battens,	metre	96.28

13 . Finishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	nailed to the under layer, including removal of wooden battens, repair to the edges of panels and finishing the groove complete as per specifications - 20mm wide and 15mm deep groove - Using Irul wood		
13.73.2J	Forming groove of uniform size in the top layer of washed stone grit plaster as per approved pattern using wooden battens, nailed to the under layer, including removal of wooden battens, repair to the edges of panels and finishing the groove complete as per specifications - 20mm wide and 15mm deep groove - Using Jack wood	metre	96.89
13.74	Extra for washed grit plaster on exterior walls of height more than 10m from ground level for every additional height of 3m or part thereof	sqm	169.90
13.75	Extra for washed stone grit plaster on circular work not exceeding 6 m in radius (in two coats)	sqm	148.33
13.76	Forming groove of uniform size from 12x12 mm and upto 25x15mm in the top layer of washed stone grit plastered surface as per approved pattern , including providing and fixing aluminium channels of appropriate size and thickness (not less than 2mm) , nailed to the under layer with rust proof screws and nails and finishing the groove complete as per specifications and direction of the Engineer-in-charge.	metre	122.22
13.77	Extra for using white cement in place of ordinary cement in the top layer of the item of washed stone grit plaster	sqm	203.93
13.78	Providing and applying 12mm thick (average) premixed formulated one coat gypsum lightweight plaster having additives and light weight aggregate as vermiculite / perlite respectively conforming to IS: 2547 (Part -I &II)1976, applied on hacked / uneven background such as bare brick /block/ RCC work on walls & ceiling at all floors and locations , finished in smooth line and level etc.complete	sqm	636.25
13.79	Extra for addition of synthetic polyester triangular fibre of length 6mm, effective diameter 10-40 microns and specific gravity of 1.34 to 1.40 in cement plaster / mortar by using 125 grams of synthetic polyester triangular fibre for 50 kg cement used in cement mortar as per direction of Engineer-in-charge.	bag(50kg) of cement	97.81

13 . Finishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
13.80	Providing and applying white cement based putty of average thickness 1mm of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete	sqm	218.39
13.81.1	Distempering with Ist quality acrylic distemper ready mixed , having VOC (Volatile Organic Compound) content less than 50 grams /litre , of approved brand and manufacturer , including applying additional coats wherever required, to achieve even shade and colour -Old work (one or more coats)	sqm	75.22
13.82.1	Wall painting with acrylic emulsion paint, having VOC (Volatile Organic Compound) content less than 50 grams / litre , of approved brand and manufacturer, including applying additional coats wherever required, to achieve even shade and colour - One coat	sqm	124.44
13.82.2	Wall painting with acrylic emulsion paint, having VOC (Volatile Organic Compound) content less than 50 grams / litre , of approved brand and manufacturer, including applying additional coats wherever required, to achieve even shade and colour - Two coats	sqm	187.77
13.83.1	Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams / litre of approved brand and manufacture , including applying additional coats wherever required to achieve even shade and colour - One coat	sqm	120.75
13.83.2	Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams / litre of approved brand and manufacture , including applying additional coats wherever required to achieve even shade and colour - Two coats	sqm	181.79
13.85.1	Applying priming coats with primer of approved brand and manufacture, having low VOC (Volatile Organic Compound) content - with ready mixed pink or grey primer on wood work (hard and soft wood) having VOC content less than 50grams / litre	sqm	92.14
13.85.3	Applying priming coats with primer of approved brand and manufacture, having low VOC (Volatile Organic Compound) content - with water thinnable cement primer on wall surface	sqm	94.30

13 . Finishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	having VOC content less than 50 grams / litre		
13.86	6mm plaster on cement concrete or reinforced cement concrete work with white cement based polymer modified self curing mortar of approved make as per the direction of Engineer-in-charge.	sqm	283.77
13.87.1	White washing with lime to give an even shade- Old work (two or more coats)	sqm	26.69
13.87.2	White washing with lime to give an even shade-Old work(one or more coats)	sqm	16.01
13.88	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc., complete	sqm	22.91
13.91	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc.complete	sqm	29.00
13.92.1	Painting on G.S. sheet with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade- Old work (one or more coats)	sqm	113.57
13.93.1	Painting (two or more coats) on rain water, soil waste and vent pipes and fittings with black anticorrosive bitumastic paint of approved brand and manufacture over and including a priming coat of ready mixed zinc chromate yellow primer on new work: 75 mm diameter pipes	metre	67.18
13.94.1	Painting (one or more coats) on rain water, soil waste and vent pipes and fittings with black anticorrosive bitumastic paint of approved brand and manufacture on old work: 75 mm diameter pipes	metre	30.88
13.94.2	Painting (one or more coats) on rain water, soil waste and vent pipes and fittings with black anticorrosive bitumastic paint of approved brand and manufacture on old work: 100 mm diameter pipes	metre	40.88
13.94.3	Painting (one or more coats) on rain water, soil waste and vent	metre	59.29

13 . Finishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	pipes and fittings with black anticorrosive bitumastic paint of approved brand and manufacture on old work: 150 mm diameter pipes		
13.95.1	Painting (two or more coats) on rain water, soil waste and vent pipes and fittings with aluminium paint of approved brand and manufacture over a priming coat of ready mixed zinc chromate yellow primer on new work- 75 mm diameter pipes	metre	69.25
13.95.2	Painting (two or more coats) on rain water, soil waste and vent pipes and fittings with aluminium paint of approved brand and manufacture over a priming coat of ready mixed zinc chromate yellow primer on new work- 100 mm diameter pipes	metre	96.23
13.95.3	Painting (two or more coats) on rain water, soil waste and vent pipes and fittings with aluminium paint of approved brand and manufacture over a priming coat of ready mixed zinc chromate yellow primer on new work- 150 mm diameter pipes	metre	143.26
13.96.1	Painting (one or more coats) on rain water, soil waste and vent pipes and fittings with synthetic enamel paint of approved brand and manufacture and required colour on old work - 75 mm diameter pipes	metre	32.44
13.96.2	Painting (one or more coats) on rain water, soil waste and vent pipes and fittings with synthetic enamel paint of approved brand and manufacture and required colour on old work - 100 mm diameter pipes	metre	41.75
13.96.3	Painting (one or more coats) on rain water, soil waste and vent pipes and fittings with synthetic enamel paint of approved brand and manufacture and required colour on old work - 150 mm diameter pipes	metre	60.50
13.97.1	Painting with oil type wood preservative of approved brand and manufacture- old work (one or more coats)	sqm	47.52
13.99.1	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade- One or more coats on old work	sqm	120.93
13.100.1	Painting with aluminium paint of approved brand and manufacture to give an even shade - one or more coats on old work	sqm	114.66

13 . Finishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
13.101.1	Painting with acid proof paint of approved brand and manufacture of required colour to give an even shade - one or more coats on old work	sqm	126.21
13.102.1	Painting with black anti-corrosive bitumastic paint of approved brand and manufacture to give an even shade - one or more coats on old work	sqm	111.43
13.103.1	French spirit polishing - one or more coats on old work	sqm	269.13
13.104.1	Polishing on wood work with ready made wax polish of approved brand and manufacture - Old work	sqm	117.11
13.105	Re-lettering with black Japan paint of approved brand and manufacture	per letter per cm height	4.59
13.106	Painting (one or more coats) with black Japan paint of approved brand and manufacture to give an even shade	sqm	114.76
13.107.1	Providing and fixing C.P. brass chain and rubber plug complete for sink or wash basin- 32mm dia	each	122.51
13.107.2	Providing and fixing C.P. brass chain and rubber plug complete for sink or wash basin- 40mm dia	each	122.51
13.109.1	Finishing walls with water proofing cement paint of required shade- Old work (one or more coats applied @ 2.20 kg /10 sqm) over priming coat of primer applied @ 0.80 litres/10sqm complete including cost of priming coat	sqm	132.82
13.109.2	Finishing walls with water proofing cement paint of required shade- Old work (one or more coats @ 2.20 kg/10 sqm) complete	sqm	88.89
13.110.1	Finishing walls with textured exterior paint of require shade- Old work (two or more coats on existing cement paint surface applied @ 3.28 litre / 10 sqm	sqm	299.26
13.110.2	Finishing walls with textured exterior paint of require shade-	sqm	183.54

13 . Finishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	old work (one or more coats) applied @ 1.82 litre / 10 sqm		
13.111.1	Finishing walls with Acrylic Smooth exterior paint of require shade - Old work (two or more coat applied @ 1.67 litre / 10 sqm) on existing cement paint surface	sqm	148.88
13.111.2	Finishing walls with Acrylic Smooth exterior paint of require shade - Old work (one or more coat applied @ 0.90 litre / 10 sqm)	sqm	98.32
13.112.1	Finishing walls with Premium Acrylic exterior paint with Silicone additives of required shade - Old work (two or more coats applied @ 1.43 litre / 10 sqm) over existing cement paint surface	sqm	179.68
13.112.2	Finishing walls with Premium Acrylic exterior paint with Silicone additives of required shade - Old work (one or more coats applied @ 0.83 litre / 10 sqm)	sqm	118.47
13.113.1	Varnishing with varnish of approved brand and manufacture-one or more coats with copal varnish	sqm	118.72
13.113.2	Varnishing with varnish of approved brand and manufacture-one or more coats with spar varnish	sqm	119.38
13.114	Melamine polishing on wood work (one or more coat)	sqm	4467.67
13.115	Varnishing with flatting varnish of approved brand and manufacture one or more coats on old work	sqm	118.82
13.116	Polishing in high gloss/matt finish melamine clear polish on wood work in required color/wooden shade texture with following process in the sequence as detailed below: (1) The surface to be polished is rubbed with sand paper 80/120 no, and then with sand paper of 160/180 nos. (2) Applying two coats of sealer with spray gun and allowing sufficient drying time for 1st coat and 2nd coat is allowed 8 to 12 hrs. (3) On drying of sealer coat, wet rubbing with emery cloth of finer grading with ample water to remove excess sealer layer and make the surface further smooth after this wet rubbing, then surface is applied with special grade melamine fillers to fill all the small and big holes/grooves etc. Filler coat to be allowed to dry for 4 to 6 hours on which again a light wet rubbing is done	sqm	1490.07

13 . Finishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	this surface is further allowed to dry for 12 hours. (4) On this, 1st coat of melamine polish is applied with spray gun using melamine clear polish and melamine thinner in required proportion. This 1st coat is allowed to dry for 24 hours then this dry surface is again fine wet rubbed smooth, which is further allowed to dry for 12 hours. The final melamine polish is applied with compressor pressure spray gun using melamine clear polish and melamine thinner mixed in required proportion complete as direction of Engineer-in-charge.(Final coat to be done in 1or 2 layers without gap of time)		

14 . Repairs To Buildings

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
14.1.1	Repairs to plaster of thickness 12mm to 20mm in patches of area 2.5 sq.metres and under including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete including disposal of rubbish to the dumping ground as per direction of Engineer-in-charge - with cement mortar 1:4 (1 cement : 4fine aggregate)	sqm	660.44
14.1.2	Repairs to plaster of thickness 12mm to 20mm in patches of area 2.5 sq.metres and under including cuttiing the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete including disposal of rubbish to the dumping ground lead as per direction of Engineer-in-charge - with cement mortar 1:4 (1 cement : 4 fine aggregate)	sqm	660.44
14.2.1	Fixing chowkhats in existing opening including embedding chowkhats in floors or walls cutting masonry for holdfasts embedding hold fasts in cement concrete blocks of size 15 x10x10 cm , with cement concrete 1:3:6 (1cement : 3 fine aggregate : 6 graded stone aggregate 20mm nominal size) painting two coats of approved wood preservative to sides of chowkhats and making good the damages to walls and floors as required complete including disposal of rubbish to the dumping ground as per direction of Engineer-in-charge- Door chowkhats	each	2064.28
14.2.2	Fixing chowkhats in existing opening including embedding chowkhats in floors or walls cutting masonry for holdfasts embedding hold fasts in cement concrete blocks of size 15 x10x10 cm , with cement concrete 1:3:6 (1cement : 3 fine aggregate : 6 graded stone aggregate 20mm nominal size) painting two coats of approved wood preservative to sides of chowkhats and making good the damages to walls and floors as required complete including disposal of rubbish to the dumping ground as per direction of Engineer-in-charge - Window chowkhats	each	1317.87
14.2.3	Fixing chowkhats in existing opening including embedding chowkhats in floors or walls cutting masonry for holdfasts embedding hold fasts in cement concrete blocks of size 15 x10x10 cm , with cement concrete 1:3:6 (1cement : 3 fine aggregate : 6 graded stone aggregate 20mm nominal size) painting two coats of approved wood preservative to sides of chowkhats and making good the damages to walls and floors as required complete including disposal of rubbish to the dumping ground as per direction of Engineer-in-charge - Clerestory window chowkhats	each	993.59

14 . Repairs To Buildings

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
14.3	Fixing chowkhat in existing opening in brick / RCC wall with dash fasteners / chemical fasteners of appropriate size (3 nos. on each vertical member of door chowkhat and 2 nos on each vertical member of window chowkhat) including cost of dash fasteners / chemical fasteners	chowkhat	256.81
14.4.1	Making the opening in brick masonry including dismantling in floor or walls by cutting masonry and making good the damages to walls, flooring and jambs complete to match existing surface i/c disposal of mulba / rubbish to the nearest dumping ground as per direction of Engineer-in-charge - for door/window/clerestory window	sqm	1486.96
14.5.1	Renewing glass panes, with putty and nails wherever necessary including racking out the old putty - Float glass panes of nominal thickness 4mm(weight not less than 10kg /sqm)	sqm	1364.70
14.5.2	Renewing glass panes, with putty and nails wherever necessary including racking out the old putty - Float glass panes of nominal thickness 5 mm (weight not less than 12.5 kg /sqm)	sqm	1583.79
14.6.1M	Renewing glass panes,with wooden fillets wherever necessary - Float glass panes of nominal thickness 4mm	sqm	2093.55
14.6.2M	Renewing glass panes,with wooden fillets wherever necessary - Float glass panes of nominal thickness 5 mm	sqm	2312.63
14.6.3M	Renewing glass panes , with wooden fillets wherever necessary - Float glass panes of nominal thickness 6 mm	sqm	2437.83
14.7.1	Renewing glass panes and refixing existing wooden fillets - Float glass panes of nominal thickness 4mm	sqm	1505.55
14.7.2	Renewing glass panes and refixing existing wooden fillets - Float glass panes of nominal thickness 5mm	sqm	1724.63
14.8.1M	Supplying and fixing new wooden fillets wherever necessary - Malabar Ist class teak wood	metre	114.35
14.8.2I	Supplying and fixing new wooden fillets wherever necessary - Irul wood	metre	96.52

14 . Repairs To Buildings

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
14.8.2J	Supplying and fixing new wooden fillets wherever necessary - Jack wood	metre	99.22
14.9	Renewal of old putty of glass panes (length)	metre	69.45
14.10	Refixing old glass panes with putty and nails	sqm	868.75
14.11	Fixing old glass panes with wooden fillets (excluding cost of fillets)	sqm	800.48
14.12	Providing and fixing 16mm M.S. Fan clamps of standard shape and size in existing R.C.C. slab, including cutting chase, anchoring clamp to reinforcement bar, including cleaning,refilling , making good the chase with matching concrete , plastering and painting the exposed portion of the clamps complete	each	648.36
14.14.1	Replacing sand stone slabs in roofing , laid in cement mortar 1:4 (1 cement :4fine aggregate) , including necessary repairs and cement pointing with same mortar complete, including disposal of rubbish to dumping ground, all complete as per direction of Engineer-in-charge - Red / White sand stone slabs 30 to 50 mm thick	sqm	1462.71
14.15.1I	Renewing wooden battens in roofs, including making good the holes in wall and painting with oil type wood preservative of approved brand and manufacture complete, including removal of rubbish to the dumping ground all complete as per direction of Engineer-in-charge - Irul wood battens	cum	189691.43
14.15.1J	Renewing wooden battens in roofs, including making good the holes in wall and painting with oil type wood preservative of approved brand and manufacture complete, including removal of rubbish to the dumping ground all complete as per direction of Engineer-in-charge - Jack wood battens	cum	213634.40
14.16.1.1I	Renewing wooden beams in roofs, including making good the holes in wall and painting with oil type wood preservative of approved brand and manufacture complete, including removal of rubbish to the dumping ground all complete as per direction of Engineer-in-charge - Not exceeding 4.00 metres in length - Irul wood beams	cum	197459.03

14 . Repairs To Buildings

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
14.16.1.1J	Renewing wooden beams in roofs, including making good the holes in wall and painting with oil type wood preservative of approved brand and manufacture complete, including removal of rubbish to the dumping ground all complete as per direction of Engineer-in-charge - Not exceeding 4.00 metres in length - Jack wood beams	cum	221646.53
14.16.1.2I	Renewing wooden beams in roofs, including making good the holes in wall and painting with oil type wood preservative of approved brand and manufacture complete, including removal of rubbish to the dumping ground all complete as per direction of Engineer-in-charge - Not exceeding 4.00 metres in length - Irul wood	cum	197459.02
14.16.1.2J	Renewing wooden beams in roofs, including making good the holes in wall and painting with oil type wood preservative of approved brand and manufacture complete, including removal of rubbish to the dumping ground all complete as per direction of Engineer-in-charge - Not exceeding 4.00 metres in length - jack wood	cum	221646.51
14.16.2.1I	Renewing wooden beams in roofs, including making good the holes in wall and painting with oil type wood preservative of approved brand and manufacture complete, including removal of rubbish to the dumping ground all complete as per direction of Engineer-in-charge - above 4.00 metres and upto 5.00 metres length - Irul wood beams	cum	200707.71
14.16.2.1J	Renewing wooden beams in roofs, including making good the holes in wall and painting with oil type wood preservative of approved brand and manufacture complete, including removal of rubbish to the dumping ground all complete as per direction of Engineer-in-charge - above 4.00 metres and upto 5.00 metres length - Jack wood beams	cum	200942.44
14.16.2.1P	Renewing wooden beams in roofs, including making good the holes in wall and painting with oil type wood preservative of approved brand and manufacture complete, including removal of rubbish to the dumping ground all complete as per direction of Engineer-in-charge - above 4.00 metres and upto 5.00 metres length - Padak wood beams	cum	2000713.76
14.16.2.1Q	Renewing wooden beams in roofs, including making good the holes in wall and painting with oil type wood preservative of approved brand and manufacture complete, including removal	cum	1989863.20

14 . Repairs To Buildings

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	of rubbish to the dumping ground all complete as per direction of Engineer-in-charge - above 4.00 metres and upto 5.00 metres length - Vegesa / Bandaru wood beams		
14.16.2.1V	Renewing wooden beams in roofs, including making good the holes in wall and painting with oil type wood preservative of approved brand and manufacture complete, including removal of rubbish to the dumping ground all complete as per direction of Engineer-in-charge - above 4.00 metres and upto 5.00 metres length - Vengai wood beams	cum	2000111.0 1
14.16.2.2I	Renewing wooden beams in roofs, including making good the holes in wall and painting with oil type wood preservative of approved brand and manufacture complete, including removal of rubbish to the dumping ground all complete as per direction of Engineer-in-charge - above 4.00 metres and upto 5.00 metres length - Irul wood	cum	200707.71
14.16.2.2J	Renewing wooden beams in roofs, including making good the holes in wall and painting with oil type wood preservative of approved brand and manufacture complete, including removal of rubbish to the dumping ground all complete as per direction of Engineer-in-charge - above 4.00 metres and upto 5.00 metres length - Jack wood	cum	224916.71
14.17	Raking out joints in lime or cement mortar and preparing the surface for repointing or replastering , including disposal of rubbish to the dumping ground all complete as per direction of Engineer-in-charge	sqm	85.57
14.18.1	Flush pointing with cement mortar 1:3 (1 cement : 3 fine aggregate) mixed with 2% of integral water proofing compound by weight of cement for flat tile bricks on top of mud phaska - with F.P.S. brick tiles	sqm	162.73
14.18.2	Flush pointing with cement mortar 1:3 (1 cement : 3 fine aggregate) mixed with 2% of integral water proofing compound by weight of cement for flat tile bricks on top of mud phaska - with modular brick tiles	sqm	164.52
14.19	Taking out wind ties from roof including cutting out rusted bolts, nuts etc and removing materials to any distance within compound and stacking	kg	6.59

14 . Repairs To Buildings

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
14.20	Fixing of old wind tie with new fittings including painting two or more coats with anticorrosive bitumastic paint of approved brand & manufacturer over and including priming coat of ready mixed zinc chromate yellow primer of approved brand	metre	147.74
14.21	Renewing bottom rail and / or top runner of collapsible gate including making good all damages and applying priming coat of zinc chromate yellow primer of approved brand and manufacture	kg	345.91
14.22.1	Renewing wrought iron or M.S.wheel or roller of steel door or gate and fitting and fixing the same with necessary clamps, nuts and bolts / welding and erection etc.complete - Wheel 50mm dia and below	no wheel	143.12
14.22.2	Renewing wrought iron or M.S.wheel or roller of steel door or gate and fitting and fixing the same with necessary clamps, nuts and bolts / welding and erection etc.complete - Wheel above 50mm dia	no wheel	366.03
14.23	Pumping out water caused by springs, tidal or river seepage, broken water mains or drains and the like	kilo litre	270.90
14.25	Brick work with common burnt clay bricks of class designation 3.5 in mud mortar	cum	7786.71
14.26.1.1M	Providing and fixing 25mm thick shutters for cup board etc - Panelled or panelled & glazed shutters - Malabar Ist class teak wood including nickel plated bright finished M.S.piano hinges with necessary screws	sqm	8847.39
14.26.1.2M	Providing and fixing 25mm thick shutters for cup board etc - Panelled or panelled & glazed shutters - Malabar Ist class teak wood including nickel plated bright finished M.S.piano hinges with necessary screws	sqm	8847.39
14.26.2.1M	Providing and fixing 25mm thick shutters for cup board etc - Glazed shutters - Malabar Ist class teak wood including nickel plated bright finished M.S.piano hinges with necessary screws	sqm	8893.51
14.26.2.2M	Providing and fixing 25mm thick shutters for cup board etc - Glazed shutters - Malabar Ist class teak wood including nickel plated bright finished M.S.piano hinges with necessary screws	sqm	8893.51

14 . Repairs To Buildings

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
14.27.1M	Providing and fixing plain jaffri door and window shutters including bright or / and black enamelled M.S.butt hinges with necessary screws 35x10 mm laths placed 35mm apart (frames to be paid separately), including fixing 50x12 mm beading complete with - Malabar Ist class teak wood	sqm	10701.50
14.29	Providing and fixing M.S.round or squire bars with M.S.flats at required spacing in wooden frames of windows and clerestory windows	kg	147.22
14.30.1I	Providing joists (karries) including hoisting , fixing in position and applying wood preservative on unexposed surface etc.complete with - Irul wood	cum	188691.93
14.30.1J	Providing joists (karries) including hoisting , fixing in position and applying wood preservative on unexposed surface etc.complete with - Jack wood	cum	212634.93
14.30.2M	Providing joist (karries) including hoisting, fixing in position and applying wood preservative on unexposed surface etc.complete with - Malabar teak	cum	252539.87
14.31.1	Providing and fixing bright finished brass single acting spring hinges with necessary brass screws etc.complete - 150mm	each	646.33
14.31.2	Providing and fixing bright finished brass single acting spring hinges with necessary brass screws etc.complete - 125mm	each	615.03
14.31.3	Providing and fixing bright finished brass single acting spring hinges with necessary brass screws etc.complete - 100mm	each	451.03
14.32.1	Providing and fixing bright finished brass double acting spring hinges with necessary brass screws etc.complete - 150mm	each	1006.26
14.32.2	Providing and fixing bright finished brass double acting spring hinges with necessary brass screws etc.complete - 125mm	each	677.63
14.32.3	Providing and fixing bright finished brass double acting spring hinges with necessary brass screws etc.complete - 100mm	each	591.87
14.33.1	Providing and fixing bright finished brass flush bolts with necessary brass screws etc.complete - 250mm	each	351.76

14 . Repairs To Buildings

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
14.33.2	Providing and fixing bright finished brass flush bolts with necessary brass screws etc.complete - 150mm	each	291.58
14.33.3	Providing and fixing bright finished brass flush bolts with necessary brass screws etc.complete - 100mm	each	213.34
14.34	Providing and fixng 150mm bright finished floor brass door stopper with rubber cushion, necessary brass screws etc. to suit shutter thickness complete	each	405.87
14.35.1	Providing and fixing bright finished brass hard drawn hooks and eyes -300mm	each	137.71
14.35.2	Providing and fixing bright finished brass hard drawn hooks and eyes -250mm	each	118.93
14.35.3	Providing and fixing bright finished brass hard drawn hooks and eyes -200 mm	each	113.53
14.35.4	Providing and fixing bright finished brass hard drawn hooks and eyes -150mm	each	95.46
14.35.5	Providing and fixing bright finished brass hard drawn hooks and eyes -100mm	each	82.94
14.36	Providing and fixing bright finished brass fan light pivot with necessary brass screws etc.complete	each	79.41
14.37	Providing and fixing 300mm long bright finished brass chain with hook for fan light including necessary brass screws etc.complete	each	103.62
14.38	Providing and fixing bright finished brass quadrant stay 300mm long with necessary brass screws etc.cpmplete	each	228.82
14.39	Providing and fixing bright finished brass helical door spring (superior quality)	each	560.21
14.40.1	Providing and fixing chromium plated brass butt hinges with necessary chromium plated brass screws etc.complete - 125x70x4mm (ordinary type)	each	281.54

14 . Repairs To Buildings

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
14.40.2	Providing and fixing chromium plated brass butt hinges with necessary chromium plated brass screws etc.complete - 100x70x4mm (ordinary type)	each	223.70
14.40.3	Providing and fixing chromium plated brass butt hinges with necessary chromium plated brass screws etc.complete - 75x65x4mm (heavy type)	each	238.66
14.40.4	Providing and fixing chromium plated brass butt hinges with necessary chromium plated brass screws etc.complete - 75x40x2.5mm (ordinary type)	each	129.12
14.40.5	Providing and fixing chromium plated brass butt hinges with necessary chromium plated brass screws etc.complete - 50x40x2.5mm (Ordinary type)	each	74.12
14.41	Providing and fixing 85x42 mm chromium plated brass pull bolt lock with necessary chromium plated brass screws, nuts, bolts and washers etc. complete	each	323.68
14.72	Providing and fixing double scaffolding system (cup lock type) on the exterior side, upto seven story height made with 40 mm dia .M.S.tube 1.5m centre to centre , horizontal & vertical tubes joining with cup & lock system with M.S.tubes, M.S.tube challies, M.S.clamps and M.S.staircase system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for the required duration as approved and removing it there after. The scaffolding system shall be stiffened with bracings, runners, connection with the building etc wherever required for inspection of work at required locations with essential safety features for the workmen etc.complete as approved. The elevational area of the scaffolding shall be measured for payment purpose. The payment will be made once irrespective of duration of scaffolding. (Note: This item to be used for maintenance work judicically, necessary deduction for scaffolding in the existing item to be done.)	sqm	428.67
14.73	Providing and fixing bright finished brass casement window fasteners or peg stays to windows / ventilators with necessary welding and machine screws etc.complete	kg	726.37
14.74	Providing and fixing 14 mm bright finished brass spring catch to steel centre hung ventilators with necessary welding and	each	81.11

14 . Repairs To Buildings

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	machine screws etc.complete		
14.75	Repair to plaster of thickness 12mm to 20mm in patches of area 2.5sqm and under including cutting the patch in proper shape , raking out joints and preparing plastering the wall surface with white cement based polymer modified self curing mortar , including disposal of rubbish , all complete as per the direction of Engineer-in-charge.	sqm	705.28
14.75A	Cleaning of terrace / loft water storage tank (inside surface area) upto 2000 litre capacity at all heights with coconut brushes , duster etc., removal of silt , rubbish from the tank and cleaning the tank with fresh water disinfecting with bleaching powder @ 0.5 gm per litre capacity of tank including marking the date of cleaning on the side of tank body with the help of stencil and paint and disposing of malba all complete . (the old date already written on tank should be removed with paint remover or black paint and if date is not written with the stencil or old date is not removed deduction will be made @ Rs.0.10 per litre) (if during cleaning any GI fittings or ball cock is damaged that is to be repaired by contracor at his own cost and nothing extra will be paid on this account)	litre	0.56
14.76	Cleaning and desilting of gully trap chamber, including removal of rubbish mixed with earth etc. and disposal of same, as per the direction of Engineer-in-charge.	no	141.18
14.77	Cleaning of chocked sewer line by diesel running vehicle mounting hydraulic operated high pressure suction cum jetting sewer cleaning machine fitted with pump having 4000 litres suction capacity and 6000 litres water jetting tank capacity including skilled operator , supervising engineer etc. for cleaning and partial desilting of manholes and dechocking of sewer lines.Dechocking and flusing of sewer line from one manhole to another by high pressure jetting system of 2200 PSI for sewer line from 150mm dia upto 300mm dia for all depth	metre	452.60
14.78	Cleaning of under ground sump , Over Head R.C.C. tank (independent staging) including disposal of slit and rubbish all as per the direction of Engineer-in-charge.. The cleaning shall consist following operations: i) Tank shall emptied of water by pumping and bottom shall be cleaned of slit and other deposits. Ii) Entire surface area of the sump shall then scrubbed thoroughly with wire brush etc. and pressure washed with water. Iii) Chlorination of RCC internal surface by liquid	sqm	100.94

14 . Repairs To Buildings

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	Chlorine.iv) the treated surface shall be dried using air jetting and all loose particles shall be removal from the surface.v)Finally the surfcae shall be treated with ultraviolet radition etc.		
14.79	Disconnecting damaged overhead / terrace PVC water storage tank of any size from water supply line and removing from the terrace including shifting at ground level	no	512.43
14.80.1	Providing & fixing white vitreous china water closet squatting pan (Indian type) along with "S" or "P" trap including dismantling of old WC seat and "S" or "P" trap at site complete with all operations including all necessary materials, labour and disposal of dismantled material i/c malba , all complete as per the direction of Engineer-in-charge.- Long pattern W.C.Pan of size 580x440mm	no	4589.73
14.80.2	Providing & fixing white vitreous china water closet squatting pan (Indian type) along with "S" or "P" trap including dismantling of old WC seat and "S" or "P" trap at site complete with all operations including all necessary materials, labour and disposal of dismantled material i/c malba , all complete as per the direction of Engineer-in-charge- Orissa pattern W.C.Pan of size 580x440 mm	no	4708.88
14.81	Cutting holes of required size in brick masonry wall for fixing of exhaust fan including providing and fixing 300 mm dia PVC pipe conforming BIS-12818 and making good the same etc.complete as per the direction of Engineer-in-charge.	no	3428.07
14.82	Dismantling W.C.Pan of all sizes including disposal of dismantled materials i/c malba all complete as per the direction of Engineer-in-charge.	no	157.56
14.83	Hacking of CC flooring including cleaning for surface etc.complete as per the direction of Engineer-in-charge.	sqm	4.00
14.84	Dismantling 15 to 40 mm dia G.I.pipe including stacking of dismantled pipes (within 50 metres lead) as per the direction of Engineer-in-charge. - a) Internal Work -Exposed on wall	metre	2.85
14.85	Taking out existing wooden door shutter , repair by cutting , painting etc.and refixing of repaired door shutters to existing door frames , including replacement of hinges with screws etc.	shutter	503.44

14 . Repairs To Buildings

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	as require all complete		
14.86	Providing and laying in situ seven course water proofing treatment with AAP (Atactic poly-propylene) modified Polymeric memberane over roof consisting of first coat of bitumen primer @ 0.40 litre per sqm, 2nd, 4th & 6th courses of bonding material at @1.20kg /sqm , which shall consist of blown type bitumen of grade 85/25 conforming to IS:702, 3rd and 5th layers of roofing membrane APP modified polymeric membearne 1.5mm thick of 2.25 kg per sqm weight consisting of five layers prefabricated with centre core as 20 micron HMHDPE film sandwiched on both sides with polymeric mix and the polymeric mix is protected on both sides with 20 micron HMHDPE film, 7th, the top most layer shall be finished with brick tiles of class designation 10 grouted with cement mortar 1:3 (1 cement: 3 fine sand) mixed with 2% integral water proofing compound by weight of cement over a 12mm layer of cement mortar 1:3 (1 cement : 3 fine sand) and finished neat (item of laying brick tiles shall be paid for separately)	sqm	738.77
14.87	Providing and laying in situ 5 course water proofing treatment with AAP (Atactic polypropylene) modified Polymeric memberane over roof consisting of first coat of bitumen primer @ 0.40 litre per sqm, 2nd & 4 th courses of bonding material @ 1.20 kg/sqm, which shall consist of blown type bitumen of grade 85/25 conforming to IS:702, 3rd layer of roofing memberane APP modified polymeric memberane 2.0mm thick of 3kg /sqm weight consisting of 5 layers prefabricated with center core as 100 micron HMHDPE film sandwiched on both sides with polymeric mix and the polymeric mix is protected on both sides with 20 micron HMHDPE film, 5th, the top most layer shall be finished with brick tiles of class designation 10 grouted with cement moratr 1:3 (1cement : 3 fine sand) mixed with 2% integral water proofing compound by weight of cement over a 12mm layer of cement mortar 1:3 (1cement: 3 fine sand) and finished neat (item of laying brick tiles shall be paid for separately)	sqm	566.71
14.88	Providing and laying in situ seven course water proofing treatment with APP (Atactic Polypropylene) modified Polymeric memberane over roof consisting of first coat of bitumen primer @ 0.40 litre per sqm, 2nd, 4th & 6th courses of bonding material @ 1.20 kg/sqm, which shall consist of blown type bitumen of grade 85/25 conforming to IS : 702, 3rd and 5th layers of roofing membrane APP modified Polymeric	sqm	898.39

14 . Repairs To Buildings

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	membrane 2.0 mm thick of 3.00 Kg/sqm weight consisting of five layers prefabricated with centre core as 100 micron HMHDPE film sandwiched on both sides with polymeric mix and the polymeric mix is protected on both side with 20 micron HMHDPE film. 7th, the top most layer shall be finished with brick tiles of class designation 10 grouted with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% integral water proofing compound by weight of cement over a 12 mm layer of cement mortar 1:3 (1 cement : 3 fine sand) and finished neat (item of laying brick tiles shall be paid for separately).		
14.89	Providing and fixing APP (Atatic polypropylene polimer) modified pre fabricated 5 layer 2 mm thick water proofing membrane, black finished reinforced with glass fibre matt consisting of a coat of bitumen primer for bitumen memberane @ 0.40 litre per sqm by the same memberance manufacture of density at 25 degree C , 0.87 - 0.89 kg /litre and viscosity 70-160 cps. Over the primer coat the layer of memberane shall be laid using Butane torch and sealing all joints extra and preparing the surface complete. The vital physical and chemical parameters of the memberane shall be as under : Joint strength in longiotudinal and transverses direction 23 degree C as 350/ 300 N/5 cm. Trar strength in longitudinal and transverse direction as 60/80 N. Softening point of memberane not less than 150 degree C. Cold flexibilty shall be upto - 2degree C when tested ii accordance with ASTM, D -5147. The laying of membrane shall be got done through the authorised applicator of the manufacturer of memberane) - 2mm (for corrugated roof sheets)	sqm	686.98
14.90.1	Providing and fixing APP (Atatic polypropylene polimer) modified pre fabricated 5 layer 3 mm thick water proofing membrane, black finished reinforced with glass fibre matt consisting of a coat of bitumen primer for bitumen memberane @ 0.40 litre per sqm by the same memberance manufacture of density at 25 degree C , 0.87 - 0.89 kg /litre and viscosity 70-160 cps. Over the primer coat the layer of memberane shall be laid using Butane torch and sealing all joints extra and preparing the surface complete. The vital physical and chemical parameters of the memberane shall be as under : Joint strength in longiotudinal and transverses direction 23 degree C as 350/ 300 N/5 cm. Trar strength in longitudinal and transverse direction as 60/80 N. Softening point of memberane not less than 150 degree C. Cold flexibilty shall be upto - 2degree C when tested in accordance with ASTM, D -5147. The laying of membrane shall be got done through the authorised applicator of the manufacturer of memberane) -	sqm	773.05

14 . Repairs To Buildings

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	3mm tick		
14.91.1	Providing and fixing APP (Atatic polypropylene polimer) modified pre fabricated 5 layer 3 mm thick water proofing membrane, black finished reinforced with non-woven polyester matt consisting of a coat of bitumen primer for bitumen memberane @ 0.40 litre per sqm by the same memberance manufacture of density at 25 degree C , 0.87 - 0.89 kg /litre and viscosity 70-160 cps. Over the primer coat the layer of memberane shall be laid using Butane torch and sealing all joints extra and preparing the surface complete. The vital physical and chemical parameters of the memberane shall be as under : Joint strength in longiotudinal and transverses direction 23 degree C as 650/ 450 N/5 cm. Tear strength in longitudinal and transverse direction as 300/250 N. Softening point of memberane not less than 150 degree C. Cold flexibilty shall be upto -2degree C when tested in accordance with ASTM, D - 5147. The laying of membrane shall be got done through the authorised applicator of the manufacturer of memberane) - 3mm thick	sqm	851.29
14.92	Extra for covering top of membrane with Geotextile, 120 gsm non woven, 100% polyester of thickness 1 to 1.25mm bonded to the membrane with intermittent touch by heating the membrane by Butane Torch as per manufacturer recommendation	sqm	144.76
14.93	Providing round the clock security guard without gun for watch & ward of Government premises and its all belongings by deploying neatly dressed security guards in eight hours shift including necessary T&P like torch, lathi and uniform etc., complete as per the direction (one job means 8 hours duty)	per job	1166.56
14.94	Providing round the clock security guard with gun for watch & ward of Government premises and its all belongings by deploying neatly dressed security guards in eight hours shift including necessary T&P like torch, lathi and uniform etc., complete as per the direction (one job means 8 hours duty)	per job	1166.56

15 . Dismantling And Demolishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
15.1	Demolishing lime concrete manually / by mechanical means and disposal of material within 50 metres lead as per direction of Engineer-in-charge.	cum	1005.50
15.2.1	Demolishing cement concrete manually / by mechanical means including disposal of material within 50 metres lead as per direction of Engineer-in-charge. - Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	cum	2872.75
15.2.2	Demolishing cement concrete manually / by mechanical means including disposal of material within 50 metres lead as per direction of Engineer-in-charge. - Nominal concrete 1:4:8 or leaner mix (including equivalent design mix)	cum	1775.45
15.3	Demolishing R.C.C work manually / by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.	cum	4191.01
15.4	Demolishing R.B.work manually / by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.	cum	3751.16
15.5	Extra for cutting reinforcement bars manually / by mechanical means in R.C.C or R.B work (payment shall be made on the cross sectional area of R.C.C. or R.B.work) as per direction of Engineer-in-charge.	sqm	1403.84
15.6	Extra for scrapping , cleaning and straightening reinforcement from R.C.C. or R.B. work	kg	10.87
15.7.1	Demolishing brick work manually / by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.- in mud mortar	cum	832.22
15.7.2	Demolishing brick work manually / by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge. - in lime mortar with old mughal bricks	cum	2107.04
15.7.3	Demolishing brick work manually / by mechanical means	cum	1005.50

15 . Dismantling And Demolishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge. - in lime mortar		
15.7.4	Demolishing brick work manually / by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.- in cement mortar	cum	2432.90
15.8.1	Removing mortar from bricks and cleaning bricks including stacking with in a lead of 50 m (stacks of cleaned bricks shall be measured) - From brick work in mud mortar	nos	5.51
15.8.2	Removing mortar from bricks and cleaning bricks including stacking with in a lead of 50 m (stacks of cleaned bricks shall be measured) - From brick work in lime mortar	nos	6.33
15.8.3	Removing mortar from bricks and cleaning bricks including stacking with in a lead of 50 m (stacks of cleaned bricks shall be measured) - From brick work in cement mortar	nos	7.92
15.9.1	Demolishing stone rubble masonry manually / by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge. - in lime mortar	cum	1367.01
15.9.2	Demolishing stone rubble masonry manually / by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.- in cement mortar	cum	2903.97
15.10.1	Dismantling dressed stone work ashlar face stone work , marble work or precast concrete work manually / by mechanical means including stacking of serviceable and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.- in lime mortar	cum	1728.16
15.10.2	Dismantling dressed stone work ashlar face stone work , marble work or precast concrete work manually / by mechanical means including stacking of serviceable and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge. - in cement mortar	cum	3399.04

15 . Dismantling And Demolishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
15.11.1	Removing mortar from and cleaning stones and concrete articles (net quantity of stacks of cleaned materials will be measured) - in lime mortar	cum	565.56
15.11.2	Removing mortar from and cleaning stones and concrete articles (net quantity of stacks of cleaned materials will be measured) - in cement mortar	cum	814.20
15.12.1	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead - of area 3 sqm and below	each	439.53
15.12.2	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead - of area beyond 3 sq.metres	each	601.16
15.13.1	Taking out doors, windows and clerestory window shutters (steel or wood) including stacking within 50 metres lead - of area 3 sqm and below	each	175.17
15.13.2	Taking out doors, windows and clerestory window shutters (steel or wood) including stacking within 50 metres lead - of area beyond 3 sqm	each	230.92
15.14.1	Dismantling wood work in frames, trusses, purlins and rafters upto 10 metres span and 5 metres height including stacking the material within 50 metres lead - of sectional area 40 square centimetres and above	cum	5501.03
15.14.2	Dismantling wood work in frames, trusses, purlins and rafters upto 10 metres span and 5 metres height including stacking the material within 50 metres lead - of sectional area below 40 square centimetres	metre	22.00
15.15.1	Extra for dismantling trusses, rafters, purlins etc. of wood work for every additional span of one metre or part thereof beyond 10 metres - of sectional area 40 square centimetres and above	cum per metre span	708.17
15.15.2	Extra for dismantling trusses, rafters, purlins etc. of wood work for every additional span of one metre or part thereof beyond 10 metres - of sectional area below 40 square centimetres	metre per metre span	2.00

15 . Dismantling And Demolishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
15.16.1	Extra for dismantling trusses, rafters, purlins etc.of wood work for every additional height of one metre or part thereof beyond 5 metres - of sectional area 40 square centimetres and above	cum per metre height	1030.38
15.16.2	Extra for dismantling trusses, rafters, purlins etc. of wood work for every additional height of one metre or part thereof beyond 5 metres - of sectional area below 40 square centimetres	metre per metre height	4.08
15.17.1	Dismantling steel work in single sections including dismembering and stacking within 50 metres lead in - R.S.joists	kg	4.06
15.17.2	Dismantling steel work in single sections including dismembering and stacking within 50 metres lead in - channels,angles,tees and flats	kg	2.75
15.18	Dismantling steel work in built up sections in angles, tees, flats and channels including all gusset plates, bolts, nuts, cutting rivets ,welding etc.including dismembering and stacking within 50 metres lead	kg	6.83
15.19	Dismantling steel work manually / by mechanical means in built up sections without distembering and stacking within 50 metres lead	kg	4.55
15.20	Extra for dismantling trusses, rafters, purlins etc. of steel work for every additional span of one metre or part there of beyond 10 metres	kg per metre span	1.03
15.21	Extra for dismantling trusses, rafters, purlins etc. of steel work for every additional height of one metre or part thereof beyond 5 metres	kg per metre height	1.03
15.22	Extra for marking of structural steel work required to be re-erected	kg	5.46
15.23.1	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead - for thickness of tiles 10mm to 25mm	sqm	86.73
15.23.2	Dismantling tile work in floors and roofs laid in cement mortar	sqm	134.18

15 . Dismantling And Demolishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	including stacking material within 50 metres lead - for thickness of tiles above 25 mm and upto 40 mm		
15.24	Demolishing dry brick pitching in floors, drains etc. including stacking serviceable material and disposal of unserviceable material within 50 metres lead	cum	1554.89
15.25	Dismantling stone slab flooring laid in cement mortar including stacking of serviceable material and disposal of unserviceable material within 50 metres lead	sqm	314.19
15.26	Demolishing brick tile covering in terracing including stacking of serviceable material and disposal of unserviceable material within 50 metres lead	sqm	124.73
15.27	Demolishing mud phaska in terracing and disposal of material within 50 metres lead	cum	1079.75
15.28.1	Dismantling roofing including ridges, hips, valleys and gutters etc., and stacking the material within 50 metres lead of - G.S.sheet	sqm	200.38
15.28.2	Dismantling roofing including ridges, hips, valleys and gutters etc., and stacking the material within 50 metres lead of - Asbestos Cement sheet	sqm	93.28
15.29	Dismantling stone slab roofing over wooden karries or R.C.C.battens (dismantling karries and battens to be paid for separately) , including stacking of serviceable material and disposal of unserviceable material within 50 metres lead	cum	3141.93
15.30	Dismantling jack arch roofing and floors including stacking of serviceable material and disposal of unserviceable material within 50 metres lead	sqm	299.34
15.31	Dismantling tiled roofing with battens, boarding etc. complete including stacking of serviceable material and disposal of unserviceable material within 50 metres lead	sqm	247.36
15.32	Demolishing thatch roofing including mats, bamboo,jaffari etc. complete including stacking of serviceable material and disposal of unserviceable material within 50 metres lead	sqm	67.87

15 . Dismantling And Demolishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
15.33	Dismantling wooden ballies in posts and struts including stacking within 50metre lead	metre	24.78
15.34.1	Dismantling and stacking within 50 metres lead, fencing posts or struts including all earth work and dismantling of concrete etc. in base of - 'T' or 'L'iron or pipe	each	258.27
15.34.2	Dismantling and stacking within 50 metres lead, fencing posts or struts including all earth work and dismantling of concrete etc. in base of - R.C.C	each	263.84
15.35	Cutting ballies or wooden posts of fencing at the point of projection above the concrete or ground and stacking the same within 50 metres lead	each	11.84
15.36	Dismantling barbed wire or flexible wire rope in fencing including making rolls and stacking within 50 metres lead	kg	43.47
15.37	Dismantling wooden trellis work excluding frames but including stacking the serviceable material within 50 metres lead	sqm	76.46
15.38	Dismantling expanded metal or I.R.C fabrics with necessary battens and beading including stacking the serviceable material within 50 metres lead	sqm	90.38
15.39.1	Dismantling wooden boardings in lining of walls and partitions , excluding supporting members but including stacking within 50 metres lead - upto 10mm thick	sqm	73.43
15.39.2	Dismantling wooden boardings in lining of walls and partitions , excluding supporting members but including stacking within 50 metres lead - thickness above 10mm upto 25mm	sqm	93.69
15.39.3	Dismantling wooden boardings in lining of walls and partitions , excluding supporting members but including stacking within 50 metres lead - thickness above 25mm upto 40mm	sqm	107.95
15.40.1	Dismantling precast concrete or stone slabs in walls, partion walls etc. including stacking within 50 metres lead - thickness upto 40mm	sqm	340.83

15 . Dismantling And Demolishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
15.40.2	Dismantling precast concrete or stone slabs in walls, partition walls etc. including stacking within 50 metres lead - thickness above 40mm upto 75mm	sqm	510.90
15.41	Dismantling cement asbestos or other hard board ceiling or partition walls including stacking of serviceable materials and disposal of unserviceable materials within 50 metres lead	sqm	68.52
15.42.1	Dismantling C.I. or asbestos rain water pipe with fittings and clamps including stacking the material within 50 metres lead - 75 to 80mm dia pipe	metre	89.37
15.42.2	Dismantling C.I. or asbestos rain water pipe with fittings and clamps including stacking the material within 50 metres lead - 100 mm dia pipe	metre	92.03
15.42.3	Dismantling C.I. or asbestos rain water pipe with fittings and clamps including stacking the material within 50 metres lead - 150mm dia pipe	metre	94.66
15.43.1	Dismantling manually / by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge. - water bound macadam road	sqm	254.63
15.43.2	Dismantling manually / by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.- bituminous road	sqm	503.59
15.44.1	Dismantling G.I.pipes (external work) including excavation and refilling trenches after taking out the pipes, manually / by mechanical means including stacking of pipes within 50 metres lead as per direction of Engineer-in-charge.- 15mm to 40mm nominal bore	metre	173.58
15.44.2	Dismantling G.I.pipes (external work) including excavation and refilling trenches after taking out the pipes, manually / by mechanical means including stacking of pipes within 50 metres lead as per direction of Engineer-in-charge.- above 40mm nominal bore	metre	183.78
15.45.1	Dismantling C.I.pipes including excavation and refilling trenches after taking out the pipes, manually / by mechanical	metre	395.97

15 . Dismantling And Demolishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	means breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes & lead at site within 50 metre lead as per direction of Engineer-in-charge.- upto 150mm diameter		
15.45.2	Dismantling C.I.pipes including excavation and refilling trenches after taking out the pipes, manually / by mechanical means breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes & lead at site within 50 metre lead as per direction of Engineer-in-charge.- above 150mm dia upto 300mm dia	metre	538.97
15.45.3	Dismantling C.I.pipes including excavation and refilling trenches after taking out the pipes, manually / by mechanical means breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes & lead at site within 50 metre lead as per direction of Engineer-in-charge. - above 300mm diameter	metre	729.08
15.46.1	Dismantling steel cylinder RC.pipes including excavation and refilling trenches after taking out the pipes, manually / by mechanical means breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes & lead at site within 50 metres lead as per direction of Engineer-in-charge. - upto 600 mm diameter	metre	813.82
15.46.2	Dismantling steel cylinder RC.pipes including excavation and refilling trenches after taking out the pipes, manually / by mechanical means breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes & lead at site within 50 metres lead as per direction of Engineer-in-charge. - above 600 mm diameter	metre	2057.66
15.47.1	Dismantling asbestos cement pressure pipes including excavation and refilling trenches after taking out the pipes manually / by mechanical means and stacking the pipes within 50 metres lead as per direction of Engineer-in-charge.- upto 150mm diameter	metre	392.55
15.47.2	Dismantling asbestos cement pressure pipes including excavation and refilling trenches after taking out the pipes manually / by mechanical means and stacking the pipes within 50 metres lead as per direction of Engineer-in-charge.- above 150mm diameter	metre	476.11

15 . Dismantling And Demolishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
15.48	Taking out C.I.cover with frame from R.C.C. top slab of manholes of various sizes including demolishing of R.C.C. work manually / by mechanical means and stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead as per direction of Engineer-in-charge.	each	816.17
15.49	Taking out C.I.cover with frame from R.C.C top slab of inspection chambers of various sizes including demolishing of R.C.C.work manually / by mechanical means and stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead as per direction of Engineer-in-charge.	each	474.96
15.50	Dismantling of R.C.C. spun vent shaft including excavating the cement concrete pit completely , taking out the shaft, refilling the excavated gap, stacking the useful materials near the site and disposal of unserviceable materials within 50 metres lead	each	5405.62
15.51	Dismantling of road gully chamber of various sizes including C.I.grating with frame including stacking of useful materilas near the site and disposal of unserviceable matreials within 50 metres lead including refilling the excavated gap	each	1125.23
15.52	Dismantling of flushing cistern of all types (C.I / PVC / Vitrous china) including stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead	each	141.61
15.53.1	Dismantling of C.I.sluiice valve including stacking of useful material within a lead of 50 metres - upto 150mm diametre	each	372.65
15.53.2	Dismantling of C.I.sluiice valve including stacking of useful material within a lead of 50 metres - above 150mm diametre	each	1405.74
15.54	Dismantling of spindle fire hydrant including stacking of useful materials within 50 metres lead	each	867.81
15.55.1	Dismantling of cement concrete platform along with curtain walls and base concrete etc.including stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead - 120 x120 cm (outside to outside)	each	1303.65
15.55.2	Dismantling of cement concrete platform along with curtain walls and base concrete etc.including stacking of useful materials near the site and disposal of unserviceable materials	each	1999.34

15 . Dismantling And Demolishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	within 50 metres lead - 210 x120 cm (outside to outside)		
15.55.3	Dismantling of cement concrete platform along with curtain walls and base concrete etc.including stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead - 320 x120 cm (outside to outside)	each	2830.46
15.56	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead	sqm	64.53
15.57	Dismantling aluminium / gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable material and stacking of serviceable material with in 50 metres lead	sqm	68.54
15.58	Demolishing R.C.C. work by mechanical means and stockpiling at designated locations and disposal of dismantled materials upto a lead of 1 kilometre , stacking serviceable and unserviceable material separately including cutting reinforcement bars	cum	3774.04
15.59	Dismantling of flexible pavement (bituminous courses) by mechanical means and disposal of dismantled material upto a lead of 1 kilometre	cum	560.59

16 . Miscellaneous Building Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
16.15.1	Supplying at site : RCC standards post / struts/ rails/ pales of mix 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 12.5 mm nominal size) with wooden plugs or 6mm bar nibs, wherever required as per direction of Engineer-in-charge (cost of earth works in excavation , concrete works in foundation to be paid separately)	cum	36676.94
16.15.2	Supplying at site: Welded steel wire fabric of required width rectangular mesh painted with two or more coats of enamel paint of approved shade over a coat of primer (Priming & painting to be paid for separately)	sqm	995.85
16.16	Supplying and fixing turn buckles and straining bolts for barbed wire fencing	set	290.21
16.17.1	Fencing with R.C.C post placed at required distance, embedded in cement concrete blocks, every 15th post, last but one end post and corner post shall be strutted on both sides and end post one side only,provided with horizontal lines and two diagonals of barbed wire weighing 9.38kg per 100 metres (minimum) between the two posts fitted and fixed with G.I.staples on wooden plugs or G.I.binding wire tied to 6mm bar nibs fixed while casting the post (cost of R.C.C. posts ,struts, earth work and concrete to be paid for separately) - Payment to be made per metre cost of total length of barbed wire used - with G.I.barbed wire	metre	19.26
16.18.1	Fencing with angle iron post placed at required distance embedded in cement concrete blocks , every 15th post, last but one end post and corner post shall be strutted on both sides and end post on one side only and provided with horizontal lines and two diagonals interwoven with horizontal wires, of barbed wire weighing 9.38 kg per 100 metre (minimum) between the two posts fitted and fixed with G.I.staples , turn buckles etc complete (cost of posts , struts, earth work and concrete work to be paid for separately):- Payment to be made per metre cost of total length of barbed wire used - with G.I.barbed wire	metre	27.84
16.19	Supplying at site Angle iron post & strut of required size including bottom to be split and bent at right angle in opposite direction of 10 cm length and drilling holes upto 10mm dia etc.complete	kg	144.64
16.20	Welded steel wire fabric fencing with posts of specified	sqm	77.52

16 . Miscellaneous Building Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	material and of standard design placed and embedded in cement concrete blocks 45 x 45 x 60 cm of mix 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40 mm nominal size) every 15th post , last but one end post and corner post shall be strutted on both sides and end post on one side only and struts embedded in cement concrete blocks 70 x 45 x 50 cm of the same mix , provided with welded steel wire fabric fixed between the posts fitted and fixed with G.I.staples on wooden plugs or tied to 6mm bar nibs with G.I. binding wire (cost of posts , welded steel wire fabric , painting , earth work in excavation and concrete to be paid for separately)		
16.42	Cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 40mm nominal size) in pavements , laid to required slope and camber in panels as required including consolidation finishing and tamping complete	cum	9868.13
16.65F	Providing and fixing glazed black board of required size using 5mm thick plain glass sheet front face finely ground and fixed in teak wood (Forest teak) frames of cross section 100 x40 mm size made to the specified shape alround fixed with 3 mm wooden fillets and stiffened at the rear side with teak wood repers of size 45 x 18 mm along the height of board at the specified spacing at 45 cm c/c approximately and fixing in portion in the wall face with teak wood plugs and screws at an interval of 90 cm approximately alround the frame including the cost of plugs screws etc. The rate shall also include painting the smooth face of glass (Rear face of the glass board) and rear face of frame polishing the frame (front face) roughing the front face of glass black board etc.complete .(Black board shall be measured internally for the purpose of Payment)	sqm	1131.28
16.68	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M-30 grade made by block making machine with strong vibratory compaction of approved size & design / shape laid in required colour and pattern over and including 50mm thick compacted bed of coarse sand , filling the joints with fine aggregate etc. all complete as per the direction of Engineer-in-charge	sqm	1274.68
16.68.1	Providing and laying 83 mm mm thick factory made rubber moulded hydraulic pressed paver block made by block making machine with strong vibratory compaction and of approved size and design / shape laid in required colour and pattern over and including 50mm thick compacted bed of course sand , filling the joints with fine aggregate etc. all complte	sqm	1270.42

16 . Miscellaneous Building Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
16.68.2	Providing and laying 63 mm mm thick factory made rubber moulded hydraulic pressed paver block made by block making machine with strong vibratory compaction and of approved size and design / shape laid in required colour and pattern over and including 50mm thick compacted bed of course sand , filling the joints with fine aggregate etc. all complte	sqm	1139.53
16.70.1	Providing and fixing G.I. chain link fabric fencing of required width in mesh size 50 x 50 mm including strengthening with 2mm dia wire or nuts , bolts and washers as required complete as per the direction of Engineer-in-charge - Made of G.I wire of dia 4mm	sqm	1130.06
16.70.2	Providing and fixing G.I.chain link fabric fencing of required width in mesh size 50 x 50 mm including strengthening with 2mm dia wire or nuts , bolts and washers as required complete as per direction of Engineer-in-charge - Made of G.I.wire of dia 4mm , PVC coated to achieve outer dia not less than 5mm in required colour and shade	sqm	1182.34
16.71	Providing and fixing G.I.chain link fabric fencing of required width in mesh size 25x25 mm made of G.I.wire of dia 3 mm including strengthening with 2mm dia wire or nuts , bolts and washers as required complete as per the direction of Engineer-in-charge	sqm	1294.37
16.75	Providing and laying C.C. pavement of mix M25 with ready mixed concrete from batching plant. The ready mixed concrete shall be laid and finished with screed board vibrator , vaccum dewatering process and finally finished by floating brooming with wire brush etc complete (The panel shuttering work shall be paid for separately)	cum	19309.60
16.90	Poilising the existing mosaic floor with Power polisher to a high degree of polish as to be perfectly smooth	sqm	432.21
16.94	Supplying fixing and commisioning of 0.5 HP monoblock pumpset slow speed single phase motor. The rate include the cost of pumpset , pumpset fixing in position and test run etc.complete	each	6541.28
16.95	Supplying fixing and commisioning of 1 HP monoblock pumpset slow speed single phase motor. The rate include the	each	8606.95

16 . Miscellaneous Building Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	cost of pumpset , pumpset fixing in position and test run etc.complete		
16.96	Supplying fixing and commisioning of 2 HP monoblock pumpset slow speed single phase motor. The rate include the cost of pumpset , pumpset fixing in position and test run etc.complete	each	18565.41
16.100	Acid cleaning for the existing Mosaic floors , glazed tiles work and removing the stains and decays to give a glassy look etc complte (The Acid used shall be 32% concentrated hydrochloric acid after taking on the precautionary measures)	sqm	151.97
16.114	Providing and fixing 19 mm thick plain thermocole for vertical expansion joints	sqm	71.13
16.115	Applying two coats of cement based polymer modified bonding admixture over the existing RCC members after removing the plastering and cleaning the concrete surfaces and saturated with clean water. The cost including all materials labour charges	sqm	256.08
16.117	Supply and fixing of side hung window at all levels made out of unplasticised Poly vinyl chloride frame from approved make of natural colour with casement outer frame of size 56 x 48 x 30 mm , shutter frame 66 x 56 x 30 mm with wall thickness of 1.8mm (+/- 0.3mm) and 5mm thick , clear glass . The gasket should be made of EPDM (Ethylene propylene dimonomer) with double gasket sealing and applying silicone sealants outside and acrylic sealent inside. The sections should be reinforced with GI sheet of 1.5mm thick with suitable drainage grouting including all necessary hardware fittings etc., all complete as per architectural drawings	sqm	4694.70
16.118	Supply and fixing of sliding windows at all levels made out from Unplasticised Poly vinyl chloride frame (UPVC) of natural colour (PRISTINE WHITE) with outer frame of size 40 x 56x40mm / 102 x 56x 40mm and for shutter frame of size 53 x 38 x37 mm for two track / three track sliding widows , with wall thickness of 1.8mm (+/-0.3mm). The section should be single glazing using (flush catch) single point locking. The gasket should be made of EPDM (Ethylene propylene dimonomer) and applying silicon sealents (GE make or wacker make) outside and acrylic sealent inside including single glazing of 5mm thick clear float glass . The sections should be	sqm	4694.70

16 . Miscellaneous Building Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	reinforced with GI sheet of 1.5 mm thick with suitable drainage grouting		

17 . Sanitary Installations

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
17.1.1	Providing and fixing water closet squatting pan (Indian type W.C.pan) with 100 mm Sand Cast Iron P or S trap, 10 litre low level white P.V.C flusing cistren, including flush pipe with, manually controlled device (handle lever) conforming to IS : 7231 , with all fittings and fixtures complete , including cutting and making good the walls and floors wherever required. White vitreous china Orissa pattern W.C.pan of size 580x440mm with integral type foot rests.	each	7192.88
17.1.2	Providing and fixing water closet squatting pan (Indian type W.C.pan) with 100 mm Sand Cast Iron P or S trap, 10 litre low level white P.V.C flusing cistren, including flush pipe with , manually controlled device (handle lever) conforming to IS : 7231 , with all fittings and fixtures complete , including cutting and making good the walls and floors wherever required. Stainless steel AISI -304 (18/8) Orissa pattern W.C.pan of size 585 x 480 mm with flush pipe and integrated type foot rests	each	14106.89
17.2.1	Providing and fixing white vitreous china pedestal type water closet (European type W.C.pan) with seat and lid, 10 litre low level white P.V.C. flusing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS: 7231,with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required - W.C. pan with ISI marked white solid plastic seat and lid	each	7922.83
17.2.2	Providing and fixing white vitreous china pedestal type water closet (European type W.C.pan) with seat and lid, 10 litre low level white P.V.C. flusing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS: 7231,with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required - W.C. pan with ISI marked black solid plastic seat and lid	each	7874.32
17.3.1	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid,10 litre low level white vitreous china flushing cistern & C.P.flush bend with fittings & C.I. brackets , 40 mm flush bend , overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets , cutting and making good the walls and floors wherever required - W.C.pan with ISI marked white solid plastic seat and lid	each	9737.21

17 . Sanitary Installations

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
17.3.2	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I. brackets, 40 mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required - W.C. pan with ISI marked black solid plastic seat and lid	each	9688.69
17.4.1	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x 260x350 mm and 340x410x265mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I. clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required - One urinal basin with 5 litre white P.V.C. automatic flushing cistern	each	6996.00
17.4.2	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x 260x350 mm and 340x410x265mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I. clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required - Range of two urinal basins with 5 litre white P.V.C. automatic flushing cistern	each	10729.78
17.4.3	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x 260x350 mm and 340x410x265mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I. clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required - Range of three urinal basins with 10 litre white P.V.C. automatic flushing cistern	each	14683.77
17.4.4	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x 260x350 mm and 340x410x265mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I. clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required - Range of four urinal basins with 10 litre white P.V.C. automatic flushing cistern	each	20493.67

17 . Sanitary Installations

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
17.5.1	Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350 mm with white PVC automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS : 2556, C.I. trap with outlet grating and other couplings in C.P. brass, including painting of fittings and cutting and making good the walls and floors wherever required :Single half stall urinal with 5 litre PVC automatic flusing cistern	each	14644.09
17.5.2	Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350 mm with white PVC automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS : 2556, C.I. trap with outlet grating and other couplings in C.P. brass, including painting of fittings and cutting and making good the walls and floors wherever required :Range of two half stall urinal with 5 litre PVC .automatic flushing cistern	each	22317.52
17.5.3	Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350 mm with white PVC automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS : 2556, C.I. trap with outlet grating and other couplings in C.P. brass, including painting of fittings and cutting and making good the walls and floors wherever required :Range of three half stall urinal with 10 litre PVC .automatic flushing cistern	each	27748.33
17.5.4	Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350 mm with white PVC automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS :	each	32876.67

17 . Sanitary Installations

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	2556, C.I. trap with outlet grating and other couplings in C.P. brass, including painting of fittings and cutting and making good the walls and floors wherever required :Range of four half stall urinal with 10 litre PVC .automatic flushing cistern		
17.6.1	Providing and fixing one piece construction white vitreous china squatting plate with an integral longitudinal flushing pipe, white PVC . Automatic flushing cistern, with fittings, standard size G.I. / PVC flush pipe for back and front flush with standard spreader pipes with fittings, G.I.clamps and C.P. brass coupling complete , including painting of fittings and cutting and making good the walls and floors etc. wherever required - single squatting plate with 5 litre PVC.automatic flushing cistern	each	10838.10
17.6.2	Providing and fixing one piece construction white vitreous china squatting plate with an integral longitudinal flushing pipe, white PVC . Automatic flushing cistern, with fittings, standard size G.I. / PVC flush pipe for back and front flush with standard spreader pipes with fittings, G.I.clamps and C.P. brass coupling complete , including painting of fittings and cutting and making good the walls and floors etc. wherever required - Range of two squatting plates with 5 litre PVC.automatic flushing cistern	each	15508.22
17.6.3	Providing and fixing one piece construction white vitreous china squatting plate with an integral longitudinal flushing pipe, white PVC . Automatic flushing cistern, with fittings, standard size G.I. / PVC flush pipe for back and front flush with standard spreader pipes with fittings, G.I.clamps and C.P. brass coupling complete , including painting of fittings and cutting and making good the walls and floors etc. wherever required - Range of three squatting plates with 10 litre PVC.automatic flushing cistern	each	20290.73
17.6.4	Providing and fixing one piece construction white vitreous china squatting plate with an integral longitudinal flushing pipe, white PVC . Automatic flushing cistern, with fittings, standard size G.I. / PVC flush pipe for back and front flush with standard spreader pipes with fittings, G.I.clamps and C.P. brass coupling complete , including painting of fittings and cutting and making good the walls and floors etc. wherever required - Range of four squatting plates with 10 litre PVC.automatic flushing cistern	each	23987.75

17 . Sanitary Installations

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
17.7.1	Providing and fixing wash basin with C.I. brackets, 15mm C.P. brass pillar taps ,32 mm C.P.brass waste of standard pattern , including painting of fittings and brackets ,cutting and making good the walls wherever required - white Vitreous China wash basin size 630x450 mm with a pair of 15 mm C.P.brass pillar taps	each	4190.63
17.7.2	Providing and fixing wash basin with C.I. brackets, 15mm C.P. brass pillar taps ,32 mm C.P.brass waste of standard pattern , including painting of fittings and brackets ,cutting and making good the walls wherever required - white Vitreous China wash basin size 630x450 mm with a single 15 mm C.P.brass pillar taps	each	3680.47
17.7.3	Providing and fixing wash basin with C.I. brackets, 15mm C.P. brass pillar taps ,32 mm C.P.brass waste of standard pattern , including painting of fittings and brackets ,cutting and making good the walls wherever required - white Vitreous China wash basin size 550x400 mm with a pair of 15 mm C.P.brass pillar taps	each	2894.61
17.7.4	Providing and fixing wash basin with C.I. brackets, 15mm C.P. brass pillar taps ,32 mm C.P.brass waste of standard pattern , including painting of fittings and brackets ,cutting and making good the walls wherever required - white vitreous china flat back wash basin size 550x400 mm with single 15mm C.P. brass pillar tap	each	2384.46
17.7.5	Providing and fixing wash basin with C.I. brackets, 15mm C.P. brass pillar taps ,32 mm C.P.brass waste of standard pattern , including painting of fittings and brackets ,cutting and making good the walls wherever required - white vitreous china angle back wash basin size 600x480 mm with single 15mm C.P. brass pillar tap	each	3680.47
17.7.6	Providing and fixing wash basin with C.I. brackets, 15mm C.P. brass pillar taps ,32 mm C.P.brass waste of standard pattern , including painting of fittings and brackets ,cutting and making good the walls wherever required - white vitreous china angle back wash basin size 400x400 mm with single 15mm C.P. brass pillar tap	each	2969.16
17.7.7	Providing and fixing wash basin with C.I. brackets, 15mm C.P. brass pillar taps ,32 mm C.P.brass waste of standard pattern ,	each	1973.31

17 . Sanitary Installations

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	including painting of fittings and brackets ,cutting and making good the walls wherever required - white vitreous china flat back wash basin size 450x300 mm with single 15mm C.P. brass pillar tap		
17.7.8	Providing and fixing wash basin with C.I. brackets, 15mm C.P. brass pillar taps ,32 mm C.P.brass waste of standard pattern , including painting of fittings and brackets ,cutting and making good the walls wherever required - white vitreous china surgeon type wash basin size 660x460 with a pair of 15mm C.P.brass pillar taps with elbow operated levers	each	5235.98
17.7.9	Providing and fixing wash basin with C.I. brackets, 15mm C.P. brass pillar taps ,32 mm C.P.brass waste of standard pattern , including painting of fittings and brackets ,cutting and making good the walls wherever required - white vitreous china surgeon type wash basin size 660x460 with single 15mm C.P.brass pillar taps with elbow operated levers ISI marked	each	3926.46
17.7.10	Providing and fixing wash basin with C.I. brackets, 15mm C.P. brass pillar taps ,32 mm C.P.brass waste of standard pattern , including painting of fittings and brackets ,cutting and making good the walls wherever required - Stainless steel AISI - 304 (18/8) round basin 405x355 mm with single 15mm C.P. brass pillar tap	each	4505.60
17.7.11	Providing and fixing wash basin with C.I. brackets, 15mm C.P. brass pillar taps ,32 mm C.P.brass waste of standard pattern , including painting of fittings and brackets ,cutting and making good the walls wherever required - Stainless steel AISI - 304 (18/8) wash basin 530x345 mm with single 15mm C.P. brass pillar tap	each	4889.71
17.7A	Providing and fixing wash basin with C.I.brackets , 15mm dia CP brass single hole basin mixer of approved quality and make, including painting of fittings and brackets, cutting and making good the walls wherever required - a) White Vitreous China Wash basin size 550x400 mm with a 15mm CP brass single hole basin mixer	no	1988.10
17.7B	Providing and fixing wash basin with C.I.brackets , 15mm PTMT pillar cock , 32mm PTMT waste coupling of standard pattern , including painting of fittings and brackets , cutting and making good the walls wherever required. White Vitreous China Flat back wash basin size 550x400 mm with single	no	2176.19

17 . Sanitary Installations

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	15mm PTMT pillar cock		
17.8	Providing and fixing white vitreous china pedestal for wash basin completely recessed at the back for the reception of pipes and fittings	each	1936.86
17.9.1	Providing and fixing kitchen sink with C.I. brackets, C.P. brass chain with rubber plug, 40mm C.P. brass waste complete, including painting the fittings and brackets, cutting and making good the walls wherever required - white glazed fire clay kitchen sink of size 600x450x250mm	each	4427.30
17.10.1.1	Providing and fixing Stainless steel AISI 304 (18/8) kitchen sink as per IS 13983 with C.I.brackets and stainless steel plug 40mm , including painting of fittings and brackets, cutting and making good the walls wherever required - kitchen sink with drain board - 510x1040 mm bowl depth 250mm	each	10441.16
17.10.1.2	Providing and fixing Stainless steel AISI 304 (18/8) kitchen sink as per IS 13983 with C.I.brackets and stainless steel plug 40mm , including painting of fittings and brackets, cutting and making good the walls wherever required - kitchen sink with drain board - 510x1040 mm bowl depth 225mm	each	10362.90
17.10.1.3	Providing and fixing Stainless steel AISI 304 (18/8) kitchen sink as per IS 13983 with C.I.brackets and stainless steel plug 40mm , including painting of fittings and brackets, cutting and making good the walls wherever required - kitchen sink with drain board - 510x1040 mm bowl depth 200mm	each	9231.92
17.10.1.4	Providing and fixing Stainless steel AISI 304 (18/8) kitchen sink as per IS 13983 with C.I.brackets and stainless steel plug 40mm , including painting of fittings and brackets, cutting and making good the walls wherever required - kitchen sink with drain board - 510x1040 mm bowl depth 178mm	each	7624.33
17.10.2.1	Providing and fixing Stainless steel AISI 304 (18/8) kitchen sink as per IS 13983 with C.I.brackets and stainless steel plug 40mm , including painting of fittings and brackets, cutting and making good the walls wherever required - kitchen sink without drain board - 610x510 mm bowl depth 200mm	each	4876.89
17.10.2.2	Providing and fixing Stainless steel AISI 304 (18/8) kitchen sink as per IS 13983 with C.I.brackets and stainless steel plug	each	4563.91

17 . Sanitary Installations

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	40mm , including painting of fittings and brackets, cutting and making good the walls wherever required - kitchen sink without drain board - 610x460 mm bowl depth 200mm		
17.10.2.3	Providing and fixing Stainless steel AISI 304 (18/8) kitchen sink as per IS 13983 with C.I.brackets and stainless steel plug 40mm , including painting of fittings and brackets, cutting and making good the walls wherever required - kitchen sink without drain board - 470x420 mm bowl depth 178mm	each	4250.93
17.11.1	Providing and fixing white vitreous china laboratory sink with C.I.brackets , C.P.brass chain with rubber plug , 40mm C.P.brass waste and 40mm C.P.brass trap with necessary C.P.brass unions complete , including painting of fittings and brackets, cutting and making good the wall wherever required - size 450x300x150mm	each	4566.16
17.11.2	Providing and fixing white vitreous china laboratory sink with C.I.brackets , C.P.brass chain with rubber plug , 40mm C.P.brass waste and 40mm C.P.brass trap with necessary C.P.brass unions complete , including painting of fittings and brackets, cutting and making good the wall wherever required - size 600x450x200 mm	each	5940.13
17.12.1	Providing and fixing draining board with C.I.bracketes including painting of brackets , cutting and making good the walls wherever required - white glazed fire clay draining board of size 600x450x25mm	each	1883.11
17.13.1	Providing and fixing white vitreous china water closet squatting pan (Indian type) - long pattern W.C. pan of size 580mm	each	2719.77
17.13.2	Providing and fixing white vitreous china water closet squatting pan (Indian type) - Orissa pattern W.C.pan of size 580x440mm	each	3061.20
17.14.1	Extra for using coloured W.C.pan instead of white W.C.pan - Orissa pattern W.C.pan 580x440mm	each	810.90
17.15	Providing and fixing white vitreous china pedestal type (European type / wash down type) water closet pan	each	3288.82

17 . Sanitary Installations

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
17.16	Extra for using coloured pedestal type WC pan (European type) with low level cistern of same colour instead of white vitreous china WC pan and cistern	each	3158.26
17.16A	Providing and fixing 8mm dia C.P. / S.S. Jet with flexible tube upto 1 metre long with S.S.triangular plate to European type W.C of quality and make as approved	no	344.83
17.17.1	Providing and fixing a pair of white vitreous china foot rests of standard pattern for squatting pan water closet - 250x130x30mm	pair	288.97
17.17.2	Providing and fixing a pair of white vitreous china foot rests of standard pattern for squatting pan water closet - 250x125x25mm	pair	237.74
17.18.1	Providing and fixing P.V.C.low level flushing cistern with manually controlled device (handle lever) conforming to IS:7231, with all fittings and fixtures complete - 10 litre capacity -white	each	1552.45
17.18.2	Providing and fixing P.V.C.low level flushing cistern with manually controlled device (handle lever) conforming to IS:7231, with all fittings and fixtures complete - 10 litre capacity -coloured	each	1743.09
17.19.1	Providing and fixing controlled flush , low level cistern made of vitreous china with all fittings complete - 10 litre (full flush) capacity -white	each	3812.67
17.19.2	Providing and fixing controlled flush , low level cistern made of vitreous china with all fittings complete - 10 litre (full flush) capacity -coloured	each	5017.63
17.20.1	Providing and fixing solid plastic seat with lid for pedestal type W.C. pan complete - white solid plastic seat with lid	each	856.54
17.20.2	Providing and fixing solid plastic seat with lid for pedestal type W.C. pan complete - black solid plastic seat with lid	each	808.03
17.20.3	Providing and fixing solid plastic seat with lid for pedestal type W.C. pan complete - coloured (other than black & white) solid plastic seat with lid	each	749.42

17 . Sanitary Installations

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
17.22	Providing and fixing G.I. inlet connection for flush pipe connecting with W.C.pan	each	146.22
17.22A	Providing and fixing CP Brass 32mm size Bottle Trap of approved quality and make and as per the direction of Enginner-in-charge.	no	1081.21
17.22B	Providing and fixing CP Brass Single lever telephonic wall mixer of quality & make as approved by Engineer-in-charge a) 15 mm nominal dia	no	6500.61
17.23	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350mm or 340x410x265mm sizes respectively	each	1932.80
17.24	Providing and fixing white vitreous china squatting plate urinal with integral rim longitudinal flush pipe	each	4544.58
17.25.1	Providing and fixing white vitreous china wash basin including making all connections but excluding the cost of fittings - flat back wash basin of size 630x450mm	each	2785.01
17.25.2	Providing and fixing white vitreous china wash basin including making all connections but excluding the cost of fittings - flat back wash basin of size 550x400mm	each	1488.99
17.25.3	Providing and fixing white vitreous china wash basin including making all connections but excluding the cost of fittings -angle back wash basin of size 600x480mm	each	2785.01
17.25.4	Providing and fixing white vitreous china wash basin including making all connections but excluding the cost of fittings -angle back wash basin of size 400x400mm	each	2073.69
17.25.5	Providing and fixing white vitreous china wash basin including making all connections but excluding the cost of fittings -Flat back wash basin of size 450x300mm	each	1077.85
17.25.6	Providing and fixing white vitreous china wash basin including making all connections but excluding the cost of fittings - Surgeon type wash basin of size 660x460mm	each	2231.62

17 . Sanitary Installations

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
17.26.1	Providing and fixing kitchen sink including making all connections excluding cost of fittings - white glazed fire clay sink of size 600x450x250mm	each	2515.02
17.27.1	Providing and fixing white vitreous china laboratory sink including making all connections excluding cost of fittings - size 450x300x150mm	each	2107.14
17.27.2	Providing and fixing white vitreous china laboratory sink including making all connections excluding cost of fittings - size 600x450x200mm	each	3481.14
17.28.1.1	Providing and fixing P.V.C. waste pipe for sink or wash basin including PVC waste fittings complete - semi rigid pipe - 32mm dia	each	97.55
17.28.1.2	Providing and fixing P.V.C. waste pipe for sink or wash basin including PVC waste fittings complete - semi rigid pipe - 40mm dia	each	104.66
17.28.2.1	Providing and fixing P.V.C. waste pipe for sink or wash basin including PVC waste fittings complete - flexible pipe - 32mm dia	each	104.66
17.28.2.2	Providing and fixing P.V.C. waste pipe for sink or wash basin including PVC waste fittings complete - flexiple pipe - 40mm dia	each	104.66
17.29	Providing and fixing 100mm sand cast iron grating for gully trap	each	47.40
17.30	Providing and fixing in position 25 mm diametre mosquito proof coupling of approved municipal design	each	76.32
17.31	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6mm thick hard board ground fixed to wooden cleats with C.P.brass screws and washers complete	each	1831.99
17.32.1	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6mm thick hard board backing - circular shape 450 mm dia	each	1851.73

17 . Sanitary Installations

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
17.32.2	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6mm thick hard board backing - rectangular shape 453 x 357 mm	each	1614.95
17.32.3	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6mm thick hard board backing - Oval shape 450x350 mm (outer dimensions)	each	1882.97
17.32.4	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6mm thick hard board backing - rectangular shape 1500 x 450 mm	each	2610.17
17.33	Providing and fixing 600x120x5 mm glass shelf with edges round off supported on anodised aluminium angle frame with C.P. brass brackets and guard rail complete fixed with 40mm long screws, rawl plugs etc.,complete	each	912.36
17.34.1	Providing and fixing toilet paper holder - C.P.brass	each	770.98
17.34.2	Providing and fixing toilet paper holder - Vitreous China	each	674.13
17.35.1.1	Providing and fixing soil,waste and vent pipes - 100 mm dia - sand cast iron S&S pipe as per IS: 1729	metre	690.17
17.35.1.2	Providing and fixing soil,waste and vent pipes - 100 mm dia - Centrifugally cast (spun) iron socket & spigot (S&S) pipe as per IS:3989	metre	1335.76
17.35.1.3	Providing and fixing soil, waste and vent pipes -Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905 - 100mm dia	metre	1294.70
17.35.2.1	Providing and fixing soil,waste and vent pipes - 75mm dia - sand cast iron S&S pipe as per IS: 1729	metre	568.31
17.35.2.2	Providing and fixing soil,waste and vent pipes - 75mm dia - Centrifugally cast (spun) iron socketed pipe as per IS:3989	metre	1151.00

17 . Sanitary Installations

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
17.35.2.3	Providing and fixing soil, waste and vent pipes - Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905 - 75mm dia	metre	1056.81
17.36.1	Providing and filling the joints with spun yarn, cement slurry and cement mortar 1:2 (1 cement :2 fine aggregate) in S.C.I / C.I. pipes - 75mm dia pipe	each	201.08
17.36.2	Providing and filling the joints with spun yarn, cement slurry and cement mortar 1:2 (1 cement :2 fine aggregate) in S.C.I / C.I. pipes - 100 mm dia pipe	each	236.95
17.37.1	Providing and fixing M.S.holder - bat clamps of approved design to sand cast iron / cast iron (spun) pipe embedded in and including cement concrete blocks 10x10x10 cm of 1:2:4 mix (1 cement : 2 fine aggregate : 4 graded stone aggregate 20mm nominal size), including cost of cutting holes and making good the walls etc. - for 100mm dia pipe	each	439.64
17.37.2	Providing and fixing M.S.holder - bat clamps of approved design to sand cast iron / cast iron (spun) pipe embedded in and including cement concrete blocks 10x10x10 cm of 1:2:4 mix (1 cement : 2 fine aggregate : 4 graded stone aggregate 20mm nominal size), including cost of cutting holes and making good the walls etc. - for 75mm dia pipe	each	411.19
17.38.1.1	Providing and fixing bend of required degree with access door, insertion rubber washer 3mm thick , bolts and nuts complete - 100 mm dia - sand cast iron S&S as per IS - 1729	each	340.07
17.38.1.2	Providing and fixing bend of required degree with access door, insertion rubber washer 3mm thick , bolts and nuts complete - 100 mm dia - sand cast iron S&S as per IS - 3989	each	525.01
17.38.1.3	Providing and fixing bend of required degree with access door, insertion rubber washer 3mm thick , bolts and nuts complete - Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905 - Bend wiith access door - 100mm dia	no	675.81
17.38.2.1	Providing and fixing bend of required degree with access door, insertion rubber washer 3mm thick , bolts and nuts complete - 75 mm dia - sand cast iron S&S as per IS - 1729	each	291.05

17 . Sanitary Installations

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
17.38.2.2	Providing and fixing bend of required degree with access door, insertion rubber washer 3mm thick , bolts and nuts complete - 75 mm dia - sand cast iron S&S as per IS - 3989	each	421.93
17.38.2.3	Providing and fixing bend of required degree with access door, insertion rubber washer 3mm thick , bolts and nuts complete - Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905 - Bend wiith access door - 75mm dia	no	497.33
17.39.1.1	Providing and fixing plain bend of required degree - 100 mm dia - sand cast iron S&S as per IS - 1729	each	237.63
17.39.1.2	Providing and fixing plain bend of required degree - 100 mm dia - sand cast iron S&S as per IS - 3989	each	414.04
17.39.1.3	Providing and fixing plain bend of required degree - Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905 - iron plain bend 100mm dia	no	415.47
17.39.2.1	Providing and fixing plain bend of required degree - 75 mm dia - sand cast iron S&S as per IS - 1729	each	187.20
17.39.2.2	Providing and fixing plain bend of required degree - 75 mm dia - sand cast iron S&S as per IS -3989	each	313.82
17.39.2.3	Providing and fixing plain bend of required degree- 75mm dia - Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905	no	286.79
17.40.1.1	Providing and fixing heel rest sanitary bend - 100 mm dia - sand cast iron S&S as per IS -1729	each	287.43
17.40.1.2	Providing and fixing heel rest sanitary bend - 100 mm dia - sand cast iron S&S as per IS -3989	each	497.98
17.40.2.1	Providing and fixing heel rest sanitary bend - 75 mm dia - sand cast iron S&S as per IS -1729	each	239.83
17.40.2.2	Providing and fixing heel rest sanitary bend - 75 mm dia - sand cast iron S&S as per IS -3989	each	434.73
17.41.1.1	Providing and fixing double equal junction of required degree	each	619.96

17 . Sanitary Installations

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	with access door , insertion rubber washer 3mm thick , bolts and nuts complete - 100x100x100x100mm - sand cast iron S&S as per IS - 1729		
17.41.1.2	Providing and fixing double equal junction of required degree with access door , insertion rubber washer 3mm thick , bolts and nuts complete - 100x100x100x100mm - sand cast iron S&S as per IS - 3989	each	1072.36
17.41.2.1	Providing and fixing double equal junction of required degree with access door , insertion rubber washer 3mm thick , bolts and nuts complete - 75x75x75x75 mm - sand cast iron S&S as per IS - 1729	each	485.95
17.41.2.2	Providing and fixing double equal junction of required degree with access door , insertion rubber washer 3mm thick , bolts and nuts complete - 75x75x75x75 mm - sand cast iron S&S as per IS - 3989	each	858.68
17.42.1.1	Providing and fixing double equal plain junction of required degree - 100x100x100x100mm - sand cast iron S&S as per IS-1729	each	526.42
17.42.1.2	Providing and fixing double equal plain junction of required degree - 100x100x100x100mm - sand cast iron S&S as per IS-3989	each	963.19
17.42.1.3	Providing and fixing double equal plain junction of required degree 100x100x100x100 mm - Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905	no	795.31
17.42.2.1	Providing and fixing double equal plain junction of required degree - 75x75x75x75mm - sand cast iron S&S as per IS-1729	each	390.64
17.42.2.2	Providing and fixing double equal plain junction of required degree - 75x75x75x75mm - sand cast iron S&S as per IS-3989	each	769.05
17.42.2.3	Providing and fixing double equal plain junction of required degree - 75x75x75x75 mm dia - Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905	no	437.58
17.43.1.1	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3mm thick ,	each	519.32

17 . Sanitary Installations

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	bolts and nuts complete - 100x100x100mm - sand cast iron S&S as per IS - 1729		
17.43.1.2	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3mm thick , bolts and nuts complete - 100x100x100mm - sand cast iron S&S as per IS - 3989	each	862.17
17.43.2.1	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3mm thick , bolts and nuts complete - 75x75x75mm - sand cast iron S&S as per IS - 1729	each	414.82
17.43.2.2	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3mm thick , bolts and nuts complete - 75x75x75mm - sand cast iron S&S as per IS - 3989	each	646.71
17.44.1.1	Providing and fixing single equal plain junction of required degree - 100x100x100 mm - sand cast iron S&S as per IS-1729	each	388.44
17.44.1.2	Providing and fixing single equal plain junction of required degree - 100x100x100 mm - sand cast iron S&S as per IS-3989	each	766.85
17.44.1.3	Providing and fixing single equal plain junction of required degree - 100x100x100 mm- Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905	no	621.76
17.44.2.1	Providing and fixing single equal plain junction of required degree - 75x75x75 mm - sand cast iron S&S as per IS-1729	each	251.22
17.44.2.2	Providing and fixing single equal plain junction of required degree - 75x75x75 mm - sand cast iron S&S as per IS-3989	each	578.43
17.44.2.3	Providing and fixing single equal plain junction of required degree 75x75x75 mm- Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905	no	350.79
17.45.1.1	Providing and fixing double unequal junction of required degree with access door, insertion rubber washer 3mm thick, bolts and nuts complete - 100x100x75x75mm - sand cast iron S&S as per IS - 1729	each	557.73

17 . Sanitary Installations

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
17.45.1.2	Providing and fixing double unequal junction of required degree with access door, insertion rubber washer 3mm thick, bolts and nuts complete - 100x100x75x75mm - sand cast iron S&S as per IS - 3989	each	1465.37
17.46.1.1	Providing and fixing double unequal plain junction of required degree - 100x100x75x75 mm - sand cast iron S&S as per IS - 1729	each	381.33
17.46.1.2	Providing and fixing double unequal plain junction of required degree - 100x100x75x75 mm - sand cast iron S&S as per IS - 3989	each	1303.19
17.46.1.3	Providing and fixing double unequal plain junction of required degree 100x100x75x75 mm - Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905	no	637.40
17.47.1.1	Providing and fixing single unequal junction of required degree with access door,insertion rubber washer 3mm thick , bolts and nuts complete - 100x100x75mm - sand cast iron S&S as per IS - 1729	each	497.98
17.47.1.2	Providing and fixing single unequal junction of required degree with access door,insertion rubber washer 3mm thick , bolts and nuts complete - 100x100x75mm - sand cast iron S&S as per IS - 3989	each	1112.56
17.48.1.1	Providing and fixing single unequal plain junction of required degree - 100x100x75mm - sand cast iron S&S as per IS -1729	each	387.01
17.48.1.2	Providing and fixing single unequal plain junction of required degree - 100x100x75mm - sand cast iron S&S as per IS -3989	each	950.37
17.48.1.3	Providing and fixing single unequal plain junction of required degree - 100X100X75 mm Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905	no	596.14
17.49.1.1	Providing and fixing double equal plain invert branch of required degree - 100x100x100x100 mm - sand cast iron S&S as per IS -1729	each	465.27
17.49.1.2	Providing and fixing double equal plain invert branch of required degree - 100x100x100x100 mm - sand cast iron S&S	each	856.48

17 . Sanitary Installations

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	as per IS -3989		
17.49.1.3	Providing and fixing double equal plain invert branch of required degree - Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905 -100x100x100x100 mm dia	no	967.45
17.49.2.1	Providing and fixing double equal plain invert branch of required degree - 75x75x75x75 mm - sand cast iron S&S as per IS -1729	each	1306.82
17.49.2.2	Providing and fixing double equal plain invert branch of required degree - 75x75x75x75 mm - sand cast iron S&S as per IS -3989	each	690.81
17.50.1.1	Providing and fixing single equal plain invert branch of required degree - 100x100x100mm - sand cast iron S&S as per IS -1729	each	813.81
17.50.1.2	Providing and fixing single equal plain invert branch of required degree - 100x100x100mm - sand cast iron S&S as per IS -3989	each	695.73
17.50.1.3	Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside as per IS:15905 - 100x100x100 mm dia	no	621.76
17.50.2.1	Providing and fixing single equal plain invert branch of required degree - 75x75x75mm - sand cast iron S&S as per IS - 1729	each	332.31
17.50.2.2	Providing and fixing single equal plain invert branch of required degree - 75x75x75mm - sand cast iron S&S as per IS - 3989	each	520.10
17.50.2.3	Providing and fixing single equal plain invert branch of required degree - Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905 - 75x75x75 mm dia	no	414.82
17.51.1.1	Providing and fixing double unequal invert branch of required degree - 100x100x75x75mm -sand cast iron S&S as per IS - 1729	each	507.94

17 . Sanitary Installations

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
17.51.1.2	Providing and fixing double unequal invert branch of required degree - 100x100x75x75mm -sand cast iron S&S as per IS - 3989	each	1175.16
17.52.1.1	Providing and fixing single unequal plain invert branch of required degree -100x100x75mm - sand cast iron S&S as per IS -1729	each	359.98
17.52.1.2	Providing and fixing single unequal plain invert branch of required degree -100x100x75mm - sand cast iron S&S as per IS -3989	each	873.55
17.52.1.3	Providing and fixing single unequal plain invert branch of required degree -Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905 -100x100x75mm dia	no	678.65
17.53.1.1	Providing and fixing sand cast iron S&S off sets as per IS :1729 - 76mm off sets - with 75mm dia pipe	each	281.09
17.53.1.2	Providing and fixing sand cast iron S&S off sets as per IS :1729 - 76mm off sets - with 100 mm dia pipe	each	471.72
17.53.2.1	Providing and fixing sand cast iron S&S off sets as per IS :1729 - 114mm off sets - with 75 mm dia pipe	each	473.80
17.53.2.2	Providing and fixing sand cast iron S&S off sets as per IS :1729 - 114mm off sets - with 100 mm dia pipe	each	611.79
17.53.3.1	Providing and fixing sand cast iron S&S off sets as per IS :1729 - 152mm off sets - with 75 mm dia pipe	each	595.92
17.53.3.2	Providing and fixing sand cast iron S&S off sets as per IS :1729 - 152mm off sets - with 100 mm dia pipe	each	766.64
17.53A.1.1	Providing and fixing Hubless centrifugally cast (spun) iron offsets epoxy coated inside & outside IS:15905 - 65 mm offsets with 100mm dia pipe	no	568.46
17.53A.1.2	Providing and fixing Hubless centrifugally cast (spun) iron offsets epoxy coated inside & outside IS:15905 - 65 mm offsets with 75 mm dia pipe	no	468.87

17 . Sanitary Installations

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
17.54.1.1	Providing and fixing sand cast iron S&S off sets as per IS:3989 -75mm off sets - with 75mm dia pipe	each	386.37
17.54.2.1	Providing and fixing sand cast iron S&S off sets as per IS:3989 -150mm off sets - with 75mm dia pipe	each	486.88
17.54.2.2	Providing and fixing sand cast iron S&S off sets as per IS:3989 -150 mm off sets - with 100mm dia pipe	each	653.33
17.54A.1.1	Providing and fixing Hubless centrifugally cast (spun) iron offsets epoxy coated inside & outside IS:15905 - 130 mm offsets with 100 mm dia pipe	no	688.61
17.54A.1.2	Providing and fixing Hubless centrifugally cast (spun) iron offsets epoxy coated inside & outside IS:15905 - 130 mm offsets with 75 mm dia pipe	no	493.07
17.55.1.1	Providing and fixing door piece, insertion rubber washer 3mm thick, bolts & nuts complete - 100mm - sand cast iron S&S as per IS-1729	each	613.49
17.55.1.2	Providing and fixing door piece, insertion rubber washer 3mm thick, bolts & nuts complete - 100mm - sand cast iron S&S as per IS-3989	each	533.54
17.55.2.1	Providing and fixing door piece, insertion rubber washer 3mm thick, bolts & nuts complete - 75mm - sand cast iron S&S as per IS-1729	each	479.40
17.55.2.2	Providing and fixing door piece, insertion rubber washer 3mm thick, bolts & nuts complete - 75mm - sand cast iron S&S as per IS-3989	each	670.89
17.56.1.1	Providing and fixing terminal guard -100mm -sand cast iron S&S as per IS - 1729	each	237.63
17.56.1.2	Providing and fixing terminal guard -100mm -sand cast iron S&S as per IS - 3989	each	341.49
17.56.1.3	Providing and fixing terminal guard -100mm-Hubless centrifugally cast (spun) iron epoxy coated inside & outside as per IS:15905	each	563.42

17 . Sanitary Installations

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
17.56.2.1	Providing and fixing terminal guard -75mm -sand cast iron S&S as per IS - 1729	each	192.89
17.56.2.2	Providing and fixing terminal guard -75mm -sand cast iron S&S as per IS - 3989	each	310.97
17.57.1.1	Providing and fixing collar - 100mm -Sand cast iron S&S as per IS -1729	each	533.54
17.57.1.2	Providing and fixing collar - 100mm -Sand cast iron S&S as per IS -3989	each	357.14
17.57.2.1	Providing and fixing collar - 75mm -Sand cast iron S&S as per IS -1729	each	551.39
17.57.2.2	Providing and fixing collar - 75mm -Sand cast iron S&S as per IS -3989	each	259.74
17.57A.1.1	Providing and fixing shielded coupling for Hubless centrifugally cast iron pipe - 100mm dia - SS 304 grade coupling with EPDM rubber gasket	no	446.76
17.57A.2.1	Providing and fixing shielded coupling for Hubless centrifugally cast iron pipe - 75 mm dia - SS 304 grade coupling with EPDM rubber gasket	no	403.43
17.58.1	Providing lead caulked joints to sand cast iron / centrifugally cast (spun) iron pipes and fittings of diameter - 100mm	each joint	587.51
17.58.2	Providing lead caulked joints to sand cast iron / centrifugally cast (spun) iron pipes and fittings of diameter - 75mm	each joint	489.60
17.58.3	Providing lead caulked joints to sand cast iron / centrifugally cast (spun) iron pipes and fittings of diameter - 50mm	each joint	386.40
17.59.1	Providing and fixing M.S.stays and clamps for sand cast iron /centrifugally cast (spun) iron pipes of diameter - 100mm	each	95.37
17.59.2	Providing and fixing M.S.stays and clamps for sand cast iron /centrifugally cast (spun) iron pipes of diameter - 75mm	each	80.51

17 . Sanitary Installations

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
17.59.3	Providing and fixing M.S.stays and clamps for sand cast iron /centrifugally cast (spun) iron pipes of diameter - 50mm	each	76.80
17.60.1.1	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors - 100mm inlet and 100mm outlet - sand cast iron S&S as per IS: 3989	each	2008.82
17.60.1.2	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors - 100mm inlet and 100mm outlet - sand cast iron S&S as per IS: 1729	each	1725.43
17.60.1.3	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors - 100mm inlet and 100mm outlet - Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905	no	835.14
17.60.2.1	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors - 100mm inlet and 75mm outlet - sand cast iron S&S as per IS: 3989	each	2061.45
17.60.2.2	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors - 100mm inlet and 75mm outlet - sand cast iron S&S as per IS: 1729	each	1716.03
17.60.2.3	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors - 100mm inlet and 75mm outlet - Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905	no	613.21
17.61.1	Cutting chases in brick masonry walls for following diameter sand cast iron / centrifugally cast (spun) iron pipes and making good the same with cement concrete 1:3:6 (1 cement : 3 fine aggregate : 6 graded stone aggregate 12.5mm nominal size) including necessary plaster and pointing in cement mortar 1:4	metre	811.78

17 . Sanitary Installations

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	(1cement : 4 fine aggregate) - 100mm dia		
17.61.2	Cutting chases in brick masonry walls for following diameter sand cast iron / centrifugally cast (spun) iron pipes and making good the same with cement concrete 1:3:6 (1 cement : 3 fine aggregate : 6 graded stone aggregate 12.5mm nominal size) including necessary plaster and pointing in cement mortar 1:4 (1cement : 4 fine aggregate) - 75 mm dia	metre	581.65
17.61.3	Cutting chases in brick masonry walls for following diameter sand cast iron / centrifugally cast (spun) iron pipes and making good the same with cement concrete 1:3:6 (1 cement : 3 fine aggregate : 6 graded stone aggregate 12.5mm nominal size) including necessary plaster and pointing in cement mortar 1:4 (1cement : 4 fine aggregate) -50 mm dia	metre	378.13
17.62	Painting C.I.cistern with bitumastic or any other anti-corrosive paint inside and white paint over a coat of zinc chromate yellow primer (of approved quality) on the outside surface of the cistern, flush pipe, other fittings etc. complete for new work	each	1221.73
17.63	Re - painting C.I.cistern with bitumastic or any other anti - corrosive paint inside and white paint on the outside surface of the cistern, flush pipe, other fittings, etc. complete , including polishing of wooden seat and lid and cleaning of W.C. pan with acid wherever necessary	each	781.74
17.64	Repainting C.I.cistern with synthetic enamel paint of approved colour, brand and manufacture on the outside surface of cistern, flush pipe, other fittings etc.complete	each	346.23
17.65.1	Painting sand cast iron / centrifugally cast (spun) iron, soil, waste vent pipes and fittings with two coats of synthetic enamel paint of any colour such as chocolate grey, or buff etc. over a coat of primer (of approved quality) for new work - 100 mm diameter pipe	metre	96.70
17.65.2	Painting sand cast iron / centrifugally cast (spun) iron ,soil, waste vent pipes and fittings with two coats of synthetic enamel paint of any colour such as chocolate grey, or buff etc. over a coat of primer (of approved quality) for new work - 75 mm diameter pipe	metre	73.32
17.66.1	Repainting sand cast iron / centrifugally cast iron (spun) iron,	metre	45.32

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	soil,waste,vent pipes and fittings with one coat of synthetic enamel paint of any colour such as chocolate, grey,or buff etc - 100 mm diameter pipe		
17.66.2	Repainting sand cast iron / centrifugally cast iron (spun) iron, soil,waste,vent pipes and fittings with one coat of synthetic enamel paint of any colour such as chocolate, grey,or buff etc - 75 mm diameter pipe	metre	33.86
17.67	Repainting bath tub of size 1700x730x430 mm with enamel paint	each	957.89
17.68.1	Providing and fixing vitreous china dual purpose closet suitable for use as squatting pan or European type water closet (Anglo Indian W.C.pan) with seat & lid fixed with C.P.brass hinges and rubber buffers, 10 litre low level flushing cistern with fittings and brackets , 40mm flush bend, 20 mm over flow pipe, with specials of standard make and mosquito proof coupling of approved municipal design complete , including painting of fittings and brackets, cutting and making good the walls and floors wherever required - White vitreous china dual purpose WC pan with white solid plastic seat and lid with white vitreous china flusing cistern and C.P.flush bend	each	10395.18
17.69.1	Providing and fixing PTMT waste coupling for wash basin and sink, of approved quality and colour - waste coupling 31 mm dia of 79 mm length and 62 mm breadth weighing not less than 45 gms	each	157.57
17.69.2	Providing and fixing PTMT waste coupling for wash basin and sink, of approved quality and colour - waste coupling 38 mm dia of 83 mm length and 77 mm breadth weighing not less than 60 gms	each	178.63
17.70.1	Providing and fixing PTMT bottle trap for wash basin and sink - Bottle trap 31 mm single piece moulded with height of 270 mm, effective length of tail pipe 260 mm from the centre of the waste coupling , 77 mm breadth with 25mm minimum water seal, weighing not less than 260 gms	each	642.41
17.70.2	Providing and fixing PTMT bottle trap for wash basin and sink - Bottle trap 38 mm single piece moulded with height of 270 mm, effective length of tail pipe 260 mm from the centre of the waste coupling , 77 mm breadth with 25mm minimum	each	692.20

17 . Sanitary Installations

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	water seal, weighing not less than 263 gms		
17.71	Providing and fixing PTMT liquid soap container 109mm wide, 125mm high and 112 mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour, weighing not less than 105 gms	each	286.69
17.72	Providing and fixing PTMT towel ring trapezoidal shape 215 mm long, 200mm wide with minimum distances of 37 mm from wall face with concealed fittings arrangement of approved quality and colour, weighing not less than 88 gms	each	272.52
17.73.1	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fitting arrangement of approved quality and colour - 450 mm long towel rail with total length of 495 mm, 78 mm wide and effective height of 88mm, weighing not less than 170 gms	each	900.33
17.73.2	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fitting arrangement of approved quality and colour - 600 mm long towel rail with total length of 645 mm, 78 mm wide and effective height of 88mm, weighing not less than 190 gms	each	960.09
17.74	Providing and fixing PTMT shelf 440 mm long, 124 mm width and 36 mm height of approved quality and colour, weighing not less than 300 gms	each	1029.80
17.75	Providing and fixing PTMT 15 mm urinal spreader size 95x69x100 mm with 1/2" BSP thread and shapes, weighing not less than 60 gms	each	256.82
17.76.1	Providing and fixing PTMT urinal cock of approved quality and colour - 15mm nominal bore, 80 mm long, 42 mm high and 30mm wide with BSP female threads weighing not less than 48 gms	each	250.56
17.77.1	Providing and fixing M.S. holder bat clamp of approved design to sand cast iron / cast iron (spun) pipes comprising of M.S. flat brackets made of 50x5 mm flat of specified shape, projecting 75mm outside the wall surface and fixed on wall with 4 nos, 6mm dia expansion hold fasteners, including drilling necessary holes in brick wall / cc / RCC surface and the cost of bolts etc. The pipes shall be fixed to the already fixed brackets	each	364.73

17 . Sanitary Installations

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	with the help of 30mm x1.6mm galvanised M.S. flats of specified shape and of total length 420 mm and shall be fixed with M.S.nuts , bolts, & washers of size 25 x6 mm , one bolts on each side of the pipe - Total bracket length 580 mm of approved shape and design (for single 100mm dia pipe)		
17.77.2	Providing and fixing M.S. holder bat clamp of approved design to sand cast iron / cast iron (spun) pipes comprising of M.S. flat brackets made of 50x5 mm flat of specified shape, projecting 75mm outside the wall surface and fixed on wall with 4 nos, 6mm dia expansion hold fastners, including drilling necessary holes in brick wall / cc / RCC surface and the cost of bolts etc. The pipes shall be fixed to the already fixed brackets with the help of 30mm x1.6mm galvanised M.S. flats of specified shape and of total length 420 mm and shall be fixed with M.S.nuts , bolts, & washers of size 25 x6 mm , one bolts on each side of the pipe - Total bracket length810 mm of approved shape and design (for two 100mm dia pipe)	each	457.17
17.77.3	Providing and fixing M.S. holder bat clamp of approved design to sand cast iron / cast iron (spun) pipes comprising of M.S. flat brackets made of 50x5 mm flat of specified shape, projecting 75mm outside the wall surface and fixed on wall with 4 nos, 6mm dia expansion hold fastners, including drilling necessary holes in brick wall / cc / RCC surface and the cost of bolts etc. The pipes shall be fixed to the already fixed brackets with the help of 30mm x1.6mm galvanised M.S. flats of specified shape and of total length 420 mm and shall be fixed with M.S.nuts , bolts, & washers of size 25 x6 mm , one bolts on each side of the pipe - Total bracket length1040 mm of approved shape and design (for three 100mm dia pipes)	each	541.84
17.78	Providing and fixing white vitreous china extended wall mounting water closet of size 780x370x690 mm of approved shape including providing & fixing white vitreous china cistern with dual flush fitting, of flushing capacity 3 litres / 6 litre (adjustable to 4 litre / 8 litres), including seat cover , and cistern fittings , nuts, bolts and gaskets etc complete	each	21035.53
17.78.1	Providing and fixing CP brass health faucet of approved quality - 15 mm nominal bore	each	1737.01
17.79	Providing and fixing white vitreous china water less urinal of size 600 x330x315 mm having antibacterial /germs free ceramic surface , fixed with cartridge having debris catcher and	each	35231.60

17 . Sanitary Installations

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	hygiene seal		
17.80	Providing and fixing white vitreous china battery based infrared sensor operated urinal of approx. size 610x390x370 mm having pre & post flushing with water (250 ml & 500 ml consumption) , having water inlet from back side, including fixing to wall with suitable brackets all as per manufactures specification as per direction of Engineer-in-charge	each	13991.63
17.81	Providing and fixing floor mounted , white vitreous china single piece, double traps syphonic water closet of approved brand / make , shape,size and pattern including integrated white vitreous china cistern of capacity 10 litres with dual flusing system , including all fittings and fixtures with seat cover , cistern fittings , nuts, bolts and gasket etc including making connection with the existing P/S trap , complete in all respect as per direction of Engineer-in-charge.	no	17768.14

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.1.1	Providing and fixing Polythelene - Aluminium -Polythelene (PE-AL-PE) composite pressure pipes conforming to IS - 15450, U.V.Stabilized with carban black having thermal stability for hot & cold water supply , capable to withstand temperature up to 80 degree C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. elbows,tees,reducers,couplers & connectors etc., with clamps at 1.00 metre spacing.This includes testing of joints complete as per direction of Engineer-in-charge - Internal work -Exposed on wall - 1216 (16 mm OD) pipe	metre	461.91
18.1.2	Providing and fixing Polythelene - Aluminium -Polythelene (PE-AL-PE) composite pressure pipes conforming to IS - 15450, U.V.Stabilized with carban black having thermal stability for hot & cold water supply , capable to withstand temperature up to 80 degree C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. elbows,tees,reducers,couplers & connectors etc., with clamps at 1.00 metre spacing.This includes testing of joints complete as per direction of Engineer-in-charge - Internal work -Exposed on wall - 1620 (20 mm OD) pipe	metre	552.42
18.1.3	Providing and fixing Polythelene - Aluminium -Polythelene (PE-AL-PE) composite pressure pipes conforming to IS - 15450, U.V.Stabilized with carban black having thermal stability for hot & cold water supply , capable to withstand temperature up to 80 degree C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. elbows,tees,reducers,couplers & connectors etc., with clamps at 1.00 metre spacing.This includes testing of joints complete as per direction of Engineer-in-charge- Internal work -Exposed on wall - 2025 (25 mm OD) pipe	metre	618.88
18.1.4	Providing and fixing Polythelene - Aluminium -Polythelene (PE-AL-PE) composite pressure pipes conforming to IS - 15450, U.V.Stabilized with carban black having thermal stability for hot & cold water supply , capable to withstand temperature up to 80 degree C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. elbows,tees,reducers,couplers & connectors etc., with clamps at 1.00 metre spacing.This includes testing of joints complete as per direction of Engineer-	metre	780.96

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	in-charge - Internal work -Exposed on wall - 2532 (32 mm OD) pipe		
18.1.5	Providing and fixing Polythelene - Aluminium -Polythelene (PE-AL-PE) composite pressure pipes conforming to IS - 15450, U.V.Stabilized with carban black having thermal stability for hot & cold water supply , capable to withstand temperature up to 80 degree C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. elbows,tees,reducers,couplers & connectors etc., with clamps at 1.00 metre spacing.This includes testing of joints complete as per direction of Engineer-in-charge - Internal work -Exposed on wall - 3240 (40 mm OD) pipe	metre	1013.78
18.1.6	Providing and fixing Polythelene - Aluminium -Polythelene (PE-AL-PE) composite pressure pipes conforming to IS - 15450, U.V.Stabilized with carban black having thermal stability for hot & cold water supply , capable to withstand temperature up to 80 degree C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. elbows,tees,reducers,couplers & connectors etc., with clamps at 1.00 metre spacing.This includes testing of joints complete as per direction of Engineer-in-charge - Internal work -Exposed on wall - 4050 (50 mm OD) pipe	metre	1215.37
18.2.1	Providing and fixing Polyethelene - Aluminium - Polyethelene (PE-AL-PE) composite pressure pipes conforming to IS - 15450, U.V.stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 80 degree C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g.elbows,tees, reducers, couplers & connectors etc., with clamps at 1.00 metre spacing .This includes the cost of cutting chases and including testing of joints complete as perdirection - .Concealed work, including cutting chases and making good the wall etc- 1216 (16 mm OD) pipe	metre	782.15
18.2.2	Providing and fixing Polyethelene - Aluminium - Polyethelene (PE-AL-PE) composite pressure pipes conforming to IS - 15450, U.V.stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 80 degree C including all special fittings of composite material (engineering plastic blend and brass inserts	metre	874.27

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	wherever required) e.g.elbows,tees, reducers, couplers & connectors etc., with clamps at 1.00 metre spacing .This includes the cost of cutting chases and including testing of joints complete as perdirection - .Concealed work, including cutting chases and making good the wall etc- 1620 (20 mm OD) pipe		
18.2.3	Providing and fixing Polyethelene - Aluminium - Polyethelene (PE-AL-PE) composite pressure pipes conforming to IS - 15450, U.V.stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 80 degree C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g.elbows,tees, reducers, couplers & connectors etc., with clamps at 1.00 metre spacing .This includes the cost of cutting chases and including testing of joints complete as perdirection - .Concealed work, including cutting chases and making good the wall etc- 2025 (25 mm OD) pipe	metre	934.02
18.2.4	Providing and fixing Polyethelene - Aluminium - Polyethelene (PE-AL-PE) composite pressure pipes conforming to IS - 15450, U.V.stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 80 degree C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g.elbows,tees, reducers, couplers & connectors etc., with clamps at 1.00 metre spacing .This includes the cost of cutting chases and including testing of joints complete as perdirection - .Concealed work, including cutting chases and making good the wall etc- 2532 (32 mm OD) pipe	metre	1098.33
18.3.1	Providing and fixing Polyethelene - Aluminium - Polyethelene (PE-AL-PE) composite pressure pipes conforming to IS - 15450, U.V.stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature upto 80 degree C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g . Elbows, tees , reducers, couplers & connectors etc., with trenching, refilling and testing of joints complete as perdirection - external work -1216 (16mm OD) pipe	metre	432.43
18.3.2	Providing and fixing Polyethelene - Aluminium - Polyethelene (PE-AL-PE) composite pressure pipes conforming to IS -	metre	500.85

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	15450, U.V.stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature upto 80 degree C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g . Elbows, tees , reducers, couplers & connectors etc., with trenching, refilling and testing of joints complete as per direction - external work -1620 (20 mm OD) pipe		
18.3.3	Providing and fixing Polyethylene - Aluminium - Polyethylene (PE-AL-PE) composite pressure pipes conforming to IS - 15450, U.V.stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature upto 80 degree C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g . Elbows, tees , reducers, couplers & connectors etc., with trenching, refilling and testing of joints complete as per direction - external work -2025(25mm OD) pipe	metre	545.24
18.3.4	Providing and fixing Polyethylene - Aluminium - Polyethylene (PE-AL-PE) composite pressure pipes conforming to IS - 15450, U.V.stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature upto 80 degree C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g . Elbows, tees , reducers, couplers & connectors etc., with trenching, refilling and testing of joints complete as per direction - external work -2532 (32mm OD) pipe	metre	667.30
18.3.5	Providing and fixing Polyethylene - Aluminium - Polyethylene (PE-AL-PE) composite pressure pipes conforming to IS - 15450, U.V.stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature upto 80 degree C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g . Elbows, tees , reducers, couplers & connectors etc., with trenching, refilling and testing of joints complete as per direction - external work -3240 (40 mm OD) pipe	metre	846.97
18.3.6	Providing and fixing Polyethylene - Aluminium - Polyethylene (PE-AL-PE) composite pressure pipes conforming to IS - 15450, U.V.stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand	metre	1048.56

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	temperature upto 80 degree C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g . Elbows, tees , reducers, couplers & connectors etc., with trenching, refilling and testing of joints complete as per direction - external work -4050 (50mm OD) pipe		
18.4.1	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes conforming to IS:15801, UV stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply, including all PP - R plain & brass threaded polypropylene random fittings and fixing the pipe with clamps at 1.00 m spacing. This includes testing of joints complete as per direction of Engineer-in-charge - Internal exposed on walls - PN-16 pipe, 20mm OD (SDR-7.4)	metre	365.63
18.4.2	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes conforming to IS:15801, UV stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply, including all PP - R plain & brass threaded polypropylene random fittings and fixing the pipe with clamps at 1.00 m spacing. This includes testing of joints complete as per direction of Engineer-in-charge - Internal exposed on walls - PN-16 pipe, 25mm OD (SDR-7.4)	metre	435.79
18.4.3	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes conforming to IS:15801, UV stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply, including all PP - R plain & brass threaded polypropylene random fittings and fixing the pipe with clamps at 1.00 m spacing. This includes testing of joints complete as per direction of Engineer-in-charge - Internal exposed on walls - PN-16 pipe, 32mm OD (SDR-7.4)	metre	537.92
18.4.4	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes SDR 7.4 , UV stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply , including all PP - R plain & brass threaded polypropylene random fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes testing of joints complete - internal work - exposed on wall -PN - 16 pipe, 40 mm OD	metre	795.55
18.4.5	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes conforming to IS:15801, UV stabilized & anti - microbial fusion welded, having thermal stability for hot	metre	952.32

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	& cold water supply, including all PP - R plain & brass threaded polypropylene random fittings and fixing the pipe with clamps at 1.00 m spacing. This includes testing of joints complete as per direction of Engineer-in-charge - Internal exposed on walls - PN-10 pipe, 50mm OD (SDR-11)		
18.5.1	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes conforming to IS:15801, UV stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply, including all PP-R plain & brass threaded polypropylene random fittings and fixing the pipe with clamps at 1.00 m spacing. This includes the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer-in-charge - Concealed work, including cutting chases and making good the wall etc - PN - 16 pipe, 20mm OD (SDR-7.4)	metre	622.82
18.5.2	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes conforming to IS:15801, UV stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply, including all PP-R plain & brass threaded polypropylene random fittings and fixing the pipe with clamps at 1.00 m spacing. This includes the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer-in-charge - Concealed work, including cutting chases and making good the wall etc - PN - 16 pipe, 25mm OD (SDR-7.4)	metre	687.55
18.5.3	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes conforming to IS:15801, UV stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply, including all PP-R plain & brass threaded polypropylene random fittings and fixing the pipe with clamps at 1.00 m spacing. This includes the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer-in-charge - Concealed work, including cutting chases and making good the wall etc - PN - 16 pipe, 32mm OD (SDR-7.4)	metre	772.90
18.6.1	Providing and fixing 3 layer PP-R (poly propylene Random copolymer) pipes conforming to IS:15801 UV stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply, including all PP - R plain & brass threaded polypropylene random fittings, including trenching, refilling & testing of joints complete as per direction of Engineer-in-charge of Engineer -in-charge - External work -	metre	304.96

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	PN - 16 pipe, 20mm OD(SDR-7.4)		
18.6.2	Providing and fixing 3 layer PP-R (poly propylene Random copolymer) pipes conforming to IS:15801 UV stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply, including all PP - R plain & brass threaded polypropylene random fittings, including trenching, refilling & testing of joints complete as per direction of Engineer-in-charge - External work - PN - 16 pipe, 25mm OD(SDR-7.4)	metre	366.74
18.6.3	Providing and fixing 3 layer PP-R (poly propylene Random copolymer) pipes conforming to IS:15801 UV stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply, including all PP - R plain & brass threaded polypropylene random fittings, including trenching, refilling & testing of joints complete as per direction of Engineer-in-charge - External work - PN - 16 pipe, 32mm OD(SDR-7.4)	metre	460.64
18.6.4	Providing and fixing 3 layer PP-R (poly propylene Random copolymer) pipes conforming to IS:15801 UV stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply, including all PP - R plain & brass threaded polypropylene random fittings, including trenching, refilling & testing of joints complete as per direction of Engineer-in-charge - External work - PN - 16 pipe, 40mm OD(SDR-7.4)	metre	4641.55
18.6.5	Providing and fixing 3 layer PP-R (poly propylene Random copolymer) pipes conforming to IS:15801 UV stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply, including all PP - R plain & brass threaded polypropylene random fittings, including trenching, refilling & testing of joints complete as per direction of Engineer-in-charge - External work - PN - 10 pipe, 50mm OD(SDR-11)	metre	809.70
18.6.6	Providing and fixing 3 layer PP-R (poly propylene Random copolymer) pipes conforming to IS:15801 UV stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply, including all PP - R plain & brass threaded polypropylene random fittings, including trenching, refilling & testing of joints complete as per direction of Engineer-in-charge - External work - PN - 10 pipe, 63mm	metre	927.79

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	OD(SDR-11)		
18.6.7	Providing and fixing 3 layer PP-R (poly propylene Random copolymer) pipes conforming to IS:15801 UV stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply, including all PP - R plain & brass threaded polypropylene random fittings, including trenching, refilling & testing of joints complete as per direction of Engineer-in-charge - External work - PN - 10 pipe, 75mm OD(SDR-11)	metre	1240.10
18.6.8	Providing and fixing 3 layer PP-R (poly propylene Random copolymer) pipes conforming to IS:15801 UV stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply, including all PP - R plain & brass threaded polypropylene random fittings, including trenching, refilling & testing of joints complete as per direction of Engineer-in-charge - External work - PN - 10 pipe, 90mm OD(SDR-11)	metre	1742.11
18.6.9	Providing and fixing 3 layer PP-R (Poly propylene random copolymer) pipes UV stabilized & anti- microbial fusion welded , having thermal stability for hot & cold water supply, including all PP-R plain & brass threaded polypropylene random fittings, including trenching, refilling & testing of joints complete - external work - PN -10 pipe, 110mm OD (SDR - 11)	metre	2400.91
18.6.10	Providing and fixing 3 layer PP-R (Poly propylene random copolymer) pipes UV stabilized & anti- microbial fusion welded , having thermal stability for hot & cold water supply, including all PP-R plain & brass threaded polypropylene random fittings, including trenching, refilling & testing of joints complete - external work - PN -10 pipe, 160mm OD (SDR -11)	metre	5606.01
18.6A.1	Providing and fixing PPR Unions - PPR Union 20mm	no	367.21
18.6A.2	Providing and fixing PPR Unions - PPR Union 25mm	no	387.37
18.6A.3	Providing and fixing PPR Unions - PPR Union 32mm	no	463.36
18.6A.4	Providing and fixing PPR Unions - PPR Union 40mm	no	615.33

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.6A.5	Providing and fixing PPR Unions - PPR Union 50mm	no	875.84
18.6A.6	Providing and fixing PPR Unions - PPR Union 63mm	no	1018.49
18.6A.7	Providing and fixing PPR Unions - PPR Union 75mm	no	1858.97
18.7.1	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00m spacing.This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer-in-charge- internal work - exposed on wall - 15mm nominal dia pipes	metre	395.22
18.7.2	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00m spacing.This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer-in-charge - internal work - exposed on wall - 20 mm nominal dia pipes	metre	483.88
18.7.3	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00m spacing.This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints completeas per direction of Engineer-in-charge - internal work - exposed on wall - 25mm nominal dia pipes	metre	574.50
18.7.4	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00m spacing.This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints completeas per direction of Engineer-in-charge - internal work - exposed on wall - 32mm nominal dia pipes	metre	743.97

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.7.5	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer-in-charge - internal work - exposed on wall - 40mm nominal dia pipes	metre	997.14
18.7.6	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer-in-charge - internal work - exposed on wall - 50mm nominal dia pipes	metre	1376.27
18.8.1	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings , with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer-in-charge - Concealed work , including cutting chases and making good the wall etc - 15mm nominal dia pipes	metre	662.65
18.8.2	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings , with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer-in-charge - Concealed work , including cutting chases and making good the wall etc - 20 mm nominal dia pipes	metre	752.28
18.8.3	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings , with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer-in-charge - Concealed work , including cutting chases and making	metre	874.27

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	good the wall etc - 25 mm nominal dia pipes		
18.8.4	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings , with one step CPVC solvment cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer-in-charge- Concealed work , including cutting chases and making good the wall etc - 32 mm nominal dia pipes	metre	1048.54
18.9.1	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings. This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer-in-charge- external work - 15mm nominal dia pipes	metre	343.65
18.9.2	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings. This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer-in-charge- external work - 20mm nominal dia pipes	metre	410.23
18.9.3	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings. This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer-in-charge - external work - 25mm nominal dia pipes	metre	518.25
18.9.4	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings. This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer-in-charge- external work - 32mm nominal dia pipes	metre	647.71
18.9.5	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC)	metre	830.32

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings. This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer-in-charge- external work - 40 mm nominal outer dia pipes		
18.9.6	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings. This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer-in-charge- external work - 50 mm nominal dia pipes	metre	1209.46
18.9.7	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings. This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer-in-charge- external work - 65 mm nominal dia pipes	metre	2216.84
18.9.8	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings. This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer-in-charge- external work - 80 mm nominal dia pipes	metre	2873.39
18.9.9	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings. This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer-in-charge- external work - 100 mm nominal dia pipes	metre	4074.84
18.9.10	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings. This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer-in-charge- external	metre	7265.95

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	work - 150mm nominal dia pipes		
18.9.11	Providing and fixing ASTM pipes including all ASTM plain& brass threaded fittings i/c fixing the pipe with clamps at 1.00m spacing . This includes jointing of pipes & fitting with one step ASTM solvent cement and testing of joints complete (Internal work exposed on wall) - 20mm nominal outer dia pipes	metre	507.92
18.9.12	Providing and fixing ASTM pipes including all ASTM plain& brass threaded fittings i/c fixing the pipe with clamps at 1.00m spacing . This includes jointing of pipes & fitting with one step ASTM solvent cement and testing of joints complete (Internal work exposed on wall) - 25mm nominal outer dia pipes	metre	554.15
18.9.13	Providing and fixing ASTM pipes including all ASTM plain& brass threaded fittings i/c fixing the pipe with clamps at 1.00m spacing . This includes jointing of pipes & fitting with one step ASTM solvent cement and testing of joints complete (Internal work exposed on wall) - 32mm nominal outer dia pipes	metre	686.64
18.9.14	Providing and fixing ASTM pipes including all ASTM plain& brass threaded fittings i/c fixing the pipe with clamps at 1.00m spacing . This includes jointing of pipes & fitting with one step ASTM solvent cement and testing of joints complete (Internal work exposed on wall) - 40mm nominal outer dia pipes	metre	843.63
18.9.15	Providing and fixing ASTM pipes including all ASTM plain& brass threaded fittings i/c fixing the pipe with clamps at 1.00m spacing . This includes jointing of pipes & fitting with one step ASTM solvent cement and testing of joints complete (Internal work exposed on wall) - 50mm nominal outer dia pipes	metre	1006.38
18.9.16	Providing and fixing ASTM pipes including all ASTM plain& brass threaded fittings i/c fixing the pipe with clamps at 1.00m spacing . This includes jointing of pipes & fitting with one step ASTM solvent cement and testing of joints complete (Internal work exposed on wall) - 63mm nominal outer dia pipes	metre	1026.73
18.9.21	Providing and fixing ASTM pipes including all ASTM plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing . This includes jointing of pipes & fitting with one step ASTM solvent cement and the cost of cutting chases and making good the same including testing of joints complete (Concealed work including cutting chases and making good the	metre	702.06

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	walls etc.) - 20 mm nominal outer dia pipes		
18.9.22	Providing and fixing ASTM pipes including all ASTM plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing . This includes jointing of pipes & fitting with one step ASTM solvent cement and the cost of cutting chases and making good the same including testing of joints complete (Concealed work including cutting chases and making good the walls etc.) - 25 mm nominal outer dia pipes	metre	748.29
18.9.23	Providing and fixing ASTM pipes including all ASTM plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing . This includes jointing of pipes & fitting with one step ASTM solvent cement and the cost of cutting chases and making good the same including testing of joints complete (Concealed work including cutting chases and making good the walls etc.) - 32 mm nominal outer dia pipes	metre	840.76
18.9.31	Providing and fixing ASTM pipes including all ASTM plain & brass threaded fittings this included jointing of pipes & fittings with one step ASTM solvent cement , trenching refilling & testing of joints complete (External work) - 20 mm nominal outer dia pipes	metre	434.28
18.9.32	Providing and fixing ASTM pipes including all ASTM plain & brass threaded fittings this included jointing of pipes & fittings with one step ASTM solvent cement , trenching refilling & testing of joints complete (External work) - 25 mm nominal outer dia pipes	metre	480.51
18.9.33	Providing and fixing ASTM pipes including all ASTM plain & brass threaded fittings this included jointing of pipes & fittings with one step ASTM solvent cement , trenching refilling & testing of joints complete (External work) - 32 mm nominal outer dia pipes	metre	590.38
18.9.34	Providing and fixing ASTM pipes including all ASTM plain & brass threaded fittings this included jointing of pipes & fittings with one step ASTM solvent cement , trenching refilling & testing of joints complete (External work) - 40 mm nominal outer dia pipes	metre	676.82
18.9.35	Providing and fixing ASTM pipes including all ASTM plain & brass threaded fittings this included jointing of pipes & fittings	metre	839.57

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	with one step ASTM solvent cement , trenching refilling & testing of joints complete (External work) - 50 mm nominal outer dia pipes		
18.9.36	Providing and fixing ASTM pipes including all ASTM plain & brass threaded fittings this included jointing of pipes & fittings with one step ASTM solvent cement , trenching refilling & testing of joints complete (External work) - 63 mm nominal outer dia pipes	metre	914.84
18.9.37	Providing and fixing ASTM pipes including all ASTM plain & brass threaded fittings this included jointing of pipes & fittings with one step ASTM solvent cement , trenching refilling & testing of joints complete (External work) - 75 mm nominal outer dia pipes	metre	729.90
18.9.38	Providing and fixing ASTM pipes including all ASTM plain & brass threaded fittings this included jointing of pipes & fittings with one step ASTM solvent cement , trenching refilling & testing of joints complete (External work) - 100 mm nominal outer dia pipes	metre	940.07
18.10.1	Providing and fixing G.I.pipes complete with G.I.fittings and clamps, including cutting and making good the walls etc - internal work -exposed on wall - 15mm dia nominal bore	metre	464.70
18.10.2	Providing and fixing G.I.pipes complete with G.I.fittings and clamps, including cutting and making good the walls etc - internal work -exposed on wall - 20mm dia nominal bore	metre	557.13
18.10.3	Providing and fixing G.I.pipes complete with G.I.fittings and clamps, including cutting and making good the walls etc - internal work -exposed on wall - 25mm dia nominal bore	metre	691.27
18.10.4	Providing and fixing G.I.pipes complete with G.I.fittings and clamps, including cutting and making good the walls etc - internal work -exposed on wall - 32 mm dia nominal bore	metre	814.32
18.10.5	Providing and fixing G.I.pipes complete with G.I.fittings and clamps, including cutting and making good the walls etc - internal work -exposed on wall - 40mm dia nominal bore	metre	1015.07
18.10.6	Providing and fixing G.I.pipes complete with G.I.fittings and clamps, including cutting and making good the walls etc -	metre	1255.23

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	internal work -exposed on wall - 50 mm dia nominal bore		
18.11.1	Providing & fixing GI pipes complete with GI fittings and clamps including making good the walls etc. concealed pipe including painting with anti corrosive bitumastic paint, cutting chases and making good the wall - 15mm dia nominal bore	metre	716.56
18.11.2	Providing & fixing GI pipes complete with GI fittings and clamps including making good the walls etc. concealed pipe including painting with anti corrosive bitumastic paint, cutting chases and making good the wall - 20mm dia nominal bore	metre	789.80
18.12.1	Providing and fixing G.I.pipes complete with G.I.fittings including trenching and refilling etc.- External work -15mm dia nominal bore	metre	407.62
18.12.2	Providing and fixing G.I.pipes complete with G.I.fittings including trenching and refilling etc.- External work -20mm dia nominal bore	metre	470.02
18.12.3	Providing and fixing G.I.pipes complete with G.I.fittings including trenching and refilling etc.- External work -25mm dia nominal bore	metre	586.50
18.12.4	Providing and fixing G.I.pipes complete with G.I.fittings including trenching and refilling etc.- External work -32mm dia nominal bore	metre	660.51
18.12.5	Providing and fixing G.I.pipes complete with G.I.fittings including trenching and refilling etc.- External work -40mm dia nominal bore	metre	777.57
18.12.6	Providing and fixing G.I.pipes complete with G.I.fittings including trenching and refilling etc.- External work -50mm dia nominal bore	metre	913.97
18.12.7	Providing and fixing G.I.pipes complete with G.I.fittings including trenching and refilling etc.- External work -65mm dia nominal bore	metre	1158.69
18.12.8	Providing and fixing G.I.pipes complete with G.I.fittings including trenching and refilling etc.- External work -80mm dia nominal bore	metre	1340.07

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.13.1	Making connection of G.I.distribution branch with G.I.main of following sizes by providing and fixing tee, including cutting and threading the pipe etc.complete - 25 to 40mm nominal bore	each	1080.87
18.13.2	Making connection of G.I.distribution branch with G.I.main of following sizes by providing and fixing tee, including cutting and threading the pipe etc.complete - 50 to 80mm nominal bore	each	2011.84
18.14	Fixing water meter and stop cock in G.I.pipe line including cutting and threading the pipe and making long screws etc.complete (cost of water meter and stop cock to be paid separately)	each	971.33
18.15.1	Providing and fixing brass bib cock of approved quality - 15mm nominal bore	each	378.59
18.15.2	Providing and fixing brass bib cock of approved quality - 20 mm nominal bore	each	524.93
18.16.1	Providing and fixing brass stop cock of approved quality - 15mm nominal bore	each	520.85
18.16.2	Providing and fixing brass stop cock of approved quality - 20mm nominal bore	each	596.06
18.17.1	Providing and fixing gun metal gate valve with C.I.wheel of approved quality (Screwed end) - 25mm nominal bore	each	856.96
18.17.1A	Providing and fixing gun metal gate valve with C.I.wheel of approved quality (screwed end) - 20 mm nominal bore	no	832.93
18.17.2	Providing and fixing gun metal gate valve with C.I.wheel of approved quality (Screwed end) - 32mm nominal bore	each	934.59
18.17.3	Providing and fixing gun metal gate valve with C.I.wheel of approved quality (Screwed end) - 40mm nominal bore	each	1209.02
18.17.4	Providing and fixing gun metal gate valve with C.I.wheel of approved quality (Screwed end) - 50 mm nominal bore	each	1343.89
18.17.5	Providing and fixing gun metal gate valve with C.I.wheel of	each	1854.04

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	approved quality (Screwed end) - 65mm nominal bore		
18.17.6	Providing and fixing gun metal gate valve with C.I.wheel of approved quality (Screwed end) - 80mm nominal bore	each	2634.30
18.18.1	Providing and fixing ball valve (brass) of approved quality , high or low pressure , with plastic floats complete - 15mm nominal bore	each	421.32
18.18.2	Providing and fixing ball valve (brass) of approved quality , high or low pressure , with plastic floats complete - 20mm nominal bore	each	616.45
18.18.3	Providing and fixing ball valve (brass) of approved quality , high or low pressure , with plastic floats complete - 25mm nominal bore	each	739.59
18.19.1.1	Providing and fixing gun metal non -return valve of approved quality (screwed end) - 25mm nominal bore - horizontal	each	607.53
18.19.1.2	Providing and fixing gun metal non -return valve of approved quality (screwed end) - 25mm nominal bore -vertical	each	507.94
18.19.2.1	Providing and fixing gun metal non -return valve of approved quality (screwed end) - 32 mm nominal bore - Horizontal	each	767.72
18.19.2.2	Providing and fixing gun metal non -return valve of approved quality (screwed end) - 32 mm nominal bore - Vertical	each	686.62
18.19.3.1	Providing and fixing gun metal non -return valve of approved quality (screwed end) - 40 mm nominal bore - Horizontal	each	1057.36
18.19.3.2	Providing and fixing gun metal non -return valve of approved quality (screwed end) - 40 mm nominal bore - Vertical	each	848.23
18.19.4.1	Providing and fixing gun metal non -return valve of approved quality (screwed end) - 50 mm nominal bore - Horizontal	each	1533.74
18.19.4.2	Providing and fixing gun metal non -return valve of approved quality (screwed end) - 50 mm nominal bore -Vertical	each	1287.63
18.19.5.1	Providing and fixing gun metal non -return valve of approved	each	2299.98

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	quality (screwed end) - 65 mm nominal bore - Horizontal		
18.19.5.2	Providing and fixing gun metal non -return valve of approved quality (screwed end) - 65 mm nominal bore - Vertical	each	1971.36
18.19.6.1	Providing and fixing gun metal non -return valve of approved quality (screwed end) - 80 mm nominal bore - Horizontal	each	3565.94
18.19.6.2	Providing and fixing gun metal non -return valve of approved quality (screwed end) - 80 mm nominal bore -Vertical	each	2635.52
18.20.1	Providing and fixing brass ferrule with C.I.mouth cover including boring and tapping the main - 15 mm nominal bore	each	384.97
18.20.2	Providing and fixing brass ferrule with C.I.mouth cover including boring and tapping the main - 20 mm nominal bore	each	441.55
18.20.3	Providing and fixing brass ferrule with C.I.mouth cover including boring and tapping the main - 25 mm nominal bore	each	575.66
18.21.1.1	Providing and fixing unplasticised PVC connection pipe with brass unions - 30 cm length - 15mm nominal bore	each	134.35
18.21.1.2	Providing and fixing unplasticised PVC connection pipe with brass unions - 30 cm length - 20 mm nominal bore	each	148.58
18.21.2.1	Providing and fixing unplasticised PVC connection pipe with brass unions - 45 cm length - 15mm nominal bore	each	159.39
18.21.2.2	Providing and fixing unplasticised PVC connection pipe with brass unions - 45 cm length - 20mm nominal bore	each	173.62
18.22.1	Providing and fixing C.P.brass shower rose with 15 or 20 mm inlet - 100 mm diameter	each	303.77
18.22.2	Providing and fixing C.P.brass shower rose with 15 or 20 mm inlet - 150 mm diameter	each	591.98
18.23	Laying in position centrifugally cast (spun) iron S&S or flanged pipes (excluding cost of pipe)	quintal	426.58

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.24	Laying in position S&S or flanged C.I.special such as tees, bends, collars , tapers and caps etc (excluding cost of specials)	quintal	784.96
18.25.1	Providing and laying S&S C.I. standard specials such as tees,bends, collars, tapers, caps etc (Heavy class) - upto 300mm dia	quintal	10458.89
18.25.2	Providing and laying S&S C.I. standard specials such as tees,bends, collars, tapers, caps etc (Heavy class) - over 300mm dia	quintal	12023.79
18.26.1	Providing and laying flanged C.I.standard specials such as tees, bends, collars, tapers, caps etc., suitable for flanged jointing as per IS:1538 - upto 300 mm dia	quintal	17714.33
18.26.2	Providing and laying flanged C.I.standard specials such as tees, bends, collars, tapers, caps etc., suitable for flanged jointing as per IS:1538 - Over 300 mm dia	quintal	19421.50
18.27.1	Providing and laying S&S centrifugally cast (spun) iron pipes (Class LA) conforming to IS -1536 - 100 mm dia pipe	metre	1629.45
18.27.2	Providing and laying S&S centrifugally cast (spun) iron pipes (Class LA) conforming to IS -1536 - 125 mm dia pipe	metre	1931.03
18.27.3	Providing and laying S&S centrifugally cast (spun) iron pipes (Class LA) conforming to IS -1536 - 150 mm dia pipe	metre	2453.41
18.27.4	Providing and laying S&S centrifugally cast (spun) iron pipes (Class LA) conforming to IS -1536 - 200 mm dia pipe	metre	3269.55
18.27.5	Providing and laying S&S centrifugally cast (spun) iron pipes (Class LA) conforming to IS -1536 - 250 mm dia pipe	metre	4497.53
18.27.6	Providing and laying S&S centrifugally cast (spun) iron pipes (Class LA) conforming to IS -1536 - 300 mm dia pipe	metre	7917.37
18.27.7	Providing and laying S&S centrifugally cast (spun) iron pipes (Class LA) conforming to IS -1536 - 350 mm dia pipe	metre	9758.07
18.27.8	Providing and laying S&S centrifugally cast (spun) iron pipes (Class LA) conforming to IS -1536 - 400 mm dia pipe	metre	12667.60

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.27.9	Providing and laying S&S centrifugally cast (spun) iron pipes (Class LA) conforming to IS -1536 - 450 mm dia pipe	metre	15170.53
18.27.10	Providing and laying S&S centrifugally cast (spun) iron pipes (Class LA) conforming to IS -1536 - 500 mm dia pipe	metre	17755.98
18.27.11	Providing and laying S&S centrifugally cast (spun) iron pipes (Class LA) conforming to IS -1536 - 600 mm dia pipe	metre	24722.07
18.28.1	Providing lead caulked joints to spun iron or C.I.pipes and specials including testing of joints but excluding the cost of pig lead - 100 mm diameter pipe	joint	582.93
18.28.2	Providing lead caulked joints to spun iron or C.I.pipes and specials including testing of joints but excluding the cost of pig lead - 125 mm diameter pipe	joint	867.22
18.28.3	Providing lead caulked joints to spun iron or C.I.pipes and specials including testing of joints but excluding the cost of pig lead - 150 mm diameter pipe	joint	873.99
18.28.4	Providing lead caulked joints to spun iron or C.I.pipes and specials including testing of joints but excluding the cost of pig lead - 200 mm diameter pipe	joint	1162.54
18.28.5	Providing lead caulked joints to spun iron or C.I.pipes and specials including testing of joints but excluding the cost of pig lead - 250 mm diameter pipe	joint	1453.01
18.28.6	Providing lead caulked joints to spun iron or C.I.pipes and specials including testing of joints but excluding the cost of pig lead - 300 mm diameter pipe	joint	1747.21
18.28.7	Providing lead caulked joints to spun iron or C.I.pipes and specials including testing of joints but excluding the cost of pig lead - 350 mm diameter pipe	joint	1770.45
18.28.8	Providing lead caulked joints to spun iron or C.I.pipes and specials including testing of joints but excluding the cost of pig lead - 400 mm diameter pipe	joint	2338.07
18.28.9	Providing lead caulked joints to spun iron or C.I.pipes and	joint	2625.91

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	specials including testing of joints but excluding the cost of pig lead - 450 mm diameter pipe		
18.28.10	Providing lead caulked joints to spun iron or C.I.pipes and specials including testing of joints but excluding the cost of pig lead - 500 mm diameter pipe	joint	2774.96
18.28.11	Providing lead caulked joints to spun iron or C.I.pipes and specials including testing of joints but excluding the cost of pig lead - 600 mm diameter pipe	joint	3772.90
18.29	Supplying pig lead at site of work	quintal	21908.61
18.30.1	Providing flanged joints to double flanged C.I / D.I. pipes and specials , including testing of joints - 80mm diameter pipe	joint	434.83
18.30.2	Providing flanged joints to double flanged C.I / D.I. pipes and specials , including testing of joints -100mm diameter pipe	joint	749.38
18.30.3	Providing flanged joints to double flanged C.I / D.I. pipes and specials , including testing of joints - 125mm diameter pipe	joint	809.13
18.30.4	Providing flanged joints to double flanged C.I / D.I. pipes and specials , including testing of joints - 150mm diameter pipe	joint	1183.35
18.30.5	Providing flanged joints to double flanged C.I / D.I. pipes and specials , including testing of joints - 200mm diameter pipe	joint	1230.30
18.30.6	Providing flanged joints to double flanged C.I / D.I. pipes and specials , including testing of joints - 250mm diameter pipe	joint	1860.67
18.30.7	Providing flanged joints to double flanged C.I / D.I. pipes and specials , including testing of joints -300mm diameter pipe	joint	1873.47
18.30.8	Providing flanged joints to double flanged C.I / D.I. pipes and specials , including testing of joints -350mm diameter pipe	joint	2503.84
18.30.9	Providing flanged joints to double flanged C.I / D.I. pipes and specials , including testing of joints - 400mm diameter pipe	joint	2671.71
18.30.10	Providing flanged joints to double flanged C.I / D.I. pipes and	joint	3313.46

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	specials , including testing of joints - 450mm diameter pipe		
18.30.11	Providing flanged joints to double flanged C.I / D.I. pipes and specials , including testing of joints - 500mm diameter pipe	joint	4949.57
18.30.12	Providing flanged joints to double flanged C.I / D.I. pipes and specials , including testing of joints - 600 mm diameter pipe	joint	5181.60
18.31.1.1	Providing and fixing C.I.sluiice valves (with cap) complete with bolts,nuts,rubber insertions etc. (the tail pieces if required will be paid separately) -100 mm diameter -class I	each	5704.67
18.31.1.2	Providing and fixing C.I.sluiice valves (with cap) complete with bolts,nuts,rubber insertions etc. (the tail pieces if required will be paid separately) -100 mm diameter -class II	each	7880.18
18.31.2.1	Providing and fixing C.I.sluiice valves (with cap) complete with bolts,nuts,rubber insertions etc. (the tail pieces if required will be paid separately) -125 mm diameter -class I	each	6702.24
18.31.2.2	Providing and fixing C.I.sluiice valves (with cap) complete with bolts,nuts,rubber insertions etc. (the tail pieces if required will be paid separately) -125 mm diameter -class II	each	8413.98
18.31.3.1	Providing and fixing C.I.sluiice valves (with cap) complete with bolts,nuts,rubber insertions etc. (the tail pieces if required will be paid separately) -150 mm diameter -class I	each	8505.41
18.31.3.2	Providing and fixing C.I.sluiice valves (with cap) complete with bolts,nuts,rubber insertions etc. (the tail pieces if required will be paid separately) -150 mm diameter -class II	each	11558.74
18.31.4.1	Providing and fixing C.I.sluiice valves (with cap) complete with bolts,nuts,rubber insertions etc. (the tail pieces if required will be paid separately) -200 mm diameter -class I	each	11371.12
18.31.4.2	Providing and fixing C.I.sluiice valves (with cap) complete with bolts,nuts,rubber insertions etc. (the tail pieces if required will be paid separately) -200 mm diameter -class II	each	15718.71
18.31.5.1	Providing and fixing C.I.sluiice valves (with cap) complete with bolts,nuts,rubber insertions etc. (the tail pieces if required will be paid separately) -250 mm diameter -class I	each	17792.08

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.31.5.2	Providing and fixing C.I.sluiice valves (with cap) complete with bolts,nuts,rubber insertions etc. (the tail pieces if required will be paid separately) -250 mm diameter -class II	each	22155.14
18.31.6.1	Providing and fixing C.I.sluiice valves (with cap) complete with bolts,nuts,rubber insertions etc. (the tail pieces if required will be paid separately) -300 mm diameter -class I	each	21206.20
18.31.6.2	Providing and fixing C.I.sluiice valves (with cap) complete with bolts,nuts,rubber insertions etc. (the tail pieces if required will be paid separately) -300 mm diameter -class II	each	26519.14
18.32.1	Constructing masonry chamber 30x30x50 cm inside , in brick work in cement mortar 1.4 (1 cement : 4 fine aggregate) for stop cock, with C.I.surface box 100x100x75 mm (inside) with hinged cover fixed in reinforced cement concrete slab 1:1.5:3 mix (1 cement : 1.5fine aggregate : 3 graded stone aggregate 20mm nominal size) , including necessary excavation , foundation concrete 1:5:10 (1 cement :5 fine aggregate : 10 graded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 fine aggregate) 12mm thick , finished with a floating coat of neat cement complete as per standard design - with common burnt clay F.P.S (non modular) bricks of class designation 3.5	each	2488.26
18.33.1	Constructing masonry chamber 60x60x75 cm inside , in brick work in cement mortar 1.4 (1 cement : 4 fine aggregate) for sluice valve, with C.I.surface box 100mm top diameter,160mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:1.5:3 mix (1 cement :1.5 coarse sand : 3 graded stone aggregate 20mm nominal size), including neceasry excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12mm thick, finished with a floating coat of neat cement complete as per standard design: with common burnt clay F.P.S (non moduar) bricks of class designation 3.5	each	13395.35
18.34.1	Constructing masonry chamber 90x90x100 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 fine aggregate) for sluice valve, with C.I.surface box 100mm top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:1.5:3 mix (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20mm nominal size), including	each	23258.99

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine aggregate: 10 graded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 fine aggregate) 12mm thick finished with a floating coat of neat cement complete as per standard design - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5		
18.35.1	Constructing masonry chamber 120x120x100 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 fine aggregate) for sluice valve, with C.I.surface box 100mm top diameter, 160mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:1.5:3 mix (1 cement :1.5 fine aggregate : 3 graded stone aggregate 20mm nominal size), including necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 fine aggregate) 12mm thick , finished with a floating coat of neat cement complete as per standard design - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5	each	32146.07
18.36.1	Constructing masonry chamber 60x60x75 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 fine aggregate) for fire hydrants , with C.I. surface box 350 x 350 mm top and 165 mm deep (inside) with chained lid and RCC to slab 1:1.5:3 mix (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20 mm nominal size), including necessary excavation , foundation concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 fine aggregate) 12mm thick, finished with a floating coat of neat cement complete as per standard design - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5	each	12601.40
18.37.1	Constructing masonry chamber 60x45x50 cm inside , in brick work in cement mortar 1:4 (1 cement : 4 fine aggregate) for water meter complete with C.I.double flap surface box 400 x 200 x 200 mm (inside) with locking arrangement and RCC top slab 1:1.5:3 mix (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20 mm nominal size), including necessary excavation , foundation concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 fine aggregate) 12 mm thick, finished with a floating coat of neat cement complete as per standard design - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5	each	11956.57

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.38.1	Painting G.I.pipes and fittings with synthetic enamel white paint with two coats over a ready mixed priming coat , both of approved quality for new work - 15mm diameter pipe	metre	21.71
18.38.2	Painting G.I.pipes and fittings with synthetic enamel white paint with two coats over a ready mixed priming coat , both of approved quality for new work - 20mm diameter pipe	metre	26.27
18.38.3	Painting G.I.pipes and fittings with synthetic enamel white paint with two coats over a ready mixed priming coat , both of approved quality for new work - 25 mm diameter pipe	metre	33.93
18.38.4	Painting G.I.pipes and fittings with synthetic enamel white paint with two coats over a ready mixed priming coat , both of approved quality for new work - 32 mm diameter pipe	metre	41.17
18.38.5	Painting G.I.pipes and fittings with synthetic enamel white paint with two coats over a ready mixed priming coat , both of approved quality for new work - 40 mm diameter pipe	metre	47.99
18.38.6	Painting G.I.pipes and fittings with synthetic enamel white paint with two coats over a ready mixed priming coat , both of approved quality for new work - 50 mm diameter pipe	metre	57.92
18.39.1	Repainting G.I.pipes and fittings with synthetic enamel white paint with one coat of approved quality - 15mm diameter pipe	metre	10.43
18.39.2	Repainting G.I.pipes and fittings with synthetic enamel white paint with one coat of approved quality - 20mm diameter pipe	metre	12.51
18.39.3	Repainting G.I.pipes and fittings with synthetic enamel white paint with one coat of approved quality - 25mm diameter pipe	metre	15.90
18.39.4	Repainting G.I.pipes and fittings with synthetic enamel white paint with one coat of approved quality - 32 mm diameter pipe	metre	19.24
18.39.5	Repainting G.I.pipes and fittings with synthetic enamel white paint with one coat of approved quality - 40 mm diameter pipe	metre	22.23
18.39.6	Repainting G.I.pipes and fittings with synthetic enamel white paint with one coat of approved quality - 50mm diameter pipe	metre	26.75

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.40.1	Painting G.I.pipes and fittings with two coats of anti - corrosive bitumastic paint of approved quality - 15 mm diameter pipe	metre	13.56
18.40.2	Painting G.I.pipes and fittings with two coats of anti - corrosive bitumastic paint of approved quality - 20 mm diameter pipe	metre	16.45
18.40.3	Painting G.I.pipes and fittings with two coats of anti - corrosive bitumastic paint of approved quality - 25 mm diameter pipe	metre	20.84
18.40.4	Painting G.I.pipes and fittings with two coats of anti - corrosive bitumastic paint of approved quality - 32 mm diameter pipe	metre	25.41
18.40.5	Painting G.I.pipes and fittings with two coats of anti - corrosive bitumastic paint of approved quality - 40 mm diameter pipe	metre	28.93
18.40.6	Painting G.I.pipes and fittings with two coats of anti - corrosive bitumastic paint of approved quality - 50 mm diameter pipe	metre	35.19
18.40.7	Painting G.I.pipes and fittings with two coats of anti - corrosive bitumastic paint of approved quality - 65 mm diameter pipe	metre	43.82
18.40.8	Painting G.I.pipes and fittings with two coats of anti - corrosive bitumastic paint of approved quality - 80 mm diameter pipe	metre	51.04
18.41.1	Providing and filling sand of grading zone V or coarser grade, all -round the G.I.pipes in external work - 15mm diameter pipe	metre	484.48
18.41.2	Providing and filling sand of grading zone V or coarser grade, all -round the G.I.pipes in external work - 20 mm diameter pipe	metre	491.03
18.41.3	Providing and filling sand of grading zone V or coarser grade, all -round the G.I.pipes in external work - 25mm diameter pipe	metre	504.12
18.41.4	Providing and filling sand of grading zone V or coarser grade, all -round the G.I.pipes in external work - 32mm diameter pipe	metre	517.21
18.41.5	Providing and filling sand of grading zone V or coarser grade, all -round the G.I.pipes in external work - 40 mm diameter pipe	metre	523.76
18.41.6	Providing and filling sand of grading zone V or coarser grade, all -round the G.I.pipes in external work - 50 mm diameter pipe	metre	543.40

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.41.7	Providing and filling sand of grading zone V or coarser grade, all -round the G.I.pipes in external work - 65 mm diameter pipe	metre	857.65
18.41.8	Providing and filling sand of grading zone V or coarser grade, all -round the G.I.pipes in external work - 80mm diameter pipe	metre	883.84
18.41.9	Providing and filling sand of grading zone V or coarser grade, all -round the G.I.pipes in external work - 100 mm diameter pipe	metre	936.22
18.41.10	Providing and filling sand of grading zone V or coarser grade, all -round the G.I.pipes in external work - 150 mm diameter pipe	metre	1394.51
18.42.1	Boring with 100 mm diameter casing pipe for hand pump / tube well in all soils except ordinary hard rocks requiring blasting , including removing the casing pipe after the hand pump / tube well is lowered and tested - upto 6 metres depth	metre	912.01
18.42.2	Boring with 100 mm diameter casing pipe for hand pump / tube well in all soils except ordinary hard rocks requiring blasting , including removing the casing pipe after the hand pump / tube well is lowered and tested - beyond 6 m and upto 12 m depth	metre	1080.60
18.42.3	Boring with 100 mm diameter casing pipe for hand pump / tube well in all soils except ordinary hard rocks requiring blasting , including removing the casing pipe after the hand pump / tube well is lowered and tested - beyond 12 m and upto 18 m depth	metre	1254.63
18.43	Providing and placing in position filters of 40mm diameter G.I.pipe with brass strainer of approved quality	metre	872.64
18.44	Providing and fixing to filter and lowering to proper levels 40mm G.I.pipe for tube well including cleaning and priming the tube well	metre	694.07
18.45	Providing and placing in position hand pump of approved quality for 40mm diameter G.I.pipe complete with all accessories	each	1509.19
18.46.1	Providing and fixing G.I.union in G.I.pipe including cutting and threading the pipe and making long screws etc.complete (New work) - 15mm nominal bore	each	395.97

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.46.2	Providing and fixing G.I.union in G.I.pipe including cutting and threading the pipe and making long screws etc.complete (New work) - 20 mm nominal bore	each	414.47
18.46.3	Providing and fixing G.I.union in G.I.pipe including cutting and threading the pipe and making long screws etc.complete (New work) - 25mm nominal bore	each	519.74
18.46.4	Providing and fixing G.I.union in G.I.pipe including cutting and threading the pipe and making long screws etc.complete (New work) - 32 mm nominal bore	each	582.35
18.46.5	Providing and fixing G.I.union in G.I.pipe including cutting and threading the pipe and making long screws etc.complete (New work) - 40 mm nominal bore	each	708.96
18.46.6	Providing and fixing G.I.union in G.I.pipe including cutting and threading the pipe and making long screws etc.complete (New work) - 50 mm nominal bore	each	960.48
18.46.7	Providing and fixing G.I.union in G.I.pipe including cutting and threading the pipe and making long screws etc.complete (New work) - 65 mm nominal bore	each	1350.28
18.46.8	Providing and fixing G.I.union in G.I.pipe including cutting and threading the pipe and making long screws etc.complete (New work) - 80 mm nominal bore	each	1432.80
18.47.1	Providing and fixing G.I.Union in existing G.I.pipe line, cutting and threading the pipe and making long screws, including excavation, refilling the earth or cutting of wall and making good the same complete wherever required - 15 mm nominal bore	each	1012.55
18.47.2	Providing and fixing G.I.Union in existing G.I.pipe line, cutting and threading the pipe and making long screws, including excavation, refilling the earth or cutting of wall and making good the same complete wherever required - 20 mm nominal bore	each	1031.04
18.47.3	Providing and fixing G.I.Union in existing G.I.pipe line, cutting and threading the pipe and making long screws, including excavation, refilling the earth or cutting of wall and	each	1136.32

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	making good the same complete wherever required - 25 mm nominal bore		
18.47.4	Providing and fixing G.I.Union in existing G.I.pipe line, cutting and threading the pipe and making long screws, including excavation, refilling the earth or cutting of wall and making good the same complete wherever required - 32 mm nominal bore	each	1198.91
18.47.5	Providing and fixing G.I.Union in existing G.I.pipe line, cutting and threading the pipe and making long screws, including excavation, refilling the earth or cutting of wall and making good the same complete wherever required - 40mm nominal bore	each	1325.52
18.47.6	Providing and fixing G.I.Union in existing G.I.pipe line, cutting and threading the pipe and making long screws, including excavation, refilling the earth or cutting of wall and making good the same complete wherever required - 50 mm nominal bore	each	1801.25
18.47.7	Providing and fixing G.I.Union in existing G.I.pipe line, cutting and threading the pipe and making long screws, including excavation, refilling the earth or cutting of wall and making good the same complete wherever required - 65 mm nominal bore	each	2191.05
18.47.8	Providing and fixing G.I.Union in existing G.I.pipe line, cutting and threading the pipe and making long screws, including excavation, refilling the earth or cutting of wall and making good the same complete wherever required - 80 mm nominal bore	each	2273.57
18.48	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI: 12701 marked , with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank	litre	11.89
18.48A	Providing and fixing rectangular high density polyethylene water storage loft tank with cover ISI: 12701 marked, colour of opaque white or as approved by Engineer-in-charge. The rate includes making necessary holes for inlet, outlet & over flow pipes. The base support including fittings and fixtures for tank	litre	11.89

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	shall be paid separately		
18.49.1	Providing and fixing C.P.brass bib cock of approved quality conforming to IS: 8931 - 15 mm nominal bore	each	677.38
18.50.1	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms - 15mm nominal bore	each	768.94
18.51.1	Providing and fixing C.P.brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms - 15 mm nominal bore	each	832.00
18.52.1	Providing and fixing C.P.brass stop cock (concealed) of standard design and of approved make conforming to IS :8931 - 15 mm nominal bore	each	1074.29
18.53.1	Providing and fixing C.P.brass angle valve for basin mixer and geyser points of approved quality conforming to IS: 8931- 15 mm nominal bore	each	478.90
18.53A	Providing and fixing C.P.Brass extension nipple (size 15mm x 50mm) of approved make and quality as per direction of Engineer-in-charge.	no	72.25
18.54.1	Providing and fixing PTMT bib cock of approved quality and colour - 15mm nominal bore, 86 mm long , weighing not less than 88gms	each	213.56
18.54.2	Providing and fixing PTMT bib cock of approved quality and colour - 15mm nominal bore, 122 mm long , weighing not less than 99 gms	each	281.85
18.54.3	Providing and fixing PTMT bib cock of approved quality and colour - 15mm nominal bore,165 mm long , weighing not less than 110gms	each	294.09
18.54.4	Providing and fixing PTMT bib cock of approved quality and colour - 15mm nominal bore, 90 mm long , weighing not less than 93 gms	each	294.65
18.55.1	Providing and fixing PTMT stop cock of approved quality and colour - 15mm nominal bore , 86mm long, weighing not less	each	209.30

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	than 88 gms		
18.55.2	Providing and fixing PTMT stop cock of approved quality and colour - 20 mm nominal bore , 89mm long, weighing not less than 88 gms	each	271.89
18.55.3	Providing and fixing PTMT stop cock of approved quality and colour - Concealed stop cock , 15mm nominal bore, 108 mm long, weighing not less than 108 gms	each	321.69
18.56.1	Providing and fixing PTMT pillar cock of approved quality and colour - 15 mm nominal bore , 107 mm long, weighing not less than 110 gms	each	328.60
18.56.2	Providing and fixing PTMT pillar cock of approved quality and colour - 15mm nominal bore , 125 mm long foam flow , weighing not less than 120 gms	each	376.69
18.57.1	Providing and fixing PTMT , push cock of approved quality and colour - 15 mm nominal bore, 98 mm long, weighing not less than 75 gms	each	194.36
18.57.2	Providing and fixing PTMT , push cock of approved quality and colour - 15 mm nominal bore, 80 mm long, weighing not less than 46 gms	each	179.42
18.58.1.1	Providing and fixing PTMT grating of approved quality and colour - circular type - 100mm nominal dia	each	76.71
18.58.1.2	Providing and fixing PTMT grating of approved quality and colour - circular type - 125 mm nominal dia with 25mm waste hole	each	98.33
18.58.2.1	Providing and fixing PTMT grating of approved quality and colour - rectangular type with openable circular lid - 150mm nominal size square 100mm diameter of the inner hinged round grating	each	189.66
18.59.1	Providing and fixing C.I.double acting air valve of approved quality with bolts, nuts, rubber insertions etc.complete (The tail pieces, tappers etc. If required will be paid separately) - 50 mm dia	each	6483.60

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.59.2	Providing and fixing C.I.double acting air valve of approved quality with bolts, nuts, rubber insertions etc.complete (The tail pieces, tappers etc. If required will be paid separately) - 80 mm dia	each	8563.49
18.59.3	Providing and fixing C.I.double acting air valve of approved quality with bolts, nuts, rubber insertions etc.complete (The tail pieces, tappers etc. If required will be paid separately) - 100 mm dia	each	10860.62
18.60.1	Providing and fixing enclosed type water meter (bulk type) conforming to IS : 2373 and tested by Municipal board complete with bolts, nuts, rubber insertion etc .(The tail pieces if required will be paid separately) - 80mm dia nominal bore	each	4544.32
18.60.2	Providing and fixing enclosed type water meter (bulk type) conforming to IS : 2373 and tested by Municipal board complete with bolts, nuts, rubber insertion etc .(The tail pieces if required will be paid separately) - 100mm dia nominal bore	each	7906.31
18.60.3	Providing and fixing enclosed type water meter (bulk type) conforming to IS : 2373 and tested by Municipal board complete with bolts, nuts, rubber insertion etc .(The tail pieces if required will be paid separately) - 150mm dia nominal bore	each	12026.40
18.60.4	Providing and fixing enclosed type water meter (bulk type) conforming to IS : 2373 and tested by Municipal board complete with bolts, nuts, rubber insertion etc .(The tail pieces if required will be paid separately) - 200mm dia nominal bore	each	12843.00
18.61.1	Providing and fixing C.I.dirt box strainer for bulk type water meter with nuts,bolts, rubber insertions etc. complete conforming to IS:2373 - 80mm dia	each	5732.22
18.61.2	Providing and fixing C.I.dirt box strainer for bulk type water meter with nuts,bolts, rubber insertions etc. complete conforming to IS:2373 - 100mm dia	each	8772.70
18.61.3	Providing and fixing C.I.dirt box strainer for bulk type water meter with nuts,bolts, rubber insertions etc. complete conforming to IS:2373 - 150 mm dia	each	11857.12
18.61.4	Providing and fixing C.I.dirt box strainer for bulk type water meter with nuts,bolts, rubber insertions etc. complete	each	15346.84

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	conforming to IS:2373 - 200 mm dia		
18.62.1	Providing and fixing PTMT Ball cock of approved quality colour and make complete with Epoxy coatd aliminium rod with L.P / H.P.H.D.plastic ball - 15mm nominal bore, 105 mm long, weighing not less than 138 gms	each	300.39
18.62.2	Providing and fixing PTMT Ball cock of approved quality colour and make complete with Epoxy coatd aliminium rod with L.P / H.P.H.D.plastic ball - 20 mm nominal bore, 120 mm long, weighing not less than 198 gms	each	423.70
18.62.3	Providing and fixing PTMT Ball cock of approved quality colour and make complete with Epoxy coatd aliminium rod with L.P / H.P.H.D.plastic ball - 25 mm nominal bore, 152 mm long, weighing not less than 440 gms	each	875.60
18.62.4	Providing and fixing PTMT Ball cock of approved quality colour and make complete with Epoxy coatd aliminium rod with L.P / H.P.H.D.plastic ball - 40 mm nominal bore, 206 mm long, weighing not less than 690 gms	each	1567.01
18.62.5	Providing and fixing PTMT Ball cock of approved quality colour and make complete with Epoxy coatd aliminium rod with L.P / H.P.H.D.plastic ball - 50 mm nominal bore, 242 mm long, weighing not less than 1240 gms	each	2309.62
18.63	Providing and fixing PTMT angle stop cock 15 mm nominal bore, weighing not less than 85 gms	each	260.51
18.64	Providing and fixing PTMT swivelling shower, 15mm nominal bore, weighing not less than 40 gms	each	178.58
18.65	Providing and fixing PTMT Soap dish holder having length of 138 mm , breadth 102 mm, height of 75mm with concealed fitting arrangements , weighing not less than 106 gms	each	234.06
18.66.1	Providing and laying S&S C.I.standard specials such as tees, bends, collars, tapers and caps etc, suitable for flanged jointing as per IS:1538 - Upto 300 mm dia	quintal	11170.21
18.66.2	Providing and laying S&S C.I.standard specials such as tees, bends, collars, tapers and caps etc, suitable for flanged jointing	quintal	12861.72

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	as per IS:1538 - above 300 mm dia		
18.67.1	Providing and laying S&S C.I.Standard specials suitable for mechanical jointing as per IS:13382 - upto 300 mm dia	quintal	12861.72
18.67.2	Providing and laying S&S C.I.Standard specials suitable for mechanical jointing as per IS:13382 - above 300 mm dia	quintal	14041.08
18.68.1	Providing and laying D.I.specials of class K - 12 suitable for push - on jointing as per IS:9523 - upto 600 mm dia	quintal	25097.82
18.68.2	Providing and laying D.I.specials of class K - 12 suitable for push - on jointing as per IS:9523 - above 600 mm dia	quintal	28499.34
18.68A.1	Providing and laying Class K-12 ductile iron double chamber restrained joint(bolt less) specials such as tees, bends, collars, tapers and caps etc. conforming to IS 9523including testing of joints all complete - Upto 600mm nominal dia	quintal	33194.04
18.68A.2	Providing and laying Class K-12 ductile iron double chamber restrained joint(bolt less) specials such as tees, bends, collars, tapers and caps etc. conforming to IS 9523including testing of joints all complete - above 600mm nominal dia	quintal	42653.15
18.69.1	Providing and laying D.I.specials of class K -12 suitable for mechanical jointing as per IS:9523 - upto 600 mm dia	quintal	26520.45
18.69.2	Providing and laying D.I.specials of class K -12 suitable for mechanical jointing as per IS:9523 - above 600 mm dia	quintal	28499.34
18.70.1	Providing push -on-joints to Centrifugally (Spun) Cast iron pipes or Ductile iron pipes including testing of joints and including the cost of rubber gasket - 100 mm dia pipes	joint	142.69
18.70.2	Providing push -on-joints to Centrifugally (Spun) Cast iron pipes or Ductile iron pipes including testing of joints and including the cost of rubber gasket - 150 mm dia pipes	joint	233.17
18.70.3	Providing push -on-joints to Centrifugally (Spun) Cast iron pipes or Ductile iron pipes including testing of joints and including the cost of rubber gasket - 200 mm dia pipes	joint	340.58

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.70.4	Providing push -on-joints to Centrifugally (Spun) Cast iron pipes or Ductile iron pipes including testing of joints and including the cost of rubber gasket - 250 mm dia pipes	joint	420.39
18.70.5	Providing push -on-joints to Centrifugally (Spun) Cast iron pipes or Ductile iron pipes including testing of joints and including the cost of rubber gasket - 300 mm dia pipes	joint	547.15
18.70.6	Providing push -on-joints to Centrifugally (Spun) Cast iron pipes or Ductile iron pipes including testing of joints and including the cost of rubber gasket - 350 mm dia pipes	joint	638.34
18.70.7	Providing push -on-joints to Centrifugally (Spun) Cast iron pipes or Ductile iron pipes including testing of joints and including the cost of rubber gasket - 400 mm dia pipes	joint	807.77
18.70.8	Providing push -on-joints to Centrifugally (Spun) Cast iron pipes or Ductile iron pipes including testing of joints and including the cost of rubber gasket - 450 mm dia pipes	joint	930.26
18.70.9	Providing push -on-joints to Centrifugally (Spun) Cast iron pipes or Ductile iron pipes including testing of joints and including the cost of rubber gasket - 500 mm dia pipes	joint	1049.83
18.70.10	Providing push -on-joints to Centrifugally (Spun) Cast iron pipes or Ductile iron pipes including testing of joints and including the cost of rubber gasket - 600 mm dia pipes	joint	1413.10
18.70.11	Providing push -on-joints to Centrifugally (Spun) Cast iron pipes or Ductile iron pipes including testing of joints and including the cost of rubber gasket - 700 mm dia pipes	joint	1659.85
18.70.12	Providing push -on-joints to Centrifugally (Spun) Cast iron pipes or Ductile iron pipes including testing of joints and including the cost of rubber gasket - 750 mm dia pipes	joint	1864.71
18.70.13	Providing push -on-joints to Centrifugally (Spun) Cast iron pipes or Ductile iron pipes including testing of joints and including the cost of rubber gasket - 800 mm dia pipes	joint	2106.50
18.70.14	Providing push -on-joints to Centrifugally (Spun) Cast iron pipes or Ductile iron pipes including testing of joints and including the cost of rubber gasket - 900 mm dia pipes	joint	2370.11

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.70.15	Providing push -on-joints to Centrifugally (Spun) Cast iron pipes or Ductile iron pipes including testing of joints and including the cost of rubber gasket - 1000 mm dia pipes	joint	2838.44
18.71.1	Providing and laying double flanged (screwed / welded) centrifugally (spun) cast iron , class B (IS:1536) - 100mm dia C.I. double flanged pipe	metre	2434.07
18.71.2	Providing and laying double flanged (screwed / welded) centrifugally (spun) cast iron , class B (IS:1536) - 150mm dia C.I. double flanged pipe	metre	3783.55
18.71.3	Providing and laying double flanged (screwed / welded) centrifugally (spun) cast iron , class B (IS:1536) - 200mm dia C.I. double flanged pipe	metre	5244.84
18.71.4	Providing and laying double flanged (screwed / welded) centrifugally (spun) cast iron , class B (IS:1536) - 250 mm dia C.I. double flanged pipe	metre	7015.12
18.71.5	Providing and laying double flanged (screwed / welded) centrifugally (spun) cast iron , class B (IS:1536) - 300mm dia C.I. double flanged pipe	metre	8922.54
18.71.6	Providing and laying double flanged (screwed / welded) centrifugally (spun) cast iron , class B (IS:1536) - 350 mm dia C.I. double flanged pipe	metre	11398.44
18.71.7	Providing and laying double flanged (screwed / welded) centrifugally (spun) cast iron , class B (IS:1536) - 400 mm dia C.I. double flanged pipe	metre	14690.36
18.71.8	Providing and laying double flanged (screwed / welded) centrifugally (spun) cast iron , class B (IS:1536) - 450 mm dia C.I. double flanged pipe	metre	18974.41
18.71.9	Providing and laying double flanged (screwed / welded) centrifugally (spun) cast iron , class B (IS:1536) - 500 mm dia C.I. double flanged pipe	metre	25647.36
18.71.10	Providing and laying double flanged (screwed / welded) centrifugally (spun) cast iron , class B (IS:1536) - 600 mm dia	metre	32206.68

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	C.I. double flanged pipe		
18.72.1	Providing and laying S&S centrifugally cast (Spun) / Ductile iron pipes conforming to IS : 8329 - 100 mm dia Ductile iron class K-7 pipes	metre	1616.65
18.72.2	Providing and laying S&S centrifugally cast (Spun) / Ductile iron pipes conforming to IS : 8329 - 150 mm dia Ductile iron class K-7 pipes	metre	2273.89
18.72.3	Providing and laying S&S centrifugally cast (Spun) / Ductile iron pipes conforming to IS : 8329 - 200 mm dia Ductile iron class K-7 pipes	metre	3031.29
18.72.4	Providing and laying S&S centrifugally cast (Spun) / Ductile iron pipes conforming to IS : 8329 - 250 mm dia Ductile iron class K-7 pipes	metre	4165.97
18.72.5	Providing and laying S&S centrifugally cast (Spun) / Ductile iron pipes conforming to IS : 8329 - 300 mm dia Ductile iron class K-7 pipes	metre	5754.75
18.72.6	Providing and laying S&S centrifugally cast (Spun) / Ductile iron pipes conforming to IS : 8329 - 350 mm dia Ductile iron class K-7 pipes	metre	6854.12
18.72.7	Providing and laying S&S centrifugally cast (Spun) / Ductile iron pipes conforming to IS : 8329 - 400 mm dia Ductile iron class K-7 pipes	metre	7885.37
18.72.8	Providing and laying S&S centrifugally cast (Spun) / Ductile iron pipes conforming to IS : 8329 - 450 mm dia Ductile iron class K-7 pipes	metre	9594.35
18.72.9	Providing and laying S&S centrifugally cast (Spun) / Ductile iron pipes conforming to IS : 8329 - 500 mm dia Ductile iron class K-7 pipes	metre	11349.28
18.72.10	Providing and laying S&S centrifugally cast (Spun) / Ductile iron pipes conforming to IS : 8329 - 600 mm dia Ductile iron class K-7 pipes	metre	14746.47

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.72.11	Providing and laying S&S centrifugally cast (Spun) / Ductile iron pipes conforming to IS : 8329 - 700 mm dia Ductile iron class K-7 pipes	metre	19150.70
18.72.12	Providing and laying S&S centrifugally cast (Spun) / Ductile iron pipes conforming to IS : 8329 - 800 mm dia Ductile iron class K-7 pipes	metre	23921.83
18.72.13	Providing and laying S&S centrifugally cast (Spun) / Ductile iron pipes conforming to IS : 8329 - 900 mm dia Ductile iron class K-7 pipes	metre	31223.57
18.72.14	Providing and laying S&S centrifugally cast (Spun) / Ductile iron pipes conforming to IS : 8329 - 1000 mm dia Ductile iron class K-7 pipes	metre	33224.37
18.72.15	Providing and laying S&S centrifugally cast (Spun) / Ductile iron pipes conforming to IS : 8329 - 100 mm dia Ductile iron class K-9 pipes	metre	1605.09
18.72.16	Providing and laying S&S centrifugally cast (Spun) / Ductile iron pipes conforming to IS : 8329 - 150 mm dia Ductile iron class K-9 pipes	metre	2374.06
18.72.17	Providing and laying S&S centrifugally cast (Spun) / Ductile iron pipes conforming to IS : 8329 - 200 mm dia Ductile iron class K-9 pipes	metre	3155.97
18.72.18	Providing and laying S&S centrifugally cast (Spun) / Ductile iron pipes conforming to IS : 8329 - 250 mm dia Ductile iron class K-9 pipes	metre	4498.27
18.72.19	Providing and laying S&S centrifugally cast (Spun) / Ductile iron pipes conforming to IS : 8329 - 300 mm dia Ductile iron class K-9 pipes	metre	5607.86
18.72.20	Providing and laying S&S centrifugally cast (Spun) / Ductile iron pipes conforming to IS : 8329 - 350 mm dia Ductile iron class K-9 pipes	metre	6894.20
18.72.21	Providing and laying S&S centrifugally cast (Spun) / Ductile iron pipes conforming to IS : 8329 - 400 mm dia Ductile iron class K-9 pipes	metre	8815.02

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.72.22	Providing and laying S&S centrifugally cast (Spun) / Ductile iron pipes conforming to IS : 8329 - 450 mm dia Ductile iron class K-9 pipes	metre	10389.15
18.72.23	Providing and laying S&S centrifugally cast (Spun) / Ductile iron pipes conforming to IS : 8329 - 500 mm dia Ductile iron class K-9 pipes	metre	12929.27
18.72.24	Providing and laying S&S centrifugally cast (Spun) / Ductile iron pipes conforming to IS : 8329 - 600 mm dia Ductile iron class K-9 pipes	metre	15586.10
18.72.25	Providing and laying S&S centrifugally cast (Spun) / Ductile iron pipes conforming to IS : 8329 - 700 mm dia Ductile iron class K-9 pipes	metre	21698.47
18.72.26	Providing and laying S&S centrifugally cast (Spun) / Ductile iron pipes conforming to IS : 8329 - 750 mm dia Ductile iron class K-9 pipes	metre	23370.27
18.72.27	Providing and laying S&S centrifugally cast (Spun) / Ductile iron pipes conforming to IS : 8329 - 800 mm dia Ductile iron class K-9 pipes	metre	23759.31
18.72.28	Providing and laying S&S centrifugally cast (Spun) / Ductile iron pipes conforming to IS : 8329 - 900 mm dia Ductile iron class K-9 pipes	metre	28705.09
18.72.29	Providing and laying S&S centrifugally cast (Spun) / Ductile iron pipes conforming to IS : 8329 - 1000 mm dia Ductile iron class K-9 pipes	metre	32080.45
18.72A.1	Providing, laying, jointing and testing S&S Centrifugally cast ductile Iron double chamber class K-9 pressure pipes conforming to IS 8329:2000 with restrained joints(bolt less),all complete - 100mm nominal dia pipe	metre	2046.01
18.72A.2	Providing, laying, jointing and testing S&S Centrifugally cast ductile Iron double chamber class K-9 pressure pipes conforming to IS 8329:2000 with restrained joints(bolt less),all complete - 150mm nominal dia pipe	metre	2832.69

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.72A.3	Providing, laying, jointing and testing S&S Centrifugally cast ductile Iron double chamber class K-9 pressure pipes conforming to IS 8329:2000 with restrained joints(bolt less),all complete - 200mm nominal dia pipe	metre	3564.68
18.72A.4	Providing, laying, jointing and testing S&S Centrifugally cast ductile Iron double chamber class K-9 pressure pipes conforming to IS 8329:2000 with restrained joints(bolt less),all complete - 250mm nominal dia pipe	metre	4763.26
18.72A.5	Providing, laying, jointing and testing S&S Centrifugally cast ductile Iron double chamber class K-9 pressure pipes conforming to IS 8329:2000 with restrained joints(bolt less),all complete - 300mm nominal dia pipe	metre	5488.68
18.72A.6	Providing, laying, jointing and testing S&S Centrifugally cast ductile Iron double chamber class K-9 pressure pipes conforming to IS 8329:2000 with restrained joints(bolt less),all complete - 350mm nominal dia pipe	metre	7255.04
18.72A.7	Providing, laying, jointing and testing S&S Centrifugally cast ductile Iron double chamber class K-9 pressure pipes conforming to IS 8329:2000 with restrained joints(bolt less),all complete - 400mm nominal dia pipe	metre	9050.62
18.72A.8	Providing, laying, jointing and testing S&S Centrifugally cast ductile Iron double chamber class K-9 pressure pipes conforming to IS 8329:2000 with restrained joints(bolt less),all complete - 450mm nominal dia pipe	metre	10781.32
18.72A.9	Providing, laying, jointing and testing S&S Centrifugally cast ductile Iron double chamber class K-9 pressure pipes conforming to IS 8329:2000 with restrained joints(bolt less),all complete - 500mm nominal dia pipe	metre	12715.76
18.72A.10	Providing, laying, jointing and testing S&S Centrifugally cast ductile Iron double chamber class K-9 pressure pipes conforming to IS 8329:2000 with restrained joints(bolt less),all complete - 600mm nominal dia pipe	metre	16621.84
18.72A.11	Providing, laying, jointing and testing S&S Centrifugally cast ductile Iron double chamber class K-9 pressure pipes conforming to IS 8329:2000 with restrained joints(bolt less),all complete - 700mm nominal dia pipe	metre	19357.53

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.72A.12	Providing, laying, jointing and testing S&S Centrifugally cast ductile Iron double chamber class K-9 pressure pipes conforming to IS 8329:2000 with restrained joints(bolt less),all complete - 750mm nominal dia pipe	metre	23654.44
18.72A.13	Providing, laying, jointing and testing S&S Centrifugally cast ductile Iron double chamber class K-9 pressure pipes conforming to IS 8329:2000 with restrained joints(bolt less),all complete - 800 mm nominal dia pipe	metre	26186.57
18.72A.14	Providing, laying, jointing and testing S&S Centrifugally cast ductile Iron double chamber class K-9 pressure pipes conforming to IS 8329:2000 with restrained joints(bolt less),all complete - 900 mm nominal dia pipe	metre	32647.20
18.72A.15	Providing, laying, jointing and testing S&S Centrifugally cast ductile Iron double chamber class K-9 pressure pipes conforming to IS 8329:2000 with restrained joints(bolt less),all complete - 1000 mm nominal dia pipe	metre	39575.11
18.73.1	Providing and laying double flanged (screwed / welded) centrifugally (spun) ductile iron pipes of class K-9 conforming to IS:8329 - 100 mm dia ductile iron double flanged	metre	2329.38
18.73.2	Providing and laying double flanged (screwed / welded) centrifugally (spun) ductile iron pipes of class K-9 conforming to IS:8329 - 150 mm dia ductile iron double flanged	metre	3476.57
18.73.3	Providing and laying double flanged (screwed / welded) centrifugally (spun) ductile iron pipes of class K-9 conforming to IS:8329 - 200 mm dia ductile iron double flanged	metre	4556.04
18.73.4	Providing and laying double flanged (screwed / welded) centrifugally (spun) ductile iron pipes of class K-9 conforming to IS:8329 - 250 mm dia ductile iron double flanged	metre	5992.30
18.73.5	Providing and laying double flanged (screwed / welded) centrifugally (spun) ductile iron pipes of class K-9 conforming to IS:8329 - 300 mm dia ductile iron double flanged	metre	7595.58
18.73.6	Providing and laying double flanged (screwed / welded) centrifugally (spun) ductile iron pipes of class K-9 conforming to IS:8329 - 350 mm dia ductile iron double flanged	metre	9483.38

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.73.7	Providing and laying double flanged (screwed / welded) centrifugally (spun) ductile iron pipes of class K-9 conforming to IS:8329 -400 mm dia ductile iron double flanged	metre	11385.13
18.73.8	Providing and laying double flanged (screwed / welded) centrifugally (spun) ductile iron pipes of class K-9 conforming to IS:8329 - 450mm dia ductile iron double flanged	metre	13034.49
18.73.9	Providing and laying double flanged (screwed / welded) centrifugally (spun) ductile iron pipes of class K-9 conforming to IS:8329 - 500 mm dia ductile iron double flanged	metre	15711.28
18.73.10	Providing and laying double flanged (screwed / welded) centrifugally (spun) ductile iron pipes of class K-9 conforming to IS:8329 - 600 mm dia ductile iron double flanged	metre	20799.95
18.73.11	Providing and laying double flanged (screwed / welded) centrifugally (spun) ductile iron pipes of class K-9 conforming to IS:8329 - 700 mm dia ductile iron double flanged	metre	26543.01
18.74.1	Providing and fixing unplasticised P.V.C. connection pipe with PTMT nuts, collar, and bush of approved quality and colour - 15 mm nominal bore with 30 cm lengthh	each	100.20
18.74.2	Providing and fixing unplasticised P.V.C. connection pipe with PTMT nuts, collar, and bush of approved quality and colour - 15 mm nominal bore with 45cm lengthh	each	116.71
18.75.1	Providing and fixing PTMT extension nipple for water tank pipe, fittings of approved quality and colour - 15 mm nominal bore , weighing not less than 32 gms	each	85.02
18.75.2	Providing and fixing PTMT extension nipple for water tank pipe, fittings of approved quality and colour - 20mm nominal bore , weighing not less than 40 gms	each	99.25
18.75.3	Providing and fixing PTMT extension nipple for water tank pipe, fittings of approved quality and colour - 25 mm nominal bore , weighing not less than 62 gms	each	144.77
18.76.1	Cutting holes upto 30x30 cm in walls including making good the same - with common burnt clay F.P.S.(non - modular) brick	each	499.04

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.77	Cutting holes upto 15x15 cm in R.C.C floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc with cement concrete 1:2:4 (1 cement : 2 fine aggregate: 4 graded stone aggregate 20 mm nominal size)including finishing complete so as to make it leak proof	each	510.82
18.78	Making chases upto 7.5x7.5 cm in walls including making good and finishing with matching surface after housing G.I.pipe etc.	metre	239.08
18.79	Making hole upto 20x20 cm and embedding pipes upto 150mm diameter in masonry and filling with cement concrete 1:3:6 (1 cement : 3coarsesand: 6 graded stone aggregate 20 mm nominal size) including disposal of malba	metre	252.67
18.80.1	Disinfecting C.I water mains by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water , operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory - 80 mm diameter C.I.pipe	metre	21.99
18.80.2	Disinfecting C.I water mains by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water , operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory -100 mm diameter C.I. pipe	metre	28.85
18.80.3	Disinfecting C.I water mains by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water , operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory - 125mm diameter C.I.pipe	metre	35.96
18.80.4	Disinfecting C.I water mains by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water , operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory -150 mm diameter C.I.pipe	metre	43.06
18.80.5	Disinfecting C.I water mains by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water , operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory -200 mm diameter C.I.pipe	metre	57.34

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.80.6	Disinfecting C.I water mains by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water , operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory -250 mm diameter C.I.pipe	metre	72.04
18.80.7	Disinfecting C.I water mains by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water , operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory -300 mm diameter C.I.pipe	metre	80.07
18.80.8	Disinfecting C.I water mains by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water , operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory - 350mm diameter C.I.pipe	metre	88.33
18.80.9	Disinfecting C.I water mains by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water , operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory -400 mm diameter C.I.pipe	metre	96.97
18.80.10	Disinfecting C.I water mains by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water , operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory - 450 mm diameter C.I.pipe	metre	105.74
18.80.11	Disinfecting C.I water mains by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water , operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory -500 mm diameter C.I.pipe	metre	114.95
18.80.12	Disinfecting C.I water mains by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water , operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory -600 mm diameter C.I.pipe	metre	133.67
18.81.1	Extra for every operation of disinfecting the C.I. main by	metre	8.04

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	flushing with water containing bleaching powder @ 0.5 gms per litre of water and cleaning the same with fresh water, including getting the samples of water tested in the municipal laboratory - 80mm diameter C.I.pipe		
18.81.2	Extra for every operation of disinfecting the C.I. main by flushing with water containing bleaching powder @ 0.5 gms per litre of water and cleaning the same with fresh water, including getting the samples of water tested in the municipal laboratory - 100 mm diameter C.I.pipe	metre	9.85
18.81.3	Extra for every operation of disinfecting the C.I. main by flushing with water containing bleaching powder @ 0.5 gms per litre of water and cleaning the same with fresh water, including getting the samples of water tested in the municipal laboratory - 125 mm diameter C.I.pipe	metre	12.01
18.81.4	Extra for every operation of disinfecting the C.I. main by flushing with water containing bleaching powder @ 0.5 gms per litre of water and cleaning the same with fresh water, including getting the samples of water tested in the municipal laboratory - 150 mm diameter C.I.pipe	metre	13.96
18.81.5	Extra for every operation of disinfecting the C.I. main by flushing with water containing bleaching powder @ 0.5 gms per litre of water and cleaning the same with fresh water, including getting the samples of water tested in the municipal laboratory - 200 mm diameter C.I.pipe	metre	21.16
18.81.6	Extra for every operation of disinfecting the C.I. main by flushing with water containing bleaching powder @ 0.5 gms per litre of water and cleaning the same with fresh water, including getting the samples of water tested in the municipal laboratory - 250mm diameter C.I.pipe	metre	24.34
18.81.7	Extra for every operation of disinfecting the C.I. main by flushing with water containing bleaching powder @ 0.5 gms per litre of water and cleaning the same with fresh water, including getting the samples of water tested in the municipal laboratory - 300 mm diameter C.I.pipe	metre	27.31
18.81.8	Extra for every operation of disinfecting the C.I. main by flushing with water containing bleaching powder @ 0.5 gms per litre of water and cleaning the same with fresh water,	metre	31.96

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	including getting the samples of water tested in the municipal laboratory - 350 mm diameter C.I.pipe		
18.81.9	Extra for every operation of disinfecting the C.I. main by flushing with water containing bleaching powder @ 0.5 gms per litre of water and cleaning the same with fresh water, including getting the samples of water tested in the municipal laboratory - 400 mm diameter C.I.pipe	metre	36.67
18.81.10	Extra for every operation of disinfecting the C.I. main by flushing with water containing bleaching powder @ 0.5 gms per litre of water and cleaning the same with fresh water, including getting the samples of water tested in the municipal laboratory - 450 mm diameter C.I.pipe	metre	41.49
18.81.11	Extra for every operation of disinfecting the C.I. main by flushing with water containing bleaching powder @ 0.5 gms per litre of water and cleaning the same with fresh water, including getting the samples of water tested in the municipal laboratory - 500 mm diameter C.I.pipe	metre	46.35
18.81.12	Extra for every operation of disinfecting the C.I. main by flushing with water containing bleaching powder @ 0.5 gms per litre of water and cleaning the same with fresh water, including getting the samples of water tested in the municipal laboratory - 600 mm diameter C.I.pipe	metre	56.28
18.82.1	Dismantling old C.I.pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks, including stacking of pipes at site lead upto 50 metre - 80mm diameter C.I.pipe	metre	380.21
18.82.2	Dismantling old C.I.pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks, including stacking of pipes at site lead upto 50 metre - 100 mm diameter C.I.pipe	metre	399.89
18.82.3	Dismantling old C.I.pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks, including stacking of pipes at site lead upto 50 metre - 125 mm diameter C.I.pipe	metre	418.61

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.82.4	Dismantling old C.I.pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks, including stacking of pipes at site lead upto 50 metre - 150 mm diameter C.I.pipe	metre	437.57
18.82.5	Dismantling old C.I.pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks, including stacking of pipes at site lead upto 50 metre - 200 mm diameter C.I.pipe	metre	491.89
18.82.6	Dismantling old C.I.pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks, including stacking of pipes at site lead upto 50 metre -250 mm diameter C.I.pipe	metre	544.60
18.82.7	Dismantling old C.I.pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks, including stacking of pipes at site lead upto 50 metre - 300 mm diameter C.I.pipe	metre	592.98
18.82.8	Dismantling old C.I.pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks, including stacking of pipes at site lead upto 50 metre - 350 mm diameter C.I.pipe	metre	640.10
18.82.9	Dismantling old C.I.pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks, including stacking of pipes at site lead upto 50 metre - 400 mm diameter C.I.pipe	metre	684.16
18.82.10	Dismantling old C.I.pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks, including stacking of pipes at site lead upto 50 metre - 450 mm diameter C.I.pipe	metre	729.09
18.82.11	Dismantling old C.I.pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked	metre	769.91

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	joints, melting of lead and making into blocks, including stacking of pipes at site lead upto 50 metre - 500 mm diameter C.I.pipe		
18.82.12	Dismantling old C.I.pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks, including stacking of pipes at site lead upto 50 metre - 600 mm diameter C.I.pipe	metre	844.36
18.83.1	Labour for cutting C.I.pipe with steel saw - 80mm diameter C.I.pipe	each	173.33
18.83.2	Labour for cutting C.I.pipe with steel saw - 100 mm diameter C.I.pipe	each	231.98
18.83.3	Labour for cutting C.I.pipe with steel saw - 125 mm diameter C.I.pipe	each	320.87
18.83.4	Labour for cutting C.I.pipe with steel saw - 150 mm diameter C.I.pipe	each	435.55
18.83.5	Labour for cutting C.I.pipe with steel saw - 200 mm diameter C.I.pipe	each	580.85
18.83.6	Labour for cutting C.I.pipe with steel saw - 250 mm diameter C.I.pipe	each	723.59
18.83.7	Labour for cutting C.I.pipe with steel saw - 300 mm diameter C.I.pipe	each	868.89
18.83.8	Labour for cutting C.I.pipe with steel saw - 350 mm diameter C.I.pipe	each	1011.61
18.83.9	Labour for cutting C.I.pipe with steel saw - 400 mm diameter C.I.pipe	each	1156.55
18.83.10	Labour for cutting C.I.pipe with steel saw - 450 mm diameter C.I.pipe	each	1299.64
18.83.11	Labour for cutting C.I.pipe with steel saw - 500 mm diameter C.I.pipe	each	1444.57

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.83.12	Labour for cutting C.I.pipe with steel saw - 600 mm diameter C.I.pipe	each	1727.41
18.84.1	Providing & fixing chrome plated brass battery based infrared sensor operated pillar cock , having foam flow technology - 15 mm nominal bore	each	11119.49
18.85.1	Providing and fixing Stainless steel pipe and fitting of grade AISI 304 as per JIS standard 3448 complete with press type fitting (fitting shall be paid for separately) including fixing of the pipe with clamps at 1.00 m spacing including cutting and making good the walls including testing of joints complete as per direction of Engineer-in-charge(The pipe length inserted in the fitting shall not be measured for payment) - Internal work - exposed on wall - 15.88 mm outer dia pipe	metre	509.00
18.85.2	Providing and fixing Stainless steel pipe and fitting of grade AISI 304 as per JIS standard 3448 complete with press type fitting (fitting shall be paid for separately) including fixing of the pipe with clamps at 1.00 m spacing including cutting and making good the walls including testing of joints complete as per direction of Engineer-in-charge (The pipe length inserted in the fitting shall not be measured for payment) - Internal work - exposed on wall - 22.22 mm outer dia pipe	metre	722.61
18.85.3	Providing and fixing Stainless steel pipe and fitting of grade AISI 304 as per JIS standard 3448 complete with press type fitting (fitting shall be paid for separately) including fixing of the pipe with clamps at 1.00 m spacing including cutting and making good the walls including testing of joints complete as per direction of Engineer-in-charge (The pipe length inserted in the fitting shall not be measured for payment) - Internal work - exposed on wall - 28.58 mm outer dia pipe	metre	838.04
18.85.4	Providing and fixing Stainless steel pipe and fitting of grade AISI 304 as per JIS standard 3448 complete with press type fitting (fitting shall be paid for separately) including fixing of the pipe with clamps at 1.00 m spacing including cutting and making good the walls including testing of joints complete as per direction of Engineer-in-charge (The pipe length inserted in the fitting shall not be measured for payment) - Internal work - exposed on wall - 34.00 mm outer dia pipe	metre	1144.26
18.85.5	Providing and fixing Stainless steel pipe and fitting of grade	metre	1361.19

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	AISI 304 as per JIS standard 3448 complete with press type fitting (fitting shall be paid for separately) including fixing of the pipe with clamps at 1.00 m spacing including cutting and making good the walls including testing of joints complete as per direction of Engineer-in-charge(The pipe length inserted in the fitting shall not be measured for payment) - Internal work - exposed on wall - 42.70 mm outer dia pipe		
18.85.6	Providing and fixing Stainless steel pipe and fitting of grade AISI 304 as per JIS standard 3448 complete with press type fitting (fitting shall be paid for separately) including fixing of the pipe with clamps at 1.00 m spacing including cutting and making good the walls including testing of joints complete as per direction of Engineer-in-charge (The pipe length inserted in the fitting shall not be measured for payment) - Internal work - exposed on wall - 48.60 mm outer dia pipe	metre	1510.56
18.85A.1	Providing and fixing Stainless Steel pipe and fitting of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards complete with press type fitting (fitting shall be paid for separately) including fixing of the pipe with clamps at 1.00 m spacing including cutting and making good the walls including testing of joints complete as per direction of Engineer-in-charge. (The pipe length inserted in the fitting shall not be measured for payment) - Internal work-Exposed on wall-15mm outer dia pipe	metre	786.91
18.85A.2	Providing and fixing Stainless Steel pipe and fitting of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards complete with press type fitting (fitting shall be paid for separately) including fixing of the pipe with clamps at 1.00 m spacing including cutting and making good the walls including testing of joints complete as per direction of Engineer-in-charge. (The pipe length inserted in the fitting shall not be measured for payment) - Internal work-Exposed on wall-22mm outer dia pipe	metre	1136.98
18.85A.3	Providing and fixing Stainless Steel pipe and fitting of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards complete with press type fitting (fitting shall be paid for separately) including fixing of the pipe with clamps at 1.00 m spacing including cutting and making good the walls including testing of joints complete as per direction of Engineer-in-charge. (The pipe length inserted in the fitting shall not be measured for payment) - Internal work-Exposed on wall-28mm outer dia pipe	metre	1406.04

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.85A.4	Providing and fixing Stainless Steel pipe and fitting of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards complete with press type fitting (fitting shall be paid for separately) including fixing of the pipe with clamps at 1.00 m spacing including cutting and making good the walls including testing of joints complete as per direction of Engineer-in-charge. (The pipe length inserted in the fitting shall not be measured for payment) - Internal work-Exposed on wall-35mm outer dia pipe	metre	1943.35
18.85A.5	Providing and fixing Stainless Steel pipe and fitting of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards complete with press type fitting (fitting shall be paid for separately) including fixing of the pipe with clamps at 1.00 m spacing including cutting and making good the walls including testing of joints complete as per direction of Engineer-in-charge. (The pipe length inserted in the fitting shall not be measured for payment) - Internal work-Exposed on wall-42mm outer dia pipe	metre	2334.45
18.85A.6	Providing and fixing Stainless Steel pipe and fitting of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards complete with press type fitting (fitting shall be paid for separately) including fixing of the pipe with clamps at 1.00 m spacing including cutting and making good the walls including testing of joints complete as per direction of Engineer-in-charge. (The pipe length inserted in the fitting shall not be measured for payment) - Internal work-Exposed on wall-54mm outer dia pipe	metre	2961.31
18.86.1	Providing and fixing Stainless steel pipe and fittings of grade AISI 304 as per JIS standard 3448 complete with press type fitting (fitting shall be paid for separately) i.e fixing of the pipe with clamps at 1.00 m spacing and also including cutting of chases and making good the walls including testing of joints complete as per direction of Engineer-in-charge (The pipe length inserted in the fitting shall not be measured for payment) - Internal work - Concealed pipe - 15.88 outer dia pipe	metre	747.30
18.86.2	Providing and fixing Stainless steel pipe and fittings of grade AISI 304 as per JIS standard 3448 complete with press type fitting (fitting shall be paid for separately) i.e fixing of the pipe with clamps at 1.00 m spacing and also including cutting of chases and making good the walls including testing of joints	metre	960.91

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	complete as per direction of Engineer-in-charge(The pipe length inserted in the fitting shall not be measured for payment) - Internal work - Concealed pipe - 22.22 outer dia pipe		
18.86A.1	Providing and fixing Stainless Steel pipe and fitting of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards complete with press type fitting (fitting shall be paid for separately) including fixing of the pipe with clamps at 1.00m spacing and also including cutting of chases and making good the walls including testing of joints complete as per direction of Engineer-in-charge.(The pipe length inserted in the fitting shall not be measured for payment) - Internal work - Concealed pipe - 15mm outer dia pipe	metre	1025.21
18.86A.2	Providing and fixing Stainless Steel pipe and fitting of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards complete with press type fitting (fitting shall be paid for separately) including fixing of the pipe with clamps at 1.00m spacing and also including cutting of chases and making good the walls including testing of joints complete as per direction of Engineer-in-charge.(The pipe length inserted in the fitting shall not be measured for payment) - Internal work - Concealed pipe - 22mm outer dia pipe	metre	1375.28
18.87.1	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V- profile or M-profile and with - O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Coupling /Socket - For 15.88 mm outer dia pipe	each	113.82
18.87.2	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V- profile or M-profile and with - O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge- Coupling /Socket - For 22.22 mm outer dia pipe	each	165.02
18.87.3	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V- profile or M-profile and with - O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Coupling /Socket - For 28.58 mm outer dia pipe	each	199.17
18.87.4	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard	each	425.36

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	with V- profile or M-profile and with - O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Coupling /Socket - For 34.00 mm outer dia pipe		
18.87.5	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V- profile or M-profile and with - O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Coupling /Socket - For 42.70 mm outer dia pipe	each	611.74
18.87.6	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V- profile or M-profile and with - O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Coupling /Socket - For 48.60mm outer dia pipe	each	825.13
18.87A.1	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge. Coupling / socket. For 15mm outer dia pipe	each	372.16
18.87A.2	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge. Coupling / socket. -for 22mm outer dia pipe	each	465.21
18.87A.3	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge. Coupling / socket. -for 28mm outer dia pipe	each	542.74
18.87A.4	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge. Coupling / socket. -for 35mm outer dia pipe	each	682.30
18.87A.5	Providing and fixing required Stainless Steel fitting of press fit	each	922.67

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge. Coupling / socket. -for 42mm outer dia pipe		
18.87A.6	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge. Coupling / socket. -for 54mm outer dia pipe	each	1108.72
18.88.1	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducer - for 22.22 mm x 15.88 mm outer dia pipe	each	199.17
18.88.2	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducer - for 28.58 mm x 15.88 mm outer dia pipe	each	268.87
18.88.3	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducer - for 28.58 mm x 22.22 mm outer dia pipe	each	277.42
18.88.4	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducer - for 34.00 mm x 15.88 mm outer dia pipe	each	412.56
18.88.5	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of	each	411.15

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	Engineer-in-charge - reducer - for 34.00 mm x 22.22 mm outer dia pipe		
18.88.6	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducer - for 34.00 mm x 28.58 mm outer dia pipe	each	448.85
18.88.7	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge- reducer - for 42.70 mm x 15.88 mm outer dia pipe	each	684.29
18.88.8	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducer - for 42.70 mm x 22.22 mm outer dia pipe	each	689.98
18.88.9	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge- reducer - for 42.70 mm x 28.58 mm outer dia pipe	each	691.41
18.88.10	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge- reducer - for 42.70 mm x 34.00 mm outer dia pipe	each	739.77
18.88.11	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducer - for 48.60mm x 15.88 mm outer dia pipe	each	867.80

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.88.12	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducer - for 48.60 mm x 22.22 mm outer dia pipe	each	876.34
18.88.13	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducer - for 48.60 mm x 28.58mm outer dia pipe	each	880.62
18.88.14	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducer - for 48.60 mm x 34.00 mm outer dia pipe	each	889.15
18.88.15	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducer - for 48.60mm x 42.70 mm outer dia pipe	each	782.45
18.88A.1	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standars with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducer - for 22mm x 15 mm outer dia pipe	each	441.96
18.88A.2	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standars with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducer - for 28mm x 15 mm outer dia pipe	each	534.99
18.88A.3	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standars with V-profile and with O-ring sealing	each	651.29

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducer - for 28mm x 22mm outer dia pipe		
18.88A.4	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standars with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducer - for 35mm x 22 mm outer dia pipe	each	659.04
18.88A.5	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standars with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducer - for 35mm x 28 mm outer dia pipe	each	814.10
18.88A.6	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standars with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducer - for 42mm x 22 mm outer dia pipe	each	1046.71
18.88A.7	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standars with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducer - for 42mm x 28 mm outer dia pipe	each	1194.01
18.88A.8	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standars with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducer - for 42mm x 35 mm outer dia pipe	each	1248.29
18.88A.9	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standars with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducer - for 54mm x 28 mm outer dia pipe	each	1449.88

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.88A.10	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducer - for 54mm x 35 mm outer dia pipe	each	1713.50
18.88A.11	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducer - for 54mm x 42 mm outer dia pipe	each	1783.29
18.89.1	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G-116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Slip Coupling / Socket - For 15.88mm outer dia pipe	each	220.51
18.89.2	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G-116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Slip Coupling / Socket - For 22.22 mm outer dia pipe	each	341.43
18.89.3	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G-116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Slip Coupling / Socket - For 28.58 mm outer dia pipe	each	441.03
18.89.4	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G-116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Slip Coupling / Socket - For 34.00mm outer dia pipe	each	657.26
18.89.5	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G-116 standard with V-profile or M-profile and with O-ring sealing	each	903.38

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	gasket of EPDM material of required dia as per direction of Engineer-in-charge - Slip Coupling / Socket - For 42.70 mm outer dia pipe		
18.89.6	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G-116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Slip Coupling / Socket - For 48.60mm outer dia pipe	each	1123.88
18.89A.1	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge -Sleeve / Slip Coupling / Socket -for 15mm outer dia pipe	each	651.29
18.89A.2	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge -Sleeve / Slip Coupling / Socket -for 22mm outer dia pipe	each	775.34
18.89A.3	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge -Sleeve / Slip Coupling / Socket -for 28mm outer dia pipe	each	899.38
18.89A.4	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge -Sleeve / Slip Coupling / Socket -for 35mm outer dia pipe	each	1000.18
18.89A.5	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge -Sleeve / Slip Coupling / Socket -for 42mm outer dia pipe	each	1163.02

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.89A.6	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge -Sleeve / Slip Coupling / Socket -for 54mm outer dia pipe	each	1651.47
18.90.1	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M- profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Elbow 90 degree - for 15.88 mm outer dia pipe	each	165.75
18.90.2	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M- profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Elbow 90 degree - for 22.22 mm outer dia pipe	each	284.54
18.90.3	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M- profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Elbow 90 degree - for 28.58 mm outer dia pipe	each	398.33
18.90.4	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M- profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Elbow 90 degree - for 34.00 mm outer dia pipe	each	796.68
18.90.5	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M- profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Elbow 90 degree - for 42.70 mm outer dia pipe	each	1166.56
18.90.6	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M- profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Elbow 90 degree - for 48.60 mm outer dia pipe	each	1294.60

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.90A.1	Providing and fixing required Stainless steel fitting of press fit design of grade 316L as per iS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - For 15 mm outer dia pipe	each	527.24
18.90A.2	Providing and fixing required Stainless steel fitting of press fit design of grade 316L as per iS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - For 22 mm outer dia pipe	each	744.32
18.90A.3	Providing and fixing required Stainless steel fitting of press fit design of grade 316L as per iS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - For 28 mm outer dia pipe	each	992.44
18.90A.4	Providing and fixing required Stainless steel fitting of press fit design of grade 316L as per iS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - For 35mm outer dia pipe	each	1628.21
18.90A.5	Providing and fixing required Stainless steel fitting of press fit design of grade 316L as per iS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - For 42mm outer dia pipe	each	2636.14
18.90A.6	Providing and fixing required Stainless steel fitting of press fit design of grade 316L as per iS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - For 54mm outer dia pipe	each	3489.01
18.91.1	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V - profile or M - Profile and with O -ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge -reducing elbow 90 degree - for 22.22 mm x 15.88 mm outer dia pipe	each	284.54
18.91.2	Providing and fixing required Stainless Steel fitting of press fit	each	384.11

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	design of grade AISI 304 conforming to JWWA G 116 standard with V - profile or M - Profile and with O -ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge -reducing elbow 90 degree - for 28.58 mm x 15.88 mm outer dia pipe		
18.91.3	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V - profile or M - Profile and with O -ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge -reducing elbow 90 degree - for 28.58 mm x 22.22 mm outer dia pipe	each	421.83
18.91.4	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V - profile or M - Profile and with O -ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge -reducing elbow 90 degree - for 34.00 mm x 22.22mm outer dia pipe	each	583.29
18.91.5	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V - profile or M - Profile and with O -ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge -reducing elbow 90 degree - for 34.00 mm x 28.58 mm outer dia pipe	each	697.10
18.91.6	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V - profile or M - Profile and with O -ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge -reducing elbow 90 degree - for 42.70 mm x 34.00 mm outer dia pipe	each	910.48
18.92.1	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V- profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - equal tee - for 15.88 mm outer dia pipe	each	312.98
18.92.2	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V- profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - equal tee - for 22.22 mm outer dia pipe	each	441.03

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.92.3	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V- profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - equal tee - for 28.58 mm outer dia pipe	each	554.82
18.92.4	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V- profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - equal tee - for 34.00 mm outer dia pipe	each	1145.23
18.92.5	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V- profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - equal tee - for 42.70 mm outer dia pipe	each	1536.44
18.92.6	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V- profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - equal tee - for 48.60 mm outer dia pipe	each	1877.88
18.92A.1	Providing and fixing required Stainless Steel Fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge -Equal Tee-for 15mm outer dia pipe	each	868.37
18.92A.2	Providing and fixing required Stainless Steel Fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge -Equal Tee-for 22mm outer dia pipe	each	1015.70
18.92A.3	Providing and fixing required Stainless Steel Fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge -Equal Tee-for 28mm outer dia pipe	each	1248.29
18.92A.4	Providing and fixing required Stainless Steel Fitting of press fit	each	1550.67

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge -Equal Tee-for 35mm outer dia pipe		
18.92A.5	Providing and fixing required Stainless Steel Fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge -Equal Tee-for 42mm outer dia pipe	each	2170.94
18.92A.6	Providing and fixing required Stainless Steel Fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge -Equal Tee-for 54mm outer dia pipe	each	2605.13
18.93.1	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducing tee - for 22.22 mm x15.88 mm outer dia pipe	each	389.80
18.93.2	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducing tee - for 28.58 mm x15.88 mm outer dia pipe	each	522.11
18.93.3	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducing tee - for 28.58 mm x22.22 mm outer dia pipe	each	553.41
18.93.4	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducing tee - for 34.00 mm x15.88 mm outer dia pipe	each	981.62
18.93.5	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of	each	1035.67

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	EPDM material of required dia as per direction of Engineer-in-charge - reducing tee - for 34.00 mm x22.22 mm outer dia pipe		
18.93.6	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducing tee - for 34.00 mm x28.58 mm outer dia pipe	each	1059.87
18.93.7	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducing tee - for 42.70 mm x15.88 mm outer dia pipe	each	1621.81
18.93.8	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducing tee - for 42.70mm x22.22 mm outer dia pipe	each	1550.67
18.93.9	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducing tee - for 42.70mm x28.58 mm outer dia pipe	each	1564.90
18.93.10	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducing tee - for 42.70 mm x34.00mm outer dia pipe	each	1593.36
18.93.11	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducing tee - for48.60 mm x15.88 mm outer dia pipe	each	1700.05
18.93.12	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducing tee - for 48.60 mm x22.22mm outer dia pipe	each	1721.39

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.93.13	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducing tee - for 48.60 mm x28.58 mm outer dia pipe	each	1799.64
18.93.14	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducing tee - for 48.60 mm x34.00mm outer dia pipe	each	1828.09
18.93.15	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - reducing tee - for 48.60 mm x42.70 mm outer dia pipe	each	1877.88
18.93A.1	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required as per direction of Engineer-in-charge - Reducing Tee - for 22mm x 15mm outer dia pipe	each	992.44
18.93A.2	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required as per direction of Engineer-in-charge - Reducing Tee - for 28mm x 15mm outer dia pipe	each	1232.80
18.93A.3	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required as per direction of Engineer-in-charge - Reducing Tee - for 28mm x 22mm outer dia pipe	no	1240.54
18.93A.4	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required as per direction of Engineer-in-charge - Reducing Tee - for 35mm x 15mm outer	each	1558.42

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	dia pipe		
18.93A.5	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required as per direction of Engineer-in-charge - Reducing Tee - for 35mm x 22mm outer dia pipe	each	1566.18
18.93A.6	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required as per direction of Engineer-in-charge - Reducing Tee - for 35mm x 28mm outer dia pipe	each	1581.70
18.93A.7	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required as per direction of Engineer-in-charge - Reducing Tee - for 42mm x 22mm outer dia pipe	each	2194.20
18.93A.8	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required as per direction of Engineer-in-charge - Reducing Tee - for 42mm x 28mm outer dia pipe	each	2217.47
18.93A.9	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required as per direction of Engineer-in-charge - Reducing Tee - for 42mm x 35mm outer dia pipe	each	2232.97
18.93A.10	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required as per direction of Engineer-in-charge - Reducing Tee - for 54mm x 22mm outer dia pipe	each	2605.13

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.93A.11	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required as per direction of Engineer-in-charge - Reducing Tee - for 54mm x 28mm outer dia pipe	each	2667.17
18.93A.12	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required as per direction of Engineer-in-charge - Reducing Tee - for 54mm x 35mm outer dia pipe	each	2690.42
18.93A.13	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required as per direction of Engineer-in-charge - Reducing Tee - for 54mm x 42mm outer dia pipe	each	2721.42
18.94.1	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V-profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge- Male thread tee - for 15.88 mm outer dia x 15 mm nominal dia threaded	each	519.26
18.94.2	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V-profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread tee - for 22.22 mm outer dia x 15 mm nominal dia threaded	each	625.96
18.94.3	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V-profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread tee - for 22.22mm outer dia x 20mm nominal dia threaded	each	661.52
18.94.4	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V-profile or M-profile and with O - ring sealing	each	768.23

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	gasket of EPDM material of required dia as per direction of Engineer-in-charge.- Male thread tee - for 28.58 mm outer dia x 15 mm nominal dia threaded		
18.94.5	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V-profile or M-profile and with O - ring sealing gasket of EPDM material of required diaas per direction of Engineer-in-charge - Male thread tee - for 28.58 mm outer dia x 20 mm nominal dia threaded	each	775.34
18.94.6	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V-profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread tee - for 28.58 mm outer dia x 25 mm nominal dia threaded	each	867.80
18.94.7	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V-profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread tee - for 34.00 mm outer dia x 15 mm nominal dia threaded	each	1109.67
18.94.8	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V-profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread tee - for 34.00 mm outer dia x 20 mm nominal dia threaded	each	1145.23
18.94.9	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V-profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread tee - for 34.00 mm outer dia x 25 mm nominal dia threaded	each	1436.87
18.94.10	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V-profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread tee - for 34.00 mm outer dia x32 mm nominal dia threaded	each	1806.75

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.94.11	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V-profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread tee - for 42.70 mm outer dia x 15 mm nominal dia threaded	each	1700.05
18.94.12	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V-profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread tee - for 42.70 mm outer dia x 20 mm nominal dia threaded	each	1714.28
18.94.13	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V-profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread tee - for 42.70 mm outer dia x 25 mm nominal dia threaded	each	1863.65
18.94.14	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V-profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread tee - for 42.70mm outer dia x 32 mm nominal dia threaded	each	2077.06
18.94.15	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V-profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread tee - for 42.70 mm outer dia x 40 mm nominal dia threaded	each	2532.29
18.94.16	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V-profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread tee - for 48.60 mm outer dia x 15 mm nominal dia threaded	each	1813.86
18.94.17	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116	each	1892.10

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	standard with V-profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread tee - for 48.60 mm outer dia x 20 mm nominal dia threaded		
18.94.18	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V-profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread tee - for 48.60 mm outer dia x 25 mm nominal dia threaded	each	1977.47
18.94.19	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V-profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread tee - for 48.60 mm outer dia x 32 mm nominal dia threaded	each	2361.57
18.94.20	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V-profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread tee - for 48.60 mm outer dia x 40 mm nominal dia threaded	each	2589.21
18.94.21	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V-profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread tee - for 48.60 mm outer dia x 50 mm nominal dia threaded	each	3172.47
18.95.1	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - Profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Tee - for 15.88 mm outer dia x 15mm nominal dia threaded	each	533.49
18.95.2	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - Profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Tee - for 22.22 mm outer dia x	each	625.96

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	15mm nominal dia threaded		
18.95.3	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - Profile and with O - ring sealing gasket of EPDM material of required diaas per direction of Engineer-in-charge - Female thread Tee - for 22.22 mm outer dia x 20 mm nominal dia threaded	each	654.41
18.95.4	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - Profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Tee - for 28.58 mm outer dia x 15mm nominal dia threaded	each	818.02
18.95.5	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - Profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Tee - for 28.58 mm outer dia x 20 mm nominal dia threaded	each	825.13
18.95.6	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - Profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Tee - for 28.58 mm outer dia x 25 mm nominal dia threaded	each	917.60
18.95.7	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - Profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Tee - for 34.00 mm outer dia x 15mm nominal dia threaded	each	1230.58
18.95.8	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - Profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Tee - for 34.00 mm outer dia x 20 mm nominal dia threaded	each	1251.93

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.95.9	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - Profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Tee - for 34.00 mm outer dia x 25mm nominal dia threaded	each	1419.80
18.95.10	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - Profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Tee - for 34.00 mm outer dia x 32 mm nominal dia threaded	each	1664.49
18.95.11	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - Profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Tee - for 42.70 mm outer dia x 15mm nominal dia threaded	each	1650.26
18.95.12	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - Profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Tee - for 42.70 mm outer dia x 20 mm nominal dia threaded	each	1664.49
18.95.13	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - Profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Tee - for 42.70 mm outer dia x 25mm nominal dia threaded	each	1877.88
18.95.14	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - Profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Tee - for 42.70 mm outer dia x 32 mm nominal dia threaded	each	1970.36
18.95.15	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - Profile and with O - ring sealing gasket	each	2148.18

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Tee - for 42.70 mm outer dia x 40mm nominal dia threaded		
18.95.16	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - Profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Tee - for 48.60 mm outer dia x 15mm nominal dia threaded	each	1970.36
18.95.17	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - Profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Tee - for 48.60 mm outer dia x 20mm nominal dia threaded	each	1991.69
18.95.18	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - Profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Tee - for 48.60mm outer dia x 25mm nominal dia threaded	each	2074.21
18.95.19	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - Profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Tee - for 48.60 mm outer dia x 32 mm nominal dia threaded	each	2197.97
18.95.20	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - Profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Tee - for 48.60 mm outer dia x 40mm nominal dia threaded	each	2290.45
18.95.21	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - Profile and with O - ring sealing gasket of EPDM material of required diaas per direction of Engineer-in-charge - Female thread Tee - for 48.60 mm outer dia x 50 mm nominal dia threaded	each	2518.06

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.95A.1	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Tee- for 15mm outer dia X 1/2" nominal dia threaded	no	969.17
18.95A.2	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Tee- for 22mm outer dia X 1/2" nominal dia threaded	each	1054.46
18.95A.3	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Tee- for 22mm outer dia X 3/4" nominal dia threaded	each	1194.01
18.95A.4	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Tee- for 28mm outer dia X 1/2" nominal dia threaded	each	1263.79
18.95A.5	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Tee- for 28mm outer dia X 3/4" nominal dia threaded	each	1310.32
18.95A.6	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Tee- for 28mm outer dia X 1" nominal dia threaded	each	1449.88
18.95A.7	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to	each	1457.63

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Tee- for 35mm outer dia X 1/2" nominal dia threaded		
18.95A.8	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Tee- for 35mm outer dia X 1-1/4" nominal dia threaded	each	2008.13
18.95A.9	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Tee- for 42mm outer dia X 1-1/4" nominal dia threaded	each	2333.76
18.95A.10	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Tee- for 54mm outer dia X 1-1/2" nominal dia threaded	each	3333.96
18.95A.11	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Tee- for 54mm outer dia X 2" nominal dia threaded	each	4000.74
18.96.1	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V- profile or M-profile and with O -ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - female thread connector / adapter - for 15.88 mm outer dia x 15 mm nominal dia threaded	each	362.77
18.96.2	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V- profile or M-profile and with O -ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - female thread connector / adapter - for 22.22 mm	each	441.03

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	outer dia x 15 mm nominal dia threaded		
18.96.3	Providing and fixing required Siainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V- profile or M-profile and with O -ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - female thread connector / adapter - for 22.22 mm outer dia x 20 mm nominal dia threaded	each	455.24
18.96.4	Providing and fixing required Siainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V- profile or M-profile and with O -ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - female thread connector / adapter - for 28.58 mm outer dia x 15 mm nominal dia threaded	each	529.23
18.96.5	Providing and fixing required Siainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V- profile or M-profile and with O -ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - female thread connector / adapter - for 28.58 mm outer dia x 20 mm nominal dia threaded	each	547.71
18.96.6	Providing and fixing required Siainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V- profile or M-profile and with O -ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - female thread connector / adapter - for 28.58 mm outer dia x 25 mm nominal dia threaded	each	647.31
18.96.7	Providing and fixing required Siainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V- profile or M-profile and with O -ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - female thread connector / adapter - for 34.00 mm outer dia x25 mm nominal dia threaded	each	782.45
18.96.8	Providing and fixing required Siainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V- profile or M-profile and with O -ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - female thread connector / adapter - for 34.00 mm outer dia x 32 mm nominal dia threaded	each	1031.41

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.96.9	Providing and fixing required Siainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V- profile or M-profile and with O -ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - female thread connector / adapter - for 42.70 mm outer dia x 32 mm nominal dia threaded	each	1098.28
18.96.10	Providing and fixing required Siainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V- profile or M-profile and with O -ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - female thread connector / adapter - for 42.70 mm outer dia x 40 mm nominal dia threaded	each	1297.45
18.96.11	Providing and fixing required Siainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V- profile or M-profile and with O -ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - female thread connector / adapter - for 48.60 mm outer dia x 40 mm nominal dia threaded	each	1707.16
18.96.12	Providing and fixing required Siainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V- profile or M-profile and with O -ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - female thread connector / adapter - for 48.60 mm outer dia x 50 mm nominal dia threaded	each	1849.43
18.96A.1	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Connector / Adapter -for 15mm outer dia x 1/2" nominal dia threaded	each	759.83
18.96A.2	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Connector / Adapter -for 22mm outer dia x 1/2" nominal dia threaded	each	852.87
18.96A.3	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and O-ring sealing gasket	each	1000.18

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Connector / Adapter -for 22mm outer dia x 3/4" nominal dia threaded		
18.96A.4	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Connector / Adapter -for 28mm outer dia x 1" nominal dia threaded	each	1651.47
18.96A.5	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Connector / Adapter -for 35mm outer dia x 1- 1/4" nominal dia threaded	each	1767.77
18.96A.6	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Connector / Adapter -for 42mm outer dia x 1- 1/2" nominal dia threaded	each	2713.68
18.96A.7	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards with V-profile and O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female thread Connector / Adapter -for 54mm outer dia x 2" nominal dia threaded	each	4163.56
18.97.1	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V-profile or M- profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge- Male thread connector / adapter - for 15.88 mm outer dia x 15mm nominal dia threaded	each	369.89
18.97.2	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V-profile or M- profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge- Male thread connector / adapter - for 22.22 mm outer dia x 15mm nominal dia threaded	each	441.03

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.97.3	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V-profile or M- profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread connector / adapter - for 22.22 mm outer dia x 20 mm nominal dia threaded	each	483.70
18.97.4	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V-profile or M- profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread connector / adapter - for 28.58 mm outer dia x 20 mm nominal dia threaded	each	597.51
18.97.5	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V-profile or M- profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread connector / adapter - for 28.58 mm outer dia x 25mm nominal dia threaded	each	611.74
18.97.6	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V-profile or M- profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread connector / adapter - for 34.00 mm outer dia x 25mm nominal dia threaded	each	882.03
18.97.7	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V-profile or M- profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread connector / adapter - for 34.00 mm outer dia x 32 mm nominal dia threaded	each	1081.21
18.97.8	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V-profile or M- profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread connector / adapter - for 42.70mm outer dia x 32 mm nominal dia threaded	each	1237.69
18.97.9	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116	each	1387.07

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	standard with V-profile or M- profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread connector / adapter - for 42.70 mm outer dia x 40 mm nominal dia threaded		
18.97.10	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V-profile or M- profile and with O - ring sealing gasket of EPDM material of required diaas per direction of Engineer-in-charge - Male thread connector / adapter - for 48.60 mm outer dia x 40 mm nominal dia threaded	each	1604.03
18.97.11	Providing and fixing required Stainless Steel fitting of press fit design of grade AISI 304 conforming to JWWA G 116 standard with V-profile or M- profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread connector / adapter - for 48.60mm outer dia x 50 mm nominal dia threaded	each	2170.24
18.97A.1	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread Connector /Adapter - for 15mm outer dia x 1/2" nominal dia threaded	each	697.81
18.97A.2	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread Connector /Adapter - for 22mm outer dia x 1/2" nominal dia threaded	each	829.61
18.97A.3	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread Connector /Adapter - for 22mm outer dia x 3/4" nominal dia threaded	each	876.13
18.97A.4	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread Connector /Adapter - for	each	1147.50

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	28mm outer dia x 1" nominal dia threaded		
18.97A.5	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread Connector /Adapter - for 35mm outer dia x 1-1/4" nominal dia threaded	each	1682.49
18.97A.6	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread Connector /Adapter - for 42mm outer dia x 1-1/2" nominal dia threaded	each	2450.06
18.97A.7	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male thread Connector /Adapter - for 54mm outer dia x 2" nominal dia threaded	each	3287.43
18.98.1	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - valve connector - for 15.88 mm outer dia x 15 mm nominal dia threaded	each	448.13
18.98.2	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O - ring sealing gasket of EPDM material of required diaas per direction of Engineer-in-charge - valve connector - for 22.22 mm outer dia x 15 mm nominal dia threaded	each	526.38
18.98.3	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - valve connector - for 22.22 mm outer dia x 20 mm nominal dia threaded	each	569.05

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.98.4	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - valve connector - for 28.58 mm outer dia x 25 mm nominal dia threaded	each	808.06
18.98.5	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - valve connector - for 34.00 mm outer dia x 32 mm nominal dia threaded	each	1199.28
18.98.6	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - valve connector - for 42.70 mm outer dia x 40 mm nominal dia threaded	each	1707.16
18.98.7	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - valve connector - for 48.60 mm outer dia x 50 mm nominal dia threaded	each	2276.22
18.99.1	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - female threaded elbow 90 degree - for 15.88 mm outer dia x 15 mm nominal dia threaded	each	372.73
18.99.2	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - female threaded elbow 90 degree - for 22.22 mm outer dia x 15 mm nominal dia threaded	each	505.03
18.99.3	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - profile and with O - ring sealing gasket	each	523.53

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	of EPDM material of required dia as per direction of Engineer-in-charge - female threaded elbow 90 degree - for 22.22 mm outer dia x 20 mm nominal dia threaded		
18.99.4	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - female threaded elbow 90 degree - for 25.58mm outer dia x 25 mm nominal dia threaded	each	779.61
18.99.5	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - female threaded elbow 90 degree - for 34.00 mm outer dia x 32 mm nominal dia threaded	each	1345.82
18.99.6	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - female threaded elbow 90 degree - for 42.70 mm outer dia x 32 mm nominal dia threaded	each	1702.90
18.99.7	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - female threaded elbow 90 degree - for 42.70 mm outer dia x 40 mm nominal dia threaded	each	1835.20
18.99.8	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - female threaded elbow 90 degree - for 48.60 mm outer dia x 40 mm nominal dia threaded	each	2034.37
18.99.9	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - female threaded elbow 90 degree - for 48.60 mm outer dia x 50 mm nominal dia threaded	each	2361.57

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.99A.1	Providing and fixing required stainless steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female threaded Elbow 90 degree - for 15mm outer dia x 1/2 " nominal dia thread	each	1108.72
18.99A.2	Providing and fixing required stainless steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female threaded Elbow 90 degree - for 22mm outer dia x 3/4 " nominal dia thread	each	1488.64
18.99A.3	Providing and fixing required stainless steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female threaded Elbow 90 degree - for 28mm outer dia x 1 " nominal dia thread	each	2046.89
18.99A.4	Providing and fixing required stainless steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female threaded Elbow 90 degree - for 35mm outer dia x 1- 1/4 " nominal dia thread	each	3326.20
18.99A.5	Providing and fixing required stainless steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female threaded Elbow 90 degree - for 42mm outer dia x 1-1/2 " nominal dia thread	each	3620.83
18.99A.6	Providing and fixing required stainless steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female threaded Elbow 90 degree - for 54mm outer dia x 2 " nominal dia thread	each	5597.94
18.100.1	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard	each	391.22

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	with V - profile or M - profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge -male threaded elbow 90 degree - for 15.88 mm outer dia x 15 mm nominal dia threaded		
18.100.2	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - profile and with O - ring sealing gasket of EPDM material of required diaas per direction of Engineer-in-charge -male threaded elbow 90 degree - for 22.22 mm outer dia x 15 mm nominal dia threaded	each	500.77
18.100.3	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge -male threaded elbow 90 degree - for 22.22 mm outer dia x 20 mm nominal dia threaded	each	522.11
18.100.4	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge -male threaded elbow 90 degree - for 28.58 mm outer dia x 25 mm nominal dia threaded	each	699.93
18.100.5	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - profile and with O - ring sealing gasket of EPDM material of required diaas per direction of Engineer-in-charge -male threaded elbow 90 degree - for 34.00 mm outer dia x 25 mm nominal dia threaded	each	1119.62
18.100.6	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge -male threaded elbow 90 degree - for 34.00 mm outer dia x 32 mm nomina dia threaded	each	1358.62
18.100.7	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - profile and with O - ring sealing gasket of EPDM material of required diaas per direction of Engineer-in-charge -male threaded elbow 90 degree - for 42.70 mm outer	each	1721.39

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	dia x 32 mm nominal dia threaded		
18.100.8	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - profile and with O - ring sealing gasket of EPDM material of required diaas per direction of Engineer-in-charge -male threaded elbow 90 degree - for 42.70 mm outer dia x 40 mm nominal dia threaded	each	1956.13
18.100.9	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge -male threaded elbow 90 degree - for 48.60 mm outer dia x 40 mm nominal dia threaded	each	2190.85
18.100.10	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - profile and with O - ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge -male threaded elbow 90 degree - for 48.60 mm outer dia x 50 mm nominal dia threaded	each	2640.41
18.100A.1	Providing and fixing required Stainless Steel Fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male threaded Elbow 90 degree - for 15mm outer dia X 1/2" nominal dia threaded	each	907.15
18.100A.2	Providing and fixing required Stainless Steel Fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male threaded Elbow 90 degree - for 22mm outer dia X 3/4" nominal dia threaded	each	1364.59
18.100A.3	Providing and fixing required Stainless Steel Fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male threaded Elbow 90 degree - for 28mm outer dia X 1" nominal dia threaded	each	1814.28

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.100A.4	Providing and fixing required Stainless Steel Fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male threaded Elbow 90 degree - for 35mm outer dia X 1-1/4" nominal dia threaded	each	2496.59
18.100A.5	Providing and fixing required Stainless Steel Fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male threaded Elbow 90 degree - for 42mm outer dia X 1-1/2" nominal dia threaded	each	4574.50
18.100A.6	Providing and fixing required Stainless Steel Fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Male threaded Elbow 90 degree - for 54mm outer dia X 2" nominal dia threaded	each	5202.51
18.101.1	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V- profile or M- profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Cap - for 15.88 mm outer dia pipe	each	86.78
18.101.2	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V- profile or M- profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Cap - for 22.22 mm outer dia pipe	each	122.35
18.101.3	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V- profile or M- profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Cap - for 28.58 mm outer dia pipe	each	170.72
18.101.4	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V- profile or M- profile and with O-ring sealing gasket of EPDM material of required diaas per direction of Engineer-in-charge - Cap - for 34.00 mm outer dia pipe	each	313.70

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.101.5	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V- profile or M- profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Cap - for 42.70 mm outer dia pipe	each	465.21
18.101.6	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V- profile or M- profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Cap - for 48.60mm outer dia pipe	each	608.89
18.101A.1	Providing and fixing required Stainless Steel Fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge -Cap - for 15 mm outer dia pipe	each	550.49
18.101A.2	Providing and fixing required Stainless Steel Fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge -Cap - for 22mm outer dia pipe	each	713.30
18.101A.3	Providing and fixing required Stainless Steel Fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge -Cap - for 28mm outer dia pipe	each	891.64
18.101A.4	Providing and fixing required Stainless Steel Fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge -Cap - for 35mm outer dia pipe	each	1248.29
18.101A.5	Providing and fixing required Stainless Steel Fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge -Cap - for 42mm outer dia pipe	each	2713.68
18.101A.6	Providing and fixing required Stainless Steel Fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to	each	2985.05

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge -Cap - for 54mm outer dia pipe		
18.102.1	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - profile and with O -ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - pipe bridge - for 15.88 mm outer dia pipe	each	412.56
18.102.2	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - profile and with O -ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - pipe bridge - for 22.22 mm outer dia pipe	each	519.26
18.102.3	Providing and fixing required Stainless steel fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V - profile or M - profile and with O -ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - pipe bridge - for 28.58 mm outer dia pipe	each	782.45
18.102A.1	Providing and fixing required Stainless Steel Fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Pipe Bridge - for 15 mm outer dia pipe	each	713.30
18.102A.2	Providing and fixing required Stainless Steel Fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Pipe Bridge - for 22 mm outer dia pipe	each	1922.84
18.102A.3	Providing and fixing required Stainless Steel Fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Pipe Bridge - for 28 mm outer dia pipe	each	2643.89
18.103.1	Providing and fixing required Stainless Steel fitting of press fit design of gr 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per irection- Male union -	each	1535.17

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	for 15mm outer dia X 1/2" nominal dia threaded		
18.103.2	Providing and fixing required Stainless Steel fitting of press fit design of gr 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per irection- Male union - for 22mm outer dia X 1/2" nominal dia threaded	each	1550.67
18.103.3	Providing and fixing required Stainless Steel fitting of press fit design of gr 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per irection- Male union - for 22mm outer dia X 3/4" nominal dia threaded	each	1775.52
18.103.4	Providing and fixing required Stainless Steel fitting of press fit design of gr 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per irection- Male union - for 28mm outer dia X 1" nominal dia threaded	each	3132.36
18.103.5	Providing and fixing required Stainless Steel fitting of press fit design of gr 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per irection- Male union - for 35mm outer dia X 1-1/4" nominal dia threaded	each	3271.93
18.103.6	Providing and fixing required Stainless Steel fitting of press fit design of gr 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per irection- Male union - for 42mm outer dia X 1-1/2" nominal dia threaded	each	3690.60
18.103.7	Providing and fixing required Stainless Steel fitting of press fit design of gr 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per irection- Male union - for 54mm outer dia X 2" nominal dia threaded	each	6388.79
18.104.1	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female Union - For 22 mm outer dia X 3/4" nominal dia threaded	each	1643.70

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
18.104.2	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female Union - For 28 mm outer dia X 1" nominal dia threaded	each	2217.47
18.105.1	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female transition Elbow / FTE - for 15mm outer dia x 1/2" nominal dia threaded	each	1124.24
18.105.2	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge - Female transition Elbow / FTE - for 22mm outer dia x 1/2" nominal dia threaded	each	1504.15
18.105.3	Providing and fixing required Stainless Steel fitting of press fit design of grade 316L as per IS 6911:2017 and conforming to EN-10312 standard with V-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge- Female transition Elbow / FTE - for 22mm outer dia x 3/4" nominal dia threaded	each	1558.42

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
19.1.1	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine aggregate 0.01) including testing of joints etc.complete -100mm diameter	metre	505.68
19.1.2	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine aggregate 0.01) including testing of joints etc.complete -150mm diameter	metre	743.68
19.1.3	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine aggregate 0.01) including testing of joints etc.complete -200mm diameter	metre	1059.81
19.1.4	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine aggregate 0.01) including testing of joints etc.complete -250mm diameter	metre	1559.85
19.1.5	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine aggregate 0.01) including testing of joints etc.complete -300mm diameter	metre	1712.04
19.2.1	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40mm nominal size) all-round S.W.pipes including bed concrete as per standard design - 100 mm diameter S.W. pipe	metre	1203.61
19.2.2	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40mm nominal size) all-round S.W.pipes including bed concrete as per standard design - 150 mm diameter S.W. pipe	metre	1471.99
19.2.3	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40mm nominal size) all-round S.W.pipes including bed concrete as per standard design - 200 mm diameter S.W. pipe	metre	1715.96
19.2.4	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40mm nominal size) all-round S.W.pipes including bed concrete as per standard	metre	1984.34

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	design - 250 mm diameter S.W. pipe		
19.3.1	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40mm nominal size) up to haunches of S.W.pipes including bed concrete as per standard design - 100 mm diameter S.W. pipe	metre	572.04
19.3.2	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40mm nominal size) up to haunches of S.W.pipes including bed concrete as per standard design - 150 mm diameter S.W. pipe	metre	927.11
19.3.3	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40mm nominal size) up to haunches of S.W.pipes including bed concrete as per standard design - 200 mm diameter S.W. pipe	metre	1089.76
19.3.4	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40mm nominal size) up to haunches of S.W.pipes including bed concrete as per standard design - 250 mm diameter S.W. pipe	metre	1268.68
19.3.5	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40mm nominal size) up to haunches of S.W.pipes including bed concrete as per standard design - 300 mm diameter S.W. pipe	metre	1463.86
19.4.1.1	Providing and fixing square - mouth S.W.gully trap class SP -1 complete with C.I. grating brick masonry chamber with water tight C.I.cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50kg and frame to be not less than 2.70 kg as per standard design - 100x100mm size P type - with common burnt clay F.P.S.(non modular) bricks of class designation 3.5	each	3018.38
19.4.1.2	Providing and fixing square - mouth S.W.gully trap class SP -1 complete with C.I. grating brick masonry chamber with water tight C.I.cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50kg and frame to be not less than 2.70 kg as per standard design - 100x100mm size P type - with sewer bricks conforming to IS :4885	each	2814.06
19.4.2.1	Providing and fixing square - mouth S.W.gully trap class SP -1 complete with C.I. grating brick masonry chamber with water	each	2998.92

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	tight C.I.cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50kg and frame to be not less than 2.70 kg as per standard design - 150x100mm size P type - with common burnt clay F.P.S.(non modular) bricks of class designation 3.5		
19.4.2.2	Providing and fixing square - mouth S.W.gully trap class SP -1 complete with C.I. grating brick masonry chamber with water tight C.I.cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50kg and frame to be not less than 2.70 kg as per standard design - 150x100mm size P type - with sewer bricks conforming to IS:4885	each	2795.64
19.4.3.1	Providing and fixing square - mouth S.W.gully trap class SP -1 complete with C.I. grating brick masonry chamber with water tight C.I.cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50kg and frame to be not less than 2.70 kg as per standard design - 180x150mm size P type - with common burnt clay F.P.S.(non modular) bricks of class designation 3.5	each	3022.40
19.4.3.2	Providing and fixing square - mouth S.W.gully trap class SP -1 complete with C.I. grating brick masonry chamber with water tight C.I.cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50kg and frame to be not less than 2.70 kg as per standard design - 180x150mm size P type - with sewer bricks conforming to IS:4885	each	2818.09
19.5.1	Dismantling of old S.W.pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps - 100 mm diameter	metre	105.21
19.5.2	Dismantling of old S.W.pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps - 150 mm diameter	metre	116.34
19.5.3	Dismantling of old S.W.pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps - 200 mm diameter	metre	123.77
19.5.4	Dismantling of old S.W.pipes including breaking of joints and	metre	131.20

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps - 250 mm diameter		
19.5.5	Dismantling of old S.W.pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps - 300 mm diameter	metre	138.62
19.5.6	Dismantling of old S.W.pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps - 350 mm diameter	metre	159.66
19.5.7	Dismantling of old S.W.pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps - 400 mm diameter	metre	174.52
19.5.8	Dismantling of old S.W.pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps - 450 mm diameter	metre	181.94
19.6.1	Providing and laying non - pressure NP2 class (light duty) R.C.C pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 100 mm dia R.C.C. pipe	metre	597.45
19.6.2	Providing and laying non - pressure NP2 class (light duty) R.C.C pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 150 mm dia R.C.C. pipe	metre	655.49
19.6.3	Providing and laying non - pressure NP2 class (light duty) R.C.C pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 250 mm dia R.C.C. pipe	metre	1058.82
19.6.4	Providing and laying non - pressure NP2 class (light duty) R.C.C pipes with collars jointed with stiff mixture of cement	metre	1580.93

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 300 mm dia R.C.C. pipe		
19.6.5	Providing and laying non - pressure NP2 class (light duty) R.C.C pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 450 mm dia R.C.C. pipe	metre	1909.80
19.6.6	Providing and laying non - pressure NP2 class (light duty) R.C.C pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 500 mm dia R.C.C. pipe	metre	2263.19
19.6.7	Providing and laying non - pressure NP2 class (light duty) R.C.C pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 600 mm dia R.C.C. pipe	metre	2644.18
19.6.8	Providing and laying non - pressure NP2 class (light duty) R.C.C pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 700 mm dia R.C.C. pipe	metre	3456.90
19.6.9	Providing and laying non - pressure NP2 class (light duty) R.C.C pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 800 mm dia R.C.C. pipe	metre	4141.30
19.6.10	Providing and laying non - pressure NP2 class (light duty) R.C.C pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 900 mm dia R.C.C. pipe	metre	5603.63
19.6.11	Providing and laying non - pressure NP2 class (light duty) R.C.C pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 1000 mm dia R.C.C.	metre	6561.11

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	pipe		
19.6.12	Providing and laying non - pressure NP2 class (light duty) R.C.C pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 1100 mm dia R.C.C. pipe	metre	7404.75
19.6.13	Providing and laying non - pressure NP2 class (light duty) R.C.C pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 1200 mm dia R.C.C. pipe	metre	8379.87
19.7.1.1	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design :-Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) :-With common burnt clay F.P.S. (non modular) bricks of class designation 3.5	each	15123.63
19.7.1.2	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design :-Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) :- with sewer bricks conforming	each	14589.26

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	to IS:4885		
19.7.2.1	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design : - inside size 120x90 cm and 90cm deep including C.I.cover with frame (medium duty) 500 mm internal diameter, total weight of cover and frame to be not less than 116 kg (weight of cover 58 kg and weight of frame 58 kg) - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5	each	27933.35
19.7.2.2	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design : - inside size 120x90 cm and 90cm deep including C.I.cover with frame (medium duty) 500 mm internal diameter, total weight of cover and frame to be not less than 116 kg (weight of cover 58 kg and weight of frame 58 kg) - with sewer bricks conforming to IS :4885	each	26471.67
19.7.3.1	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of	each	29737.83

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	neat cement complete as per standard design : - inside size 120x90 cm and 90cm deep including C.I.cover with frame (heavy duty) 560 mm internal diameter, total weight of cover and frame to be not less than 208kg (weight of cover 108 kg and weight of frame 100 kg) - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5		
19.7.3.2	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design : - inside size 120x90 cm and 90cm deep including C.I.cover with frame (heavy duty) 560 mm internal diameter, total weight of cover and frame to be not less than 208kg (weight of cover 108 kg and weight of frame 100 kg) - with sewer bricks conforming to IS : 4885	each	28480.50
19.8.1.1	Extra for depth for manholes - size 90x80 cm - with common burnt clay F.P.S (non modular) bricks of class designation 3.5	metre	10928.29
19.8.1.2	Extra for depth for manholes - size 90x80 cm - with sewer bricks conforming to IS:4885	metre	9372.31
19.8.2.1	Extra for depth for manholes - size 120x90 cm - with common burnt clay F.P.S (non modular) bricks of class designation 3.5	metre	13103.59
19.8.2.2	Extra for depth for manholes - size 120x90 cm - with sewer bricks conforming to IS : 4885	metre	11248.99
19.9.1.1	Constructing brick masonry circular type manhole 0.91 m internal dia at bottom and 0.56 m dia at top in cement mortar 1:4 (1 cement : 4 fine aggregate) , in side cement plaster 12mm thick with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement , foundation concrete 1:3:6 mix (1 cement : 3 fine aggregate : 6 graded stone aggregate 40mm nominal size) , and making necessary channels in cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20mm nominal size) finished with a	each	16072.37

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	floating coat of neat cement , all complete as per standard design - 0.91 m deep with S.F.R.C .cover and frame (heavy duty, HD-20 grade designation) 560 mm internal diameter conforming to IS : 12592, total weight of cover and frame to be not less than 182 kg , fixed in cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 grade stone aggregate 20 mm nominal size) including centering, shuttering all complete . (Excavation , foot rests and 12mm thick cement plaster at the external surface shall be paid for separately) - with common burnt clay F.P.S (non modular) bricks of class designation 3.5		
19.9.1.2	Constructing brick masonry circular type manhole 0.91 m internal dia at bottom and 0.56 m dia at top in cement mortar 1:4 (1 cement : 4 fine aggregate) , in side cement plaster 12mm thick with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement , foundation concrete 1:3:6 mix (1 cement : 3 fine aggregate : 6 graded stone aggregate 40mm nominal size) , and making necessary channels in cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement , all complete as per standard design - 0.91 m deep with S.F.R.C .cover and frame (heavy duty, HD-20 grade designation) 560 mm internal diameter conforming to IS : 12592, total weight of cover and frame to be not less than 182 kg , fixed in cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 grade stone aggregate 20 mm nominal size) including centering, shuttering all complete . (Excavation , foot rests and 12mm thick cement plaster at the external surface shall be paid for separately) - with sewer bricks conforming to IS :4885	each	15177.77
19.10.1	Extra depth for circular type manhole 0.91 m internal dia (at bottom) beyond 0.91 m to 1.67 m - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5	metre	9394.01
19.10.2	Extra depth for circular type manhole 0.91 m internal dia (at bottom) beyond 0.91 m to 1.67 m - with sewer bricks conforming IS: 4885	metre	8091.16
19.11.1.1	Constructing brick masonry circular manhole 1.22 m internal dia at bottom and 0.56 m dia at top in cement mortar 1:4 (1 cement : 4 fine aggregate) inside cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement foundation concrete 1:3:6 (1 cement : 3 fine aggregate : 6 gaded stone aggregate 40 mm nominal size) and making necessary channel in cement	each	30893.89

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement , all complete as per standard design - 1.68 m deep with SFRC cover and frame (heavy duty HD-20 grade designation) 560 mm internal diameter conforming to IS: 12592, total weight of cover and frame to be not less than 182 kg fixed in cement concrete 1:2:4 (1cement :2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) including centering , shuttering all complete.(Excavation , foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately) - with common burnt clay F.P.S.(non modular) bricks of class designation 3.5		
19.11.1.2	Constructing brick masonry circular manhole 1.22 m internal dia at bottom and 0.56 m dia at top in cement mortar 1:4 (1 cement : 4 fine aggregate) inside cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement foundation concrete 1:3:6 (1 cement : 3 fine aggregate : 6 gaded stone aggregate 40 mm nominal size) and making necessary channel in cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement , all complete as per standard design - 1.68 m deep with SFRC cover and frame (heavy duty HD-20 grade designation) 560 mm internal diameter conforming to IS: 12592, total weight of cover and frame to be not less than 182 kg fixed in cement concrete 1:2:4 (1cement :2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) including centering , shuttering all complete.(Excavation , foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately) - with sewer bricks conforming to IS : 4885	each	28804.77
19.12.1	Extra depth for circular type manhole 1.22 m internal dia (at bottom) beyond 1.68 m to 2.29 m - with common burnt clay F.P.S.(non modular) bricks of class designation 3.5	metre	12197.71
19.12.2	Extra depth for circular type manhole 1.22 m internal dia (at bottom) beyond 1.68 m to 2.29 m - with sewer bricks conforming IS :4885	metre	10497.16
19.13.1.1	Constructing brick masonry circular manhole 1.52 m internal dia at bottom and 0.56 m dia at top in cement mortar 1:4 (1 cement : 4 fine aggregate) inside cement plaster 12mm thick with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement , foundation concrete 1:3:6 (1 cement : 3fine aggregate : 6 graded stone aggregate 40 mm	each	66031.59

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	nominal size) and making necessary channel in cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement , all complete as per standard design - 2.30 m deep with SFRC cover and frame (heavy duty HD - 20 grade designation) 560 mm internal diameter conforming to IS : 12592, total weight of cover and frame to be not less than 182 kg fixed in cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) including centering , shuttering all complete .(Excavation , foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately) - with common burnt clay F.P.S.(non modular) bricks of class designation 3.5		
19.13.1.2	Constructing brick masonry circular manhole 1.52 m internal dia at bottom and 0.56 m dia at top in cement mortar 1:4 (1 cement : 4 fine aggregate) inside cement plaster 12mm thick with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement , foundation concrete 1:3:6 (1 cement : 3 fine aggregate : 6 graded stone aggregate 40 mm nominal size) and making necessary channel in cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement , all complete as per standard design - 2.30 m deep with SFRC cover and frame (heavy duty HD - 20 grade designation) 560 mm internal diameter conforming to IS : 12592, total weight of cover and frame to be not less than 182 kg fixed in cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) including centering , shuttering all complete .(Excavation , foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately) - with Sewer bricks conforming to IS :4885	each	60124.51
19.14.1	Extra depth for circular type manhole 1.52 m internal dia (at bottom) beyond 2.30m - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5	metre	28333.02
19.14.2	Extra depth for circular type manhole 1.52 m internal dia (at bottom) beyond 2.30m - with sewer bricks conforming IS: 4885	metre	23935.59
19.15.1	Providing M.S.foot rests including fixing in manholes with 20x20x10 cm cement concrete blocks 1:3:6 (1 cement :3 fine aggregate :6 graded stone aggregate 20 mm nominal size) as per standard design - with 20x20 mm square bar	each	659.57

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
19.15.2	Providing M.S.foot rests including fixing in manholes with 20x20x10 cm cement concrete blocks 1:3:6 (1 cement :3 fine aggregate :6 graded stone aggregate 20 mm nominal size) as per standard design - with 20 mm diameter round bar	each	602.80
19.16	Providing orange colour safety foot rest of minimum 6mm thick plastic encapsulated as per IS : 10910 on 12 mm dia steel bar conforming to IS : 1786 , having minimum cross section as 23 mm x 25 mm and over all minimum length 263 mm and width as 165 mm with minimum 112 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even after fixing , including fixing in manholes with 30x20x15 cm cement concrete block 1:3:6 (1 cement : 3 fine aggregate : 6 graded stone aggregate 20mm nominal size) complete as per design	each	668.26
19.17.1	Replacement of M.S. foot rests in manholes including dismantling concrete blocks and fixing with 20x20x10 cm cement concrete blocks 1:3:6 (1 cement : 3 fine aggregate : 6 graded stone aggregate 20 mm nominal size) - with 20x20 mm square bar	each	805.53
19.17.2	Replacement of M.S. foot rests in manholes including dismantling concrete blocks and fixing with 20x20x10 cm cement concrete blocks 1:3:6 (1 cement : 3 fine aggregate : 6 graded stone aggregate 20 mm nominal size) - with 20 mm diametre round bar	each	748.75
19.18.1	Supplying and fixing C.I.cover without frame for manholes - 455 x 610 mm rectangular C.I.cover (light duty) the weight of the cover to be not less than 23 kg	each	1049.05
19.18.2	Supplying and fixing C.I.cover without frame for manholes - 500 mm diameter C.I. cover (medium duty) the weight of the cover to be not less than 58 kg	each	2595.46
19.18.3	Supplying and fixing C.I.cover without frame for manholes - 560 mm diameter C.I.cover (heavy duty) the weight of the cover to be not less than 108 kg	each	3514.48

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
19.19.1.1	Providing and fixing in position pre-cast R.C.C. manhole cover and frame of required shape and approved quality - LD - 2.5 - rectangular shape 600x450 mm internal dimensions	each	1792.80
19.19.1.2	Providing and fixing in position pre-cast R.C.C. manhole cover and frame of required shape and approved quality - LD - 2.5 - square shape 450 mm internal dimensions	each	1702.77
19.19.1.3	Providing and fixing in position pre-cast R.C.C. manhole cover and frame of required shape and approved quality - LD -2.5 - circular shape 450 mm internal diameter	each	1482.26
19.19.2.1	Providing and fixing in position pre-cast R.C.C. manhole cover and frame of required shape and approved quality - MD -10 - square shape 450 mm internal dimensions	each	1730.54
19.19.2.2	Providing and fixing in position pre-cast R.C.C. manhole cover and frame of required shape and approved quality - MD -10 - Cirucualr shape 500 mm internal diameter	each	1576.49
19.19.3.1	Providing and fixing in position pre-cast R.C.C. manhole cover and frame of required shape and approved quality - HD -20 - Cirucualr shape 560 mm internal diameter	each	2383.53
19.19.4.1	Providing and fixing in position pre-cast R.C.C. manhole cover and frame of required shape and approved quality - EHD -35 - Cirucualr shape 560 mm internal diameter	each	2596.91
19.20	Supplying and fixing C.I.cover 300x300 mm without frame for gully trap (standard pattern) the weight of cover to be not less than 4.5 kg	each	583.43
19.21.1	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete - For pipes 100 to 250 mm diameter	each	932.37
19.21.2	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 fine	each	1068.02

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	aggregate : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete - For pipes 250 to 300 mm diameter		
19.21.3	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete - For pipes 350 to 450 mm diameter	each	1542.07
19.22.1	Providing sand cast iron drop connection externally for 60 cm drop from branch sewer line to main sewer manhole including inspection and cleaning eye with chain and lid, sand cast iron drop pipe and bend encased all - round with cement concrete 1:5:10 (1cement : 5 fine aggregate : 10 graded stone aggregate 40mm nominal size) with all centering and shuttering required , cutting holes in walls and making good with brick work in cement mortar 1:4 (1cement : 4 fine aggregate) plastered with cement mortar 1:3 (1 cement : 3 fine aggregate) on inside of the manhole wall, lead caulked joints between sand cast iron pipes and fittings , stiff cement mortar 1:1 (1 cement : 1 fine aggregate) joints between sand cast iron tee and S.W.pipe, making required channels complete as per standard design and specifications - 100 mm dia sand cast iron drop connection	each	13225.47
19.22.2	Providing sand cast iron drop connection externally for 60 cm drop from branch sewer line to main sewer manhole including inspection and cleaning eye with chain and lid, sand cast iron drop pipe and bend encased all - round with cement concrete 1:5:10 (1cement : 5 fine aggregate : 10 grade stone aggregate 40mm nominal size) with all centering and shuttering required , cutting holes in walls and making good with brick work in cement mortar 1:4 (1cement : 4 fine aggregate) plastered with cement mortar 1:3 (1 cement : 3 fine aggregate) on inside of the manhole wall, lead caulked joints between sand cast iron pipes and fittings , stiff cement mortar 1:1 (1 cement : 1 fine aggregate) joints between sand cast iron tee and S.W.pipe, making required channels complete as per standard design and specifications - 150 mm dia sand cast iron drop connection	each	18231.97
19.23.1	Extra for depths beyond 60cm of sand cast iron drop	metre	3352.57

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	connection complete - for 100 mm dia sand cast iron drop connection		
19.23.2	Extra for depths beyond 60cm of sand cast iron drop connection complete - for 150 mm dia sand cast iron drop connection	metre	4206.27
19.24.1	Dismantling of manhole including R.C.C. top slab, C.I. cover with frame, including stacking of useful materials near the site and disposal of unserviceable materials within 50 m lead as per direction of Engineer-in-charge:-Rectangular manhole 90x80 cm and 45 cm deep	each	2992.65
19.24.2	Dismantling of manhole including R.C.C. top slab, C.I. cover with frame, including stacking of useful materials near the site and disposal of unserviceable materials within 50 m lead as per direction of Engineer-in-charge:-Rectangular manhole 120x90 cm and 90 cm deep	each	5276.85
19.24.3	Dismantling of manhole including R.C.C. top slab, C.I. cover with frame, including stacking of useful materials near the site and disposal of unserviceable materials within 50 m lead as per direction of Engineer-in-charge:-Rectangular manhole 140x90 cm and 2.45 cm deep	each	9982.09
19.24.4	Dismantling of manhole including R.C.C. top slab, C.I. cover with frame, including stacking of useful materials near the site and disposal of unserviceable materials within 50 m lead as per direction of Engineer-in-charge:-circular manhole 122 cm diameter and 1.68 metre deep	each	7625.70
19.25.1	Extra for depth of manholes dismantled - rectangular manholes 90x80 cm and beyond 45 cm depth	metre	2413.76
19.25.2	Extra for depth of manholes dismantled - rectangular manholes 120x90 cm and beyond 90 cm depth	metre	2876.03
19.25.3	Extra for depth of manholes dismantled - rectangular arch type manholes 140x90 cm and beyond 2.45 m depth (upto 4.25 m depth)	metre	2333.10
19.25.4	Extra for depth of manholes dismantled - circular manhole 122 cm diameter and beyond 1.68 m depth (upto 2.29 m depth)	metre	2632.49

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
19.26.1	Raising manhole cover and frame slab to required level including dismantling existing slab and making good the damages as required (raising depth of manhole to be paid separately) - rectangular manhole 90x80 cm with rectangular cover 600x450 mm of grade LD - 2.5	each	3136.89
19.26.2	Raising manhole cover and frame slab to required level including dismantling existing slab and making good the damages as required (raising depth of manhole to be paid separately) - rectangular manhole 120x90 cm with circular cover 500 mm dia of grade MD -10	each	4980.50
19.26.3	Raising manhole cover and frame slab to required level including dismantling existing slab and making good the damages as required (raising depth of manhole to be paid separately) - rectangular manhole 120x90 cm with circular cover 560mm dia of grade HD -20	each	4631.89
19.26.4	Raising manhole cover and frame slab to required level including dismantling existing slab and making good the damages as required (raising depth of manhole to be paid separately) - circular manhole 140cm dia with circular cover 600 mm dia of grade EHD -35	each	358.75
19.27.1	Constructing brick masonry road gully chamber 50x45x60 cm with bricks in cement mortar 1:4 (1 cement : 4 fine aggregate) including 500 x 450 mm pre-cast R.C.C. horizontal grating with frame complete as per standard design - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5	each	7432.99
19.28.1	Constructing brick masonry road gully chamber 45x45x77.5 cm with bricks in cement mortar 1:4 (1 cement : 4 fine aggregate) with pre-cast R.C.C. vertical grating complete as per standard design - with common burnt clay F.P.S.(non modular) bricks of class designation 3.5	each	8705.91
19.29.1	Constructing brick masonry road gully chamber 110x50x77.5 cm with bricks in cement mortar 1:4 (1 cement : 4 fine aggregate) including 500 x450 mm pre - cast R.C.C. horizontal grating with frame and vertical grating complete as per standard design - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5	each	14425.16
19.30.1.1	Constructing brick masonry chamber for underground C.I.	each	8039.79

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	inspection chamber and bends with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg), R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 fine sand : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand), finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design: -Inside dimensions 455x610 mm and 45 cm deep for single pipe line : -With common burnt clay F.P.S. (non modular) bricks of class designation 3.5		
19.30.2.1	Constructing brick masonry chamber for underground C.I. inspection chamber and bends with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg), R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 fine sand : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand), finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design: - inside dimensions 500 x700 mm and 45 cm deep for pipe line with one or two inlets - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5	each	9512.14
19.30.3.1	Constructing brick masonry chamber for underground C.I. inspection chamber and bends with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg), R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 fine sand : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand), finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design: - inside dimensions 600 x 850 mm and 45 cm deep for pipe line with three or more inlets - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5	each	11292.44

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
19.31.1.1	Extra for depth beyond 45 cm of brick masonry chamber - for 455x610mm size - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5	metre	7582.20
19.31.2.1	Extra for depth beyond 45 cm of brick masonry chamber - for 500x700mm size - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5	metre	8278.32
19.31.3.1	Extra for depth beyond 45 cm of brick masonry chamber - for 600x850mm size - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5	metre	9649.42
19.32.1	Making soak pit 2.5 m diameter 3.0 metre deep with 45 x 45 cm dry brick honey comb shaft with bricks and S.W. drain pipe 100 mm diameter , 1.8 m long complete as per standard design - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5	each	34491.81
19.32.1A	Making soak pit 2.5 m diameter 3 m deep with 45 x 45 cm dry brick honeycomb shaft with bricks of class designation 75 and 110mm dia UPVC pipe (type B) 1.8 m long complete as per stadard design with F.P.S.bricks	1 soak pit	36103.93
19.33	Constructing soak pit 1.20 x 1.20 x 1.20 m filled with brickbats including S.W.drain pipe 100 mm diameter and 1.20 m long complete as per standard design	each	4175.79
19.33.1	Providing and fixing on wall / column face unplasticed - PVC soil and waste pipes (type - B) conforming to IS : 13592- 1992 including jointing with seal ring conformation to IS : 5382 leaving 10mm gap for thermal expansion - single socked pipes - 110mm diameter	metre	679.12
19.33.1A	Providing and fixing on wall face / column face unplasticised - PVC moulded fittings / accessories for unplasticisd - PVC soil and waste pipes conforming to IS : 14735 -1999 including jointing with seal ring conforming to IS : 5382 leaving 10mm gap for thermal expansion - Single tee with door - 110 x110x110 mm	each	457.18
19.33.1B	Providing and fixing on wall face / column face unplasticised - PVC moulded fittings / accessories for unplasticisd - PVC soil and waste pipes conforming to IS:14735 - 1999 including jointing with seal ring conforming to IS :5382 leaving 10mm	each	421.61

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	gap for thermal expansion - Single tee without door - 110 x110x110mm		
19.33.1C	Providing and fixing on wall face / column face unplasticised - PVC mould fittings / accessories for unplasticised - PVC soil and waste pipes conforming to IS : 14735 - 1999 including jointing with seal ring conforming to IS : 5382 leaving 10mm gap for thermal expansion - bend 110 mm	each	221.07
19.33.1D	Providing and fixing on wall face / column face unplasticised - PVC mould fittings / accessories for unplasticised - PVC soil and waste pipes conforming to IS : 14735 - 1999 including jointing with seal ring conforming to IS : 5382 leaving 10mm gap for thermal expansion - bend with door 110 mm	each	374.71
19.33.1E	Providing and fixing on wall face / column face unplasticised - PVC mould fittings / accessories for unplasticised - PVC soil and waste pipes conforming to IS : 14735 - 1999 including jointing with seal ring conforming to IS : 5382 leaving 10mm gap for thermal expansion - heel rest bend 110 mm	each	223.92
19.33.2	Providing and fixing on wall / column face unplasticised - PVC soil and waste pipes (type B) conforming to IS :13592 - 1992 including jointing with seal ring conforming to IS : 5382 leaving 10mm gap for thermal expansion - Single socketed pipes 75mm diameter	metre	445.85
19.33.2A	Providing and fixing on wall / column face unplasticised - PVC moulded fittings / accessories for unplasticised - PVC soil and waste pipes conforming to IS :14735 -1999 including jointing with seal ring conforming to IS : 5382 leaving 10mm gap for thermal expansion - Single tee with door - 75x75x75mm	each	306.26
19.33.2B	Providing and fixing on wall / column face unplasticised - PVC moulded fittings / accessories for unplasticised - PVC soil and waste pipes conforming to IS :14735 -1999 including jointing with seal ring conforming to IS : 5382 leaving 10mm gap for thermal expansion - Single tee without door - 75x75x75mm	each	273.55
19.33.2C	Providing and fixing on wall / column face unplasticised - PVC moulded fittings / accessories for unplasticised - PVC soil and waste pipes conforming to IS :14735 -1999 including jointing with seal ring conforming to IS : 5382 leaving 10mm gap for thermal expansion - Bend 75 mm	each	172.57

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
19.33.2E	Providing and fixing on wall / column face unplasticisd - PVC moulded fittings / accessories for unplasticisd - PVC soil and waste pipes conforming to IS :14735 -1999 including jointing with seal ring conforming to IS : 5382 leaving 10mm gap for thermal expansion - heel rest Bend 75 mm	each	169.72
19.33.2F	Providing and fixing on wall / column face unplasticisd - PVC moulded fittings / accessories for unplasticisd - PVC soil and waste pipes conforming to IS :4985 - including jointing with seal ring conforming to IS : 5382 leaving 10mm gap for thermal expansion - Bend with door 50 mm	each	189.21
19.33A	Constructing soak pit 1.20 x 1.20 x1.20 m filled with brick bats including 110 mm dia UPVC pipe (type B) 1.20 m long complete as per standard design	1 soak pit	4513.76
19.34.1	Providing and fixing S.W.intercepting trap in manholes with stiff mixture of cement mortar 1:1 (1 cement : 1 fine aggregate) including testing of joints etc.complete - 100 mm dia	each	420.91
19.34.2	Providing and fixing S.W.intercepting trap in manholes with stiff mixture of cement mortar 1:1 (1 cement : 1 fine aggregate) including testing of joints etc.complete - 150 mm dia	each	586.47
19.35.1	Providing and laying Non Pressure NP-3 class (Medium duty) R.C.C.pipes including collars / spigot jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 450 mm dia RCC pipes	metre	2469.46
19.35.2	Providing and laying Non Pressure NP-3 class (Medium duty) R.C.C.pipes including collars / spigot jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 600 mm dia RCC pipes	metre	3151.74
19.35.3	Providing and laying Non Pressure NP-3 class (Medium duty) R.C.C.pipes including collars / spigot jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 900 mm dia RCC pipes	metre	4642.92
19.35.4	Providing and laying Non Pressure NP-3 class (Medium duty) R.C.C.pipes including collars / spigot jointed with stiff mixture	metre	5737.03

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 1000 mm dia RCC pipes (laying by manual / mechanical means)		
19.35.5	Providing and laying Non Pressure NP-3 class (Medium duty) R.C.C.pipes including collars / spigot jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 1200 mm dia RCC pipes (Laying by mannual / mechanical means)	metre	8115.61
19.35.6	Providing and laying Non Pressure NP-3 class (Medium duty) R.C.C.pipes including collars / spigot jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 1800 mm dia RCC pipes - (Laying by manual / mechanical means)	metre	14146.59
19.36.1	Providing and laying Non pressure NP-4 class (Heavy duty) R.C.C. pipes including collars / spigot jointed with stiff mixture of cement mortar in the propotion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 450mm dia RCC pipes	metre	2924.70
19.36.2	Providing and laying Non pressure NP-4 class (Heavy duty) R.C.C. pipes including collars / spigot jointed with stiff mixture of cement mortar in the propotion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 600mm dia RCC pipes	metre	3706.57
19.36.3	Providing and laying Non pressure NP-4 class (Heavy duty) R.C.C. pipes including collars / spigot jointed with stiff mixture of cement mortar in the propotion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 900mm dia RCC pipes	metre	6549.26
19.36.4	Providing and laying Non pressure NP-4 class (Heavy duty) R.C.C. pipes including collars / spigot jointed with stiff mixture of cement mortar in the propotion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 1000mm dia RCC pipes (Laying by manual / mechanical means)	metre	8055.93
19.36.5	Providing and laying Non pressure NP-4 class (Heavy duty) R.C.C. pipes including collars / spigot jointed with stiff mixture of cement mortar in the propotion of 1:2 (1 cement : 2	metre	9822.78

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	fine aggregate) including testing of joints etc.complete - 1200mm dia RCC pipes (Laying by mannual / mechanical means)		
19.36.6	Providing and laying Non pressure NP-4 class (Heavy duty) R.C.C. pipes including collars / spigot jointed with stiff mixture of cement mortar in the propotion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 1800mm dia RCC pipes (Laying by mannual / mechanical means)	metre	20890.53

20 . Pile Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
20.1.1	Providing, driving with hydraulic piling rigs with power units and installing driven cast -in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry safe working load not less than specified , excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap) - 400 mm dia piles	metre	2915.45
20.1.2	Providing, driving with hydraulic piling rigs with power units and installing driven cast -in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry safe working load not less than specified , excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap) - 450 mm dia piles	metre	3588.82
20.1.3	Providing, driving with hydraulic piling rigs with power units and installing driven cast -in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry safe working load not less than specified , excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap) - 500 mm dia piles	metre	4303.15
20.1.4	Providing, driving with hydraulic piling rigs with power units and installing driven cast -in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry safe working load not less than specified , excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap) - 550 mm dia piles	metre	4761.40
20.1.5	Providing, driving with hydraulic piling rigs with power units and installing driven cast -in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry safe working load not less than specified , excluding the cost of steel reinforcement but	metre	8198.07

20 . Pile Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap) - 750 mm dia piles		
20.1.6	Providing, driving with hydraulic piling rigs with power units and installing driven cast -in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry safe working load not less than specified , excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap) - 1000 mm dia piles	metre	13630.53
20.1.7	Providing, driving with hydraulic piling rigs with power units and installing driven cast -in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry safe working load not less than specified , excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap) -1200 mm dia piles	metre	18026.85
20.1.8	Providing, driving with hydraulic piling rigs with power units and installing driven cast -in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry safe working load not less than specified , excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap) - 1500 mm dia piles	metre	25767.05
20.2.1	Boring , providing and installing bored cast -in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring , with bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc, by percussion drilling using direct mud circulation (DMC) or bailer and chisel technique by tripod and mechanical winch machine all complete, including removal of excavated earth with all its lifts and leads (length of pile for	metre	2673.87

20 . Pile Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	payment shall be measured upto bottom of pile cap) - 450 mm dia piles - Note: Truck Mounted rotary/TMR/Tubewell boring machine shall not be used		
20.2.2	Boring , providing and installing bored cast -in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring , with bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc, by percussion drilling using direct mud circulation (DMC) or bailer and chisel technique by tripod and mechanical winch machine all complete, including removal of excavated earth with all its lifts and leads (length of pile for payment shall be measured upto bottom of pile cap) - 500 mm dia piles - Note: Truck Mounted rotary/TMR/Tubewell boring machine shall not be used	metre	3156.02
20.2.3	Boring , providing and installing bored cast -in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring , with bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc, by percussion drilling using direct mud circulation (DMC) or bailer and chisel technique by tripod and mechanical winch machine all complete, including removal of excavated earth with all its lifts and leads (length of pile for payment shall be measured upto bottom of pile cap) - 600 mm dia piles - Note: Truck Mounted rotary/TMR/Tubewell boring machine shall not be used	metre	4224.08
20.2.4	Boring , providing and installing bored cast -in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring , with bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc, by percussion drilling using direct mud circulation (DMC) or bailer and chisel technique by tripod and mechanical winch machine all complete, including removal of excavated earth with all its lifts and leads (length of pile for payment shall be measured upto bottom of pile cap) - 750 mm	metre	6545.92

20 . Pile Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	dia piles - Note: Truck Mounted rotary/TMR/Tubewell boring machine shall not be used		
20.2A.1	Boring, providing and installation bored cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below pile cap, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc. by Crawler mounted telescopic boom hydraulic piling rig all complete, including removal of excavated earth with all its lifts and leads (length of pile for payment shall be measured upto bottom of pile cap) Note: Truck Mounted rotary / TMR/Tube well boring machine shall not be used- 600mm dia piles	metre	5743.81
20.2A.2	Boring, providing and installation bored cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below pile cap, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc. by Crawler mounted telescopic boom hydraulic piling rig all complete, including removal of excavated earth with all its lifts and leads (length of pile for payment shall be measured upto bottom of pile cap) Note: Truck Mounted rotary / TMR/Tube well boring machine shall not be used- 750mm dia piles	metre	8438.02
20.2A.3	Boring, providing and installation bored cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below pile cap, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc. by Crawler mounted telescopic boom hydraulic piling rig all complete, including removal of excavated earth with all its lifts and leads (length of pile for payment shall be measured upto bottom of pile cap) Note: Truck Mounted rotary / TMR/Tube well boring machine shall not be used- 1000 mm dia piles	metre	14236.15
20.2A.4	Boring, providing and installation bored cast-in-situ reinforced	metre	18833.09

20 . Pile Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	cement concrete piles of grade M-25 of specified diameter and length below pile cap, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc. by Crawler mounted telescopic boom hydraulic piling rig all complete, including removal of excavated earth with all its lifts and leads (length of pile for payment shall be measured upto bottom of pile cap) Note: Truck Mounted rotary / TMR/Tube well boring machine shall not be used- 1200 mm dia piles		
20.2A.5	Boring, providing and installation bored cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below pile cap, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc. by Crawler mounted telescopic boom hydraulic piling rig all complete, including removal of excavated earth with all its lifts and leads (length of pile for payment shall be measured upto bottom of pile cap) Note: Truck Mounted rotary / TMR/Tube well boring machine shall not be used- 1500 mm dia piles	metre	27231.56
20.3.1	Boring with hydraulic piling rigs with power units, providing and installing cast in situ single under reamed piles of specified diameter and length below pile cap in M-25 cement concrete, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and the length of the pile to be embedded in pile cap etc. all complete (Length of pile for payment shall be measured upto to the bottom of pile cap) - 300 mm dia piles	metre	3030.27
20.3.2	Boring with hydraulic piling rigs with power units, providing and installing cast in situ single under reamed piles of specified diameter and length below pile cap in M-25 cement concrete, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and the length of the pile to be embedded in pile cap etc. all complete (Length of pile for payment shall be measured upto to the bottom of pile cap) - 400 mm dia piles	metre	3885.82

20 . Pile Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
20.3.3	Boring with hydraulic piling rigs with power units, providing and installing cast in situ single under reamed piles of specified diameter and length below pile cap in M-25 cement concrete, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and the length of the pile to be embedded in pile cap etc. all complete (Length of pile for payment shall be measured upto to the bottom of pile cap) - 450 mm dia piles	metre	4393.29
20.3.4	Boring with hydraulic piling rigs with power units, providing and installing cast in situ single under reamed piles of specified diameter and length below pile cap in M-25 cement concrete, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and the length of the pile to be embedded in pile cap etc. all complete (Length of pile for payment shall be measured upto to the bottom of pile cap) - 550 mm dia piles	metre	4953.05
20.4.1	Extra over single under ream for providing additional bulbs in under reamed piles, under specified diameter (only the nos, of extra bulbs are to be paid) - 300mm dia piles	each	2807.71
20.4.2	Extra over single under ream for providing additional bulbs in under reamed piles, under specified diameter (only the nos, of extra bulbs are to be paid) - 400mm dia piles	each	3157.91
20.4.3	Extra over single under ream for providing additional bulbs in under reamed piles, under specified diameter (only the nos, of extra bulbs are to be paid) - 450mm dia piles	each	3369.54
20.4.4	Extra over single under ream for providing additional bulbs in under reamed piles, under specified diameter (only the nos, of extra bulbs are to be paid) - 550mm dia piles	each	3698.44
20.5.1	Providing, driving (with vibrating pile driving hammer complete with power units & accessories) and installing driven Pre-cast reinforced cement concrete piles of specified diameter and length below the pile cap in M-25 cement concrete to carry safe working load not less than specified. With a central through preformed hole with M.S.black pipe of dia , 40mm for grouting with cement sand grouting mix 1:2 (1 cement : 2 fine aggregate) under sufficient positive pressure to ensure	metre	4298.54

20 . Pile Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	complete filling including centring , shuttering, driving and removing the steel casing pipe and lifting casing etc. complete but excluding the cost of steel reinforcement . (Length of pile for payment shall be measured from top of the shoe to the bottom of pile cap) - 400 mm dia piles		
20.5.2	Providing, driving (with vibrating pile driving hammer complete with power units & accessories) and installing driven Pre-cast reinforced cement concrete piles of specified diameter and length below the pile cap in M-25 cement concrete to carry safe working load not less than specified. With a central through preformed hole with M.S.black pipe of dia , 40mm for grouting with cement sand grouting mix 1:2 (1 cement : 2 fine aggregate) under sufficient positive pressure to ensure complete filling including centring , shuttering, driving and removing the steel casing pipe and lifting casing etc. complete but excluding the cost of steel reinforcement . (Length of pile for payment shall be measured from top of the shoe to the bottom of pile cap) - 450 mm dia piles	metre	5501.65
20.5.3	Providing, driving (with vibrating pile driving hammer complete with power units & accessories) and installing driven Pre-cast reinforced cement concrete piles of specified diameter and length below the pile cap in M-25 cement concrete to carry safe working load not less than specified. With a central through preformed hole with M.S.black pipe of dia , 40mm for grouting with cement sand grouting mix 1:2 (1 cement : 2 fine aggregate) under sufficient positive pressure to ensure complete filling including centring , shuttering, driving and removing the steel casing pipe and lifting casing etc. complete but excluding the cost of steel reinforcement . (Length of pile for payment shall be measured from top of the shoe to the bottom of pile cap) - 500 mm dia piles	metre	5671.19
20.5.4	Providing, driving (with vibrating pile driving hammer complete with power units & accessories) and installing driven Pre-cast reinforced cement concrete piles of specified diameter and length below the pile cap in M-25 cement concrete to carry safe working load not less than specified. With a central through preformed hole with M.S.black pipe of dia , 40mm for grouting with cement sand grouting mix 1:2 (1 cement : 2 fine aggregate) under sufficient positive pressure to ensure complete filling including centring , shuttering, driving and removing the steel casing pipe and lifting casing etc. complete but excluding the cost of steel reinforcement . (Length of pile for payment shall be measured from top of the shoe to the	metre	6471.50

20 . Pile Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	bottom of pile cap) - 550 mm dia piles		
20.5.5	Providing, driving (with vibrating pile driving hammer complete with power units & accessories) and installing driven Pre-cast reinforced cement concrete piles of specified diameter and length below the pile cap in M-25 cement concrete to carry safe working load not less than specified. With a central through preformed hole with M.S.black pipe of dia , 40mm for grouting with cement sand grouting mix 1:2 (1 cement : 2 fine aggregate) under sufficient positive pressure to ensure complete filling including centring , shuttering, driving and removing the steel casing pipe and lifting casing etc. complete but excluding the cost of steel reinforcement . (Length of pile for payment shall be measured from top of the shoe to the bottom of pile cap) - 750 mm dia piles	metre	12418.04
20.5.6	Providing, driving (with vibrating pile driving hammer complete with power units & accessories) and installing driven Pre-cast reinforced cement concrete piles of specified diameter and length below the pile cap in M-25 cement concrete to carry safe working load not less than specified. With a central through preformed hole with M.S.black pipe of dia , 40mm for grouting with cement sand grouting mix 1:2 (1 cement : 2 fine aggregate) under sufficient positive pressure to ensure complete filling including centring , shuttering, driving and removing the steel casing pipe and lifting casing etc. complete but excluding the cost of steel reinforcement . (Length of pile for payment shall be measured from top of the shoe to the bottom of pile cap) - 1000 mm dia piles	metre	17093.78
20.6.1.1	Vertical load testing of piles in accordance with IS 2911 (Part IV) including installation of loading platform by Kentledge / Anchor piles method and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification - Single pile upto 50 tonne capacity & the direction - Single pile upto 50 tonne Safe capacity -Initial test (Test load 2.5 times the safe capacity)	test	35093.59
20.6.1.2	Vertical load testing of piles in accordance with IS 2911 (Part IV) including installation of loading platform by Kentledge / Anchor piles method and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification - Single pile upto 50 tonne capacity & the direction - Single pile upto 50 tonne Safe capacity -Routine test (Test load 1.5 times the safe capacity)	test	20696.52

20 . Pile Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
20.6.2.1	Vertical load testing of piles in accordance with IS 2911 (Part IV) including installation of loading platform by Kentledge / Anchor piles method and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification - Single pile upto 50 tonne capacity & the direction - Single pile above 50 tonne and upto 100 tonne Safe capacity - Initial test (Test load 2.5 times the safe capacity)	test	49490.68
20.6.2.2	Vertical load testing of piles in accordance with IS 2911 (Part IV) including installation of loading platform by Kentledge / Anchor piles method and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification - Single pile upto 50 tonne capacity & the direction - Single pile above 50 tonne and upto 100 tonne Safe capacity - Routine test (Test load 1.5 times the safe capacity)	test	32393.44
20.6.3.1	Vertical load testing of piles in accordance with IS 2911 (Part IV) including installation of loading platform by Kentledge / Anchor piles method and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification - Single pile upto 50 tonne capacity & the direction - Group of two or more piles upto 50 tonne safe capacity - Initial test (Test load 2.5 times the safe capacity)	test	67487.03
20.6.3.2	Vertical load testing of piles in accordance with IS 2911 (Part IV) including installation of loading platform by Kentledge / Anchor piles method and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification - Single pile upto 50 tonne capacity & the direction - Group of two or more piles upto 50 tonne safe capacity - Routine test (Test load 1.5 times the safe capacity)	test	41391.61
20.7.1.1	Cyclic vertical load testing of pile in accordance with IS code of practice IS : 2911 (part IV) by Kentledge method including preparation of pile head etc for - single pile - upto 50 tonne capacity pile	test	20696.52
20.7.1.2	Cyclic vertical load testing of pile in accordance with IS code of practice IS : 2911 (part IV) by Kentledge method including preparation of pile head etc for - single pile - above 50 tonne and upto 100 tonne safe capacity pile	test	32393.44

20 . Pile Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
20.7.2.1	Cyclic vertical load testing of pile in accordance with IS code of practice IS : 2911 (part IV) by Kentledge method including preparation of pile head etc for - Group of two or more piles - upto 400 tonne safe capacity of group	test	41391.61
20.8.1	Lateral load testing of single pile in accordance with IS Code of practice IS : 2911 (Part IV) for determining safe allowable lateral load on pile - upto 50 tonne capacity pile	test	20696.52
20.8.2	Lateral load testing of single pile in accordance with IS Code of practice IS : 2911 (Part IV) for determining safe allowable lateral load on pile - above 50 tonne and upto 100 tonne capacity pile	test	32393.44
20.9	Integrity testing of pile using low strain / sonic integrity test / sonic echo test method in accordance with IS 14893 including surface preparation of pile top by removing soil , mud, dust & chipping lean concrete lumps etc. and use of computerised equipment and high skill trained personal for conducting the test & submission of results, all complete as per direction of Engineer-in-charge	test	1401.94

21 . Aluminium Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
21.1.1.1	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections / appropriate Z sections and other sections of approved make conforming to IS:733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions , i.e at top, bottom and sides with required EPDM rubber / neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, aluminium snap beading for glazing / paneling , C.P.brass / stainless steel screws , all complete as per architectural drawings and the direction.(Glazing, paneling and dash fasteners to be paid for separately) - for fixed portion - anodised aluminium (anodised transparent or dyed to required shade according to IS:1868, Minimum anodic coating of grade AC 15)	kg	636.78
21.1.1.2	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections / appropriate Z sections and other sections of approved make conforming to IS:733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions , i.e at top, bottom and sides with required EPDM rubber / neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, aluminium snap beading for glazing / paneling , C.P.brass / stainless steel screws , all complete as per architectural drawings and the direction.(Glazing, paneling and dash fasteners to be paid for separately) - for fixed portion - Powder coated aluminium (minimum thickness of powder coating 50 micron)	kg	656.94
21.1.1.3	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections / appropriate Z sections and other sections of approved make conforming to IS:733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions , i.e at top, bottom and sides with required EPDM rubber / neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, aluminium snap beading for glazing / paneling , C.P.brass / stainless steel screws , all complete as per architectural drawings and the direction. (Glazing, paneling and dash fasteners to be paid for separately) - for fixed portion -	kg	668.89

21 . Aluminium Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	Polyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron)		
21.1.2.1	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections / appropriate Z sections and other sections of approved make conforming to IS:733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions , i.e at top, bottom and sides with required EPDM rubber / neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, aluminium snap beading for glazing / paneling , C.P.brass / stainless steel screws , all complete as per architectural drawings and the direction.(Glazing, paneling and dash fasteners to be paid for separately) - for shutters of doors, windows & ventilators including providing and fixing hinges / pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (fittings shall be paid for separately) - Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC15)	kg	771.76
21.1.2.2	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections / appropriate Z sections and other sections of approved make conforming to IS:733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions , i.e at top, bottom and sides with required EPDM rubber / neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, aluminium snap beading for glazing / paneling , C.P.brass / stainless steel screws , all complete as per architectural drawings and the direction.(Glazing, paneling and dash fasteners to be paid for separately) - for shutters of doors, windows & ventilators including providing and fixing hinges / pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (fittings shall be paid for separately) - Powder coated aluminium (minimum thickness of powder coating 50 micron)	kg	791.92
21.1.2.3	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections / appropriate Z sections and other sections of	kg	803.87

21 . Aluminium Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	approved make conforming to IS:733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions , i.e at top, bottom and sides with required EPDM rubber / neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, aluminium snap beading for glazing / paneling , C.P.brass / stainless steel screws , all complete as per architectural drawings and the direction.(Glazing, paneling and dash fasteners to be paid for separately) - for shutters of doors, windows & ventilators including providing and fixing hinges / pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (fittings shall be paid for separately) - Polyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron)		
21.2.1	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS:12823 grade I type II , in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and the direction.- Pre - laminated particle board with decorative lamination on one side and balancing lamination on other side	sqm	1315.06
21.2.2	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS:12823 grade I type II , in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and the direction.- Pre - laminated particle board with decorative lamination on both sides	sqm	1480.88
21.3.1	Providing and fixing glazing in aluminium door, window , ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the direction. (cost of aluminium snap beading shall be paid in basic item) - with float glass panes of 4.0 mm thickness	sqm	1621.21
21.3.2	Providing and fixing glazing in aluminium door, window , ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the direction.(cost of aluminium snap beading shall be paid in basic item) - with float glass panes of 5 mm thickness	sqm	1840.30

21 . Aluminium Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
21.3.3	Providing and fixing glazing in aluminium door, window , ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the direction.(cost of aluminium snap beading shall be paid in basic item) - with float glass panes of 8 mm thickness (weight not less than 20kg / sqm)	sqm	2513.20
21.4.1	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS:6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors including cost of cutting floors , embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete and the direction.- with stainless steel cover plate minimum 1.25mm thickness	each	3725.41
21.4.2	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS:6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors including cost of cutting floors , embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete and the direction.- with brass cover plate minimum 1.25mm thickness	each	3672.76
21.5	Providing and fixing powder coated aluminium work (minimum thickness of powder coating 50 micron) consisting of tee / angle sections , of approved make conforming to IS:733 in frames of false ceiling including aluminium angle cleats with necessary C.P.brass / stainless steel sunk screws, aluminium perimeter angles fixed to wall with stainless steel rawl plugs @ 450mm centre to centre and fixing the frame work to G.I.level adjusting hangers 6mm dia with necessary cadmium plated machine screws all complete as per approved architectural drawings and the direction.(level adjusting hangers, ceiling cleats and expansion hold fasteners to be paid for separately	kg	933.23
21.6	Providing and fixing 6mm dia G.I.level adjusting hangers (upto 1200 mm length) ,fixed to roof slabs by means of ceiling cleats made out of G.I.flat 40x3 mm size 60 mm long and stainless steel expandable dash fastener of 12.5mm dia and 50 mm long , complete as per direction of Engineer-in-charge	each	204.91

21 . Aluminium Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
21.7.1	Providing and fixing machine moulded aluminium covering of approved pattern and design, made out of machine cut aluminium sheet and machine holed for receiving dash fastener, over expansion joints on vertical surfaces / ceiling floors, the fixing on plate in one row on one side of joint only shall be done with stainless steel dash fastners of 8 mm dia and 75 mm long bolt including providing aluminium washers 2 mm thick 15mm dia , at a staggered pitch of 200mm centre to centre including drilling holes in the receiving surface and providing expandable plastic sleeves in holes etc. complete as per direction of Engineer-in-charge - Anodised aluminium sheet 2.5mm thick (anodised transparent or dyed to required shade according to IS:1868, minimum anodic coating of grade AC 15)	kg	885.53
21.7.2	Providing and fixing machine moulded aluminium covering of approved pattern and design, made out of machine cut aluminium sheet and machine holed for receiving dash fastener, over expansion joints on vertical surfaces / ceiling floors, the fixing on plate in one row on one side of joint only shall be done with stainless steel dash fastners of 8 mm dia and 75 mm long bolt including providing aluminium washers 2 mm thick 15mm dia , at a staggered pitch of 200mm centre to centre including drilling holes in the receiving surface and providing expandable plastic sleeves in holes etc. complete as per direction of Engineer-in-charge - Powder coated aluminium sheet 2.5mm thick (minimum thickness of powder coating 50 micron)	kg	905.70
21.8.1	Filling the gap in between aluminium frame & adjacent RCC / Brick / Stone work by providing weather silicon sealent over backer rod of approved quality as per architectural drawings and direction complete - Upto 5 mm depth and 5 mm width	metre	114.73
21.9.1	Extra for applying additional anodic coating AC 25 instead of AC 15 to aluminium extruded sections - for fixed portion	kg	12.09
21.9.2	Extra for applying additional anodic coating AC 25 instead of AC 15 to aluminium extruded sections - for shutters of doors, windows, & ventilators	kg	12.09
21.10	Providing and fixing double glazed hermetically sealed glazing in aluminium windows, ventilators and partition etc. with 6 mm thick clear float glass both side , having 12 mm air gap, including providing EPDM gasket, perforated aluminium	sqm	5732.06

21 . Aluminium Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	spacers, desiccants, sealant (both primary and secondary sealant) etc. as per specifications, drawings and direction complete		
21.11.1	Providing and fixing stainless steel (SS 304 grade) adjustable friction windows stays of approved quality with necessary stainless steel screws etc. to the side hung windows as per direction of Engineer-in-charge complete - 205x19 mm	each	343.77
21.11.2	Providing and fixing stainless steel (SS 304 grade) adjustable friction windows stays of approved quality with necessary stainless steel screws etc. to the side hung windows as per direction of Engineer-in-charge complete - 255x19 mm	each	373.64
21.11.3	Providing and fixing stainless steel (SS 304 grade) adjustable friction windows stays of approved quality with necessary stainless steel screws etc. to the side hung windows as per direction of Engineer-in-charge complete - 355 x 19 mm	each	471.80
21.11.4	Providing and fixing stainless steel (SS 304 grade) adjustable friction windows stays of approved quality with necessary stainless steel screws etc. to the side hung windows as per direction of Engineer-in-charge complete - 510 x 19 mm	each	847.38
21.11.5	Providing and fixing stainless steel (SS 304 grade) adjustable friction windows stays of approved quality with necessary stainless steel screws etc. to the side hung windows as per direction of Engineer-in-charge complete - 710x19mm	each	1520.29
21.12.1	Providing and fixing aluminium tubular handle bar 32 mm outer dia 3.0 mm thick & 2100 mm long with SS screws etc. complete as per direction of Engineer-in-charge - Anodized (AC 15) aluminium tubular handle bar	each	767.42
21.12.2	Providing and fixing aluminium tubular handle bar 32 mm outer dia 3.0 mm thick & 2100 mm long with SS screws etc. complete as per direction of Engineer-in-charge - Powder coated minimum thickness 50 micron aluminium tubular handle bar	each	798.80
21.12.3	Providing and fixing aluminium tubular handle bar 32 mm outer dia 3.0 mm thick & 2100 mm long with SS screws etc. complete as per direction of Engineer-in-charge - Polyester powder coated minimum thickness 50 micron aluminium	each	817.40

21 . Aluminium Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	tubular handle bar		
21.13	Providing and fixing brass 100 mm mortice latch and lock with 6 levers without pair of handles (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete	each	908.04
21.14	Providing and fixing anodised aluminium (anodised transparent or dyed to required shade according to IS : 1868, minimum anodic coating of grade AC 15) sub frame work for windows and ventilators with extruded built up standard tubular sections of approved make conforming to IS :733 and IS : 1285, fixed with dash fastener of required dia and size (Dash fastener to be paid separately)	kg	526.62
21.15.1	Providing and fixing aluminium casement windows fastener of required length for aluminium windows with necessary screws etc.complete - anodized (AC 15) aluminium	each	96.23
21.15.2	Providing and fixing aluminium casement windows fastener of required length for aluminium windows with necessary screws etc.complete - Powder coated minimum thickness 50 micron aluminium	each	101.92
21.15.3	Providing and fixing aluminium casement windows fastener of required length for aluminium windows with necessary screws etc.complete - Polyster powder coated minimum thickness 50 micron aluminium	each	100.49
21.16.1	Providing and fixing aluminium round shape handle of outer dia 100mm with SS screws etc.complete as per direction of Engineer-in-charge - Anodized (AC 15) aluminium	each	113.30
21.16.2	Providing and fixing aluminium round shape handle of outer dia 100mm with SS screws etc.complete as per direction of Engineer-in-charge - Powder coated minimum thickness 50 micron aluminium	each	118.99
21.16.3	Providing and fixing aluminium round shape handle of outer dia 100mm with SS screws etc.complete as per direction of Engineer-in-charge - Polyster powder coated minimum thickness 50 micron aluminium	each	127.53

21 . Aluminium Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
21.17	Providing and fixing anodised aluminium grill (anodised transparent or dyed to required shade according to IS:1868 with minimum anodic coating of grade AC 15) of approved design / pattern, with approved standard section and fixed to the existing window frame with C.P.brass / stainless steel screws @ 200 mm centre to centre , including cutting the grill to proper opening size for fixing and operation of handles and fixing approved anodised aluminium standard section around the opening, all complete as per requirement and direction - (Only weight of grill to be measured for payment)	kg	744.11
21.18	Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture , including providing and fixing top & bottom pivot & double acting hydraulic floor spring type fixing arrangement and making necessary holes etc. for fixing required door fittings, all complete as per direction of Engineer-in-charge (Door handle, lock and stopper etc. to be paid separately)	sqm	7012.46
21.19.1	Filling the gap in between aluminium / stone / wood frame and adjacent RCC / Brick / Stone / Wood / Ceramic / Gypsum work by providing weather / structural non sag elastomeric PU sealant over backer rod of approved quality as per architectural drawings and direction complete, complying to ASTM C920 , DIN 18540-F & ISO 11600 - upto 5mm depth and 5mm width	metre	148.52
21.19.2	Filling the gap in between aluminium / stone / wood frame and adjacent RCC / Brick / Stone / Wood / Ceramic / Gypsum work by providing weather / structural non sag elastomeric PU sealant over backer rod of approved quality as per architectural drawings and direction complete, complying to ASTM C920 , DIN 18540-F & ISO 11600 - upto 10mm depth and 10 mm width	metre	200.59
21.19.3	Filling the gap in between aluminium / stone / wood frame and adjacent RCC / Brick / Stone / Wood / Ceramic / Gypsum work by providing weather / structural non sag elastomeric PU sealant over backer rod of approved quality as per architectural drawings and direction complete, complying to ASTM C920 , DIN 18540-F & ISO 11600 - upto 20mm depth and 20mm width	metre	360.35

22 . Water Proofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
22.1.1	Providing and laying integral cement based treatment for water proofing on horizontal surfcae at all depth below ground level for under ground structures as per direction of Engineer-in-charge and consisting of :i) Ist layer of 22mm to 25mm thick approved and specified rough stone slab over a 25 mm thick base of cement mortar 1:3 (1 cement : 3 fine aggregate) including applying of twice (at base and top of mortar) cement slurry @ 2.2kg/sqm (each time) mixed with water proofing compound conforming to IS :2645 in the recommended propotion over the levelling course (leveling course to be paid separately) . Joints sealed and grouted with cement slurry mixed with water proofing compound .ii) 2nd layer of 25 mm thick cement mortar 1:3 (1cement : 3 fine aggregate) mixed with water proofing compound in recommended proportions . Iii) Finishing top with stone aggregate of 10 mm to 12mm nominal size spreading @ 8 cudm /sqm thoroughly embedded in the 2nd layer - Using rough kota stone	sqm	2214.90
22.2.1	Providing and laying integral cement based treatment for water proofing on the vertical surface by fixing specified stone slab 22 mm to 25mm thick with cement slurry mixed with water proofing compound conforming to IS:2645 in recommended proportions with a gap of 20mm (minimum) between stone slabs and the receiving surfaces and filling the gaps with neat cement slurry mixed with water proofing compound and finishing the exterior of stone slab with cement mortat 1:3 (1cement : 3 fine aggregate) 20mm thick with neat cement punning mixed with water proofing compound in recommended proportion complete at all levels as directed by Engineer-in-charge - Using rough kota stone	sqm	2808.24
22.3	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen and the like consisting of : i) Ist course of applying cement slurry @ 4.4 kg /sqm mixed with water proofing compound conforming to IS : 2645 in recommended proportions including rounding off junction of vertical and horizontal surface - ii) II nd course of 20mm cement plaster 1:3 (1 cement : 3 fine aggregate) mixed with water proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface - iii) III rd course of applying blown or residual bitumen applied hot at 1.7 kg per sqm of area - iv) IV th course of 400 micron thick PVC sheet. (Overlaps at joints of PVC sheet should be 100mm wide and pasted to each other with bitumen @1.7 kg/sqm)	sqm	912.29

22 . Water Proofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
22.4.1	Providing and placing in position suitable PVC water stops conforming to IS : 12200 for construction / expansion joints between two RCC members and fixed to the reinforcement with binding wire befor pouring concrete etc. complete - Serrated with central bulb (225 mm wide, 8-11 mm thick)	metre	669.95
22.4.2	Providing and placing in position suitable PVC water stops conforming to IS : 12200 for construction / expansion joints between two RCC members and fixed to the reinforcement with binding wire befor pouring concrete etc. complete - Dumb bell with central bulb (180 mm wide, 8 mm thick)	metre	620.16
22.4.3	Providing and placing in position suitable PVC water stops conforming to IS : 12200 for construction / expansion joints between two RCC members and fixed to the reinforcement with binding wire befor pouring concrete etc. complete - Kickers (320 mm wide, 5mm thick)	metre	755.31
22.5	Providing and laying water proofing treatment in sunken portion of WCs , bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying :- a) First layer of slurry of cement @0.488 kg / sqm mixed with water proofing cement compound @ 0.253 kg / sqm . This layer will be allowed to air cure for 4 hours - b) second layer of slurry of cement @ 0.242 kg / sqm mixed with water proofing cement compound @ 0.126 kg /sqm . This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate included preparation of surface, tratment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.	sqm	698.64
22.6	Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying : -a) after surface preparation, first layer of slurry of cement @ 0.488 kg / sqm mixed with water proofing cement compound @ 0.253 kg / sqm - b) laying second layer of fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm . - c) third layer of 1.5mm thickness consisting of slurry of cement @ 1.289 kg / sqm mixed with water proofing cement compound @ 0.670 kg / sqm and fine aggregate @ 1.289 kg / sqm . This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around . - d) fourth and final layer of brick tilling with cement mortar (which will be paid for	sqm	775.40

22 . Water Proofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	separately. For the purpose of measurement the entire treated surface will be measured)		
22.7.1	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations : - a) Applying a slurry coat of neat cement using 2.75 kg / sqm of cement admixed with water proofing compound conforming to IS: 2645 and approved over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment - b) Laying brick bats with mortar using broken bricks / brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 fine aggregate) admixed with water proofing compound conforming to IS : 2645 and approved over 20mm thick layer of cement mortar of mix 1:5 (1 cement : 5 fine aggregate) admixed with water proofing compound conforming to IS:2645 and approved to required slope and treating similarly the adjoining walls upto 300mm height including rounding of junctions of walls and slabs - c) after two days of proper curing applying a second coat of cement slurry using 2.75 kg / sqm of cement admixed with water proofing compound conforming to IS: 2645 and approved - d) Finishing the surface with 20mm thick jointless cement mortar of mix 1:4 (1 cement : 4 fine aggregate) admixed with water proofing compound conforming to IS: 2645 and approved including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep - e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test . All above operations to be done in order and as per direction of Engineer-in-charge and specified - with average thickness of 120mm and minimum thickness at khurra as 65 mm	sqm	1970.45
22.8.1	Providing and laying four courses water proofing treatment with bitumen felt over roofs consisting of first and third courses of blown bitumen 85/25 or 90/15 conforming to IS:702 applied hot @ 1.45 kg per sqm of area for each course , second course of roofing felt type 3 grade - I (hessian based self finished bitumen felt) and fourth and final course of stone grit 6mm and down size or pea- sized gravel spread at 6 cubic decimeter per sqm including preparation of surface but excluding grading complete with - Bitumen felt (hessian base) type 3 grade I conforming to IS : 1322	sqm	575.90

22 . Water Proofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
22.9	Providing and laying six courses water proofing treatment with bitumen felt over roofs consisting of first , third and fifth course of blown bitumen 85/25 or 90/15 conforming to IS: 702 applied hot @ 1.45 , 1.20 and 1.45 kg per sqm of area respectively , second and fourth courses of roofing felt type 3 grade I conforming to IS :1322 (Hessian based self finished bitumen felt) sixth and final course of stone grit 6 mm and down size or pea sized gravel spread at 6 cubic dm per sqm including preparation of surface but excluding grading ,complete	sqm	901.44
22.10	Providing and laying six courses water proofing treatment with bitumen felt over roofs consisting of first, third, fifth courses of blown or / and residual bitumen applied hot at 1.45 , 1.20, and 1.70 kg per sqm of area respectively, second and fourth courses of roofing felt type 2 grade I (fibre base self finished bitumen felt) six and final courses of stone grit 6mm and down size of pea sized gravel spread at 6 cu.dm per sqm including preparation of surface, excluding grading , complete	sqm	933.04
22.11	Providing and laying six courses water proofing treatment with bitumen felt over roofs consisting of first, third, and fifth courses of blow or / and residual bitumen applied hot at 1.45, 1.20 and 1.70 kg per sqm of area respectively , second and fourth courses of roofing felt type 2 grade II (glass fibre base self finished bitumen felt) and sixth and final course of stone grit 6mm and down size or pea sized gravel spread at 6 cubic dm per sqm including preparation of surface but excluding grading , complete	sqm	933.04
22.12	Supplying and applying bituminous solution primer on roof and or wall surface at 0.24 litre per sqm	sqm	67.13
22.13.1	Deduct for omitting in water proofing treatment final course of spreading stone grit 6mm down size or pea sized gravel - at 6 cudm per sqm	sqm	14.29
22.13.2	Deduct for omitting in water proofing treatment final course of spreading stone grit 6mm down size or pea sized gravel - at 8 cudm per sqm	sqm	17.88
22.14.1	Grading roof for water proofing treatment with - Cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size)	cum	9858.12

22 . Water Proofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
22.14.2	Grading roof for water proofing treatment with - Cement mortar 1:3 (1 cement : 3 fine aggregate)	cum	19054.27
22.14.3	Grading roof for water proofing treatment with - Cement mortar 1:4 (1 cement : 4 fine aggregate)	cum	17939.14
22.22	Providing and mixing integral crystalline admixture for waterproofing treatment to RCC structure like basement raft , retaining walls , reservior , sewage & water treatment plant , tunnels / subway and bridge deck etc., at the time of transporting of concrete into the drum of the ready - mix truck, using integral crystalline admixture @ 0.80% (minimum) to the weight of cement content per cubic meter of concrete) or higher as recommended by the manufacturer's specification in reinforced cement concrete st site of work . The material shall meet the requirements as specified in ACI-212-3R-2010 i.e, by reducing permeability of concrete by more than 90%, compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure. The crystalline admixture shall be capable of self - healing of cracks up to a width of 0.5mm. The work shall be carried out all complete as per specification and direction of Engineer-in-charge..The product performance shall carry guarantee for 10 years against any leakage.	kg	464.35
22.22A	Providing and applying fibre reinforced elastomeric liquid water proofing membrane with resilient acrylic polymers having Sun Reflectivity Index (SRI) of 105 on top of concrete roof in three coats @ 10.76 litre / 10 sqm. One coat of self - priming of elastomeric waterproofing liquid (dilution with water in the ratio of 3:1) and two coats of undiluted elastomeric waterproofing liquid (dr film thickness of complete application / system not less than 500 microns). The operation shall be carried out after scrapping and properly cleaning the surface to remove loose particles with wire brushes,complete in all respect as per direction of Engineer-in-charge.	sqm	499.51
22.23.1	Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks , roof slabs, podiums , reservior , sewage & water treatment plant , tunnels / subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements	sqm	543.03

22 . Water Proofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	as specified in ACI-212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50 mm. The work shall be carried out all complete as per specification and the direction. The product performance shall carry guarantee for 10 years against any leakage - For Vertical surfcae two coats @ 0.70 kg per sqm per coat		
22.23.2	Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks , roof slabs, podiums , reservior , sewage & water treatment plant , tunnels / subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI-212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50 mm. The work shall be carried out all complete as per specification and the direction. The product performance shall carry guarantee for 10 years against any leakage - For horizontal surfcae one coats @ 1.10 kg per sqm	sqm	418.98
22.23A	Providing & applying polymer modified , flexible cementatious negative side waterproofing coating with elastic waterproofing polymers on interior wall plaster surface in three coats @ 14.35 kg / 10 sqm , one coat of self priming of cementatious waterproofing polymer (dilution with water in the ratio of 1:1) and two coats of cementatious waterproofing polymer (dilution with water in the ratio of 3:1) after scrapping and properly cleaning the surface to remove pre-existing paint film & loose particles till plaster is visible , complete in all respect as per the direction	sqm	504.06
22.24	Providing and applying integral crystalline (dry shake) of hydrophilic in nature for waterproofing treatment to the RCC structures like basement raft , foundation slab, sewage & water treatment plant slab, warehouses floor, paking structures and water tank base slab etc. sprinkled @ 0.60kg per sqm or higher	sqm	352.68

22 . Water Proofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	as recommended by the manufacturer's specification over the lean concrete of above cited structures. The material shall meet the requirements as specified in ACI-212-3R-2010 i.e.by reducing permeability of concrete by more than 85% ,compared control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline dry - shake shall be capable of self-healing of cracks up to a width of 0.50 mm. The work shall be carried out all complete as per specification and the direction. The product performance shall carry guarantee for 10 years against any leakage		
22.24A	Providing and applying high quality acrylic modified resin based texture of Dholpur / red sand stone Pattern with anti algae and UV resistance properties to be applied as intermediate finish in desired pattern @ 43.04 kgs / 10 sqm to form film of 1-1.5 mm thickness after scrapping and properly cleaning the surface to remove loose particles from the plaster surface , followed by top coating with Premium Acrylic Smooth exterior paint with Silicone additives of required shade by two or more coats @ 1.43 litres / 10 sqm.complte as the direction	sqm	655.06
22.25.1	Providing and applying crystalline mortar by mixing in the ratio of 4.5 : 1 (4.5 parts crystalline mortar : 1 part water) for the treatment of faulty construction joints, cracks, tie rod holes and spalled & honeycombed surface of RCC underground structures like basement, water tanks, bridge deck etc. to ensure water tightness. The crystallie mortar shall conform to the EN 1504-3 having compressive strength Class R4 $\geq$ 45 MPa and adhesive bond strength Class R3 $\geq$ 1.5 MPa. The work shall be carried out all complete as per specification and the direction of the engineer-in-charge. The product performance shall carry guarantee for 10 years against any leakage.- For sealing cracks and faulty construction joints , routed out/making U-shape groove size 25x25mm and then primed the area with integral crystalline slurry @ 0.05 kg / running meter and while the surface is tacky filled the groove upto surace with crystalline mortar at 1.5 kg /running meter. Once crystalline mortar is touch dry then finally applied two coats of integral crystalline slurry @ 0.05 kg / running meter per coat	metre	632.37
22.25.2	Providing and applying crystalline mortar by mixing in the ratio of 4.5 : 1 (4.5 parts crystalline mortar : 1 part water) for the treatment of faulty construction joints, cracks, tie rod holes and spalled & honeycombed surface of RCC underground structures like basement, water tanks, bridge deck etc. to ensure	per hole	23.93

22 . Water Proofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	water tightness. The crystalline mortar shall conform to the EN 1504-3 having compressive strength Class R4 ≥ 45 MPa and adhesive bond strength Class R3 ≥ 1.5 MPa. The work shall be carried out all complete as per specification and the direction of the engineer-in-charge. The product performance shall carry guarantee for 10 years against any leakage. For patching of the tie rod holes , prepared tie rod hole surface and then primed the area with integral crystalline slurry @ 0.07kg / sqm and while the surface is tacky repair and then filled the tie rod holes with crystalline mortar @ 0.04 kg per hole. The crystalline mortar should be tightly rodded into tie rod holes or packed tightly (For 25x25x25 mm tie rod hole , use 0.04kg to fill the hole)		
22.26	Providing and applying of swellable type water stop tape , 19mm x 25mm thick in linear meter (expansive nature) for construction joints treatment of RCC structure such as raft slab , retaining wall , water storage tank and at the junction of raft slab with the retaining walls etc.. After cleaning the surace , one coat of required primer for swellable water stop tape shall be applied throughout the length of the joint @ 3.78 litre per 240 running meter. Over the primed surface swellable type water stop tape shall be placed. The work shall be carried out all complete as per specification and the direction. The product performance shall carry guarantee for 10 years against any leakage.	metre	663.15

23 . Rain Water Harvesting & TubeWells

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
23.1.1.1	Boring / drilling bore well of required dia for casing / strainer pipe, by suitable method prescribed in IS : 2800 (part 1) , including collecting samples from different strata , preparing and submitting strata chart /bore log, including hire & running charges of all equipments, tools , plants & machineries required for the job, all complete as directed by Engineer-in-charge.- upto 90 metre depth below ground level - all types of soil - 300 mm dia	metre	847.93
23.1.1.2	Boring / drilling bore well of required dia for casing / strainer pipe, by suitable method prescribed in IS : 2800 (part 1) , including collecting samples from different strata , preparing and submitting strata chart /bore log, including hire & running charges of all equipments, tools , plants & machineries required for the job, all complete as directed by Engineer-in-charge - upto 90 metre depth below ground level - all types of soil - 350 mm dia	metre	927.42
23.1.1.3	Boring / drilling bore well of required dia for casing / strainer pipe, by suitable method prescribed in IS : 2800 (part 1) , including collecting samples from different strata , preparing and submitting strata chart /bore log, including hire & running charges of all equipments, tools , plants & machineries required for the job, all complete as directed by Engineer-in-charge- upto 90 metre depth below ground level - all types of soil - 400 mm dia	metre	1187.10
23.1.2.1	Boring / drilling bore well of required dia for casing / strainer pipe, by suitable method prescribed in IS : 2800 (part 1) , including collecting samples from different strata , preparing and submitting strata chart /bore log, including hire & running charges of all equipments, tools , plants & machineries required for the job, all complete as directed by Engineer-in-charge- upto 90 metre depth below ground level -rocky strata including boulders - 300 mm dia	metre	2036.01
23.1.2.2	Boring / drilling bore well of required dia for casing / strainer pipe, by suitable method prescribed in IS : 2800 (part 1) , including collecting samples from different strata , preparing and submitting strata chart /bore log, including hire & running charges of all equipments, tools , plants & machineries required for the job, all complete as directed by Engineer-in-charge - upto 90 metre depth below ground level -rocky strata including boulders - 350 mm dia	metre	2155.60

23 . Rain Water Harvesting & TubeWells

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
23.1.2.3	Boring / drilling bore well of required dia for casing / strainer pipe, by suitable method prescribed in IS : 2800 (part 1) , including collecting samples from different strata , preparing and submitting strata chart /bore log, including hire & running charges of all equipments, tools , plants & machineries required for the job, all complete as directed by Engineer-in-charge- upto 90 metre depth below ground level -rocky strata including boulders - 400 mm dia	metre	2555.72
23.2.1.1	Boring / drilling bore well of required dia for casing / strainer pipe, by suitable method prescribed in IS : 2800 (part 1) , including collecting samples from different strata , preparing and submitting strata chart /bore log, including hire & running charges of all equipments, tools , plants & machineries required for the job, all complete as per direction of Engineer-in-charge - beyond 90 metre & upto 150 metre depth below ground level -all types of soil - 300 mm dia	metre	989.25
23.2.1.2	Boring / drilling bore well of required dia for casing / strainer pipe, by suitable method prescribed in IS : 2800 (part 1) , including collecting samples from different strata , preparing and submitting strata chart /bore log, including hire & running charges of all equipments, tools , plants & machineries required for the job, all complete as per direction of Engineer-in-charge - beyond 90 metre & upto 150 metre depth below ground level -all types of soil - 350 mm dia	metre	1099.17
23.2.1.3	Boring / drilling bore well of required dia for casing / strainer pipe, by suitable method prescribed in IS : 2800 (part 1) , including collecting samples from different strata , preparing and submitting strata chart /bore log, including hire & running charges of all equipments, tools , plants & machineries required for the job, all complete as per direction of Engineer-in-charge - beyond 90 metre & upto 150 metre depth below ground level -all types of soil - 400 mm dia	metre	1483.88
23.2.2.1	Boring / drilling bore well of required dia for casing / strainer pipe, by suitable method prescribed in IS : 2800 (part 1) , including collecting samples from different strata , preparing and submitting strata chart /bore log, including hire & running charges of all equipments, tools , plants & machineries required for the job, all complete as per direction of Engineer-in-charge - beyond 90 metre & upto 150 metre depth below ground level -Rocky strata including boulders - 300 mm dia	metre	2246.07

23 . Rain Water Harvesting & TubeWells

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
23.2.2.2	Boring / drilling bore well of required dia for casing / strainer pipe, by suitable method prescribed in IS : 2800 (part 1) , including collecting samples from different strata , preparing and submitting strata chart /bore log, including hire & running charges of all equipments, tools , plants & machineries required for the job, all complete as per direction of Engineer-in-charge - beyond 90 metre & upto 150 metre depth below ground level -Rocky strata including boulders - 350 mm dia	metre	2345.88
23.2.2.3	Boring / drilling bore well of required dia for casing / strainer pipe, by suitable method prescribed in IS : 2800 (part 1) , including collecting samples from different strata , preparing and submitting strata chart /bore log, including hire & running charges of all equipments, tools , plants & machineries required for the job, all complete as per direction of Engineer-in-charge - beyond 90 metre & upto 150 metre depth below ground level -Rocky strata including boulders - 400 mm dia	metre	3000.59
23.3.1	Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC medium well casing (CM) pipe of required dia , conforming to IS: 12818, including required hire and labour charges, fittings & accessories etc. all complete , for all depths as per direction of Engineer-in-charge - 100 mm nominal size dia	metre	866.25
23.3.2	Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC medium well casing (CM) pipe of required dia , conforming to IS: 12818, including required hire and labour charges, fittings & accessories etc. all complete , for all depths - 150 mm nominal size dia	metre	994.28
23.3.3	Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC medium well casing (CM) pipe of required dia , conforming to IS: 12818, including required hire and labour charges, fittings & accessories etc. all complete , for all depths - 200 mm nominal size dia	metre	1577.56
23.4.1	Supplying, assembling, lowering and fixing in vertical position in bore well unplasticied PVC medium well screen (RMS) pipes with ribs, conforming to IS: 12818, including hire & labour charges , fittings & accessories etc all complete , for all depths as per direction of Engineer-in-charge- 100 mm nominal size dia	metre	842.06
23.4.2	Supplying, assembling, lowering and fixing in vertical position	metre	1108.09

23 . Rain Water Harvesting & TubeWells

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	in bore well unplasticied PVC medium well screen (RMS) pipes with ribs, conforming to IS: 12818, including hire & labour charges , fittings & accessories etc all complete , for all depths as per direction of Engineer-in-charge- 150 mm nominal size dia		
23.4.3	Supplying, assembling, lowering and fixing in vertical position in bore well unplasticied PVC medium well screen (RMS) pipes with ribs, conforming to IS: 12818, including hire & labour charges , fittings & accessories etc all complete , for all depths as per direction of Engineer-in-charge- 200 mm nominal size dia	metre	1714.23
23.5	Supplying , filling , spreading & leveling stone boulders of size range 5 cm to 20 cm, in recharge pit, in the required thickness, for all leads & lifts , all complete as per direction of Engineer-in-charge	cum	1969.65
23.6	Supplying, filling, spreading and levelling gravels of size range 5 mm to 10 mm , in the recharge pit, over the existing layer of boulders , in required thickness , for all leads and lifts , all complete as per direction of Engineer-in-charge	cum	1407.71
23.7	Supplying , filling , spreading and levelling fine aggregate of size range 1.5mm to 2 mm in recharge pit , in required thickness over gravel layer, for all leads and lifts, all complete as per direction of Engineer-in-charge	cum	1407.71
23.8	Gravel packing in tubewell construction in accordance with IS :4097, including providing gravel fine / medium / coarse, in required grading and sizes as per actual requirement , of all complete as per direction of Engineer-in-charge	cum	1469.59
23.9	Providing and fixing factory made precast RCC perforated drain covers, having concrete of strength not less than M-25 , of size 1000 x 450 x 50 mm , reinforced with 8 mm dia four nos longitudinal & 9 nos cross sectional T.M.T. hoop bars, including providing 50 mm dia perforations @ 100 to 125 mm c/c, including providing edge binding with M.S.flats of size 50 mm x1.6 mm complete, all as per direction of Engineer-in-charge	each	1710.01
23.10.1	Supplying , assembling, lowering and fixing in vertical position in bore well, ERW (Electric Resistance Welded) FE 410 mild	metre	1718.50

23 . Rain Water Harvesting & TubeWells

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	steel screwed and socketed / plain ended casing pipes of required dia, conforming to IS:4270 , of reputed & approved make, including painted with outside surface with two coats of anticorrosive paint of approved brand and manufacture, including required hire & labour charges, fittings & accessories , all complete , for all depths as per direction of Engineer-in-charge.- 100 mm nominal size dia having minimum wall thickness 5.00 mm		
23.10.2	Supplying , assembling, lowering and fixing in vertical position in bore well, ERW (Electric Resistance Welded) FE 410 mild steel screwed and socketed / plain ended casing pipes of required dia, conforming to IS:4270 , of reputed & approved make, including painted with outside surface with two coats of anticorrosive paint of approved brand and manufacture, including required hire & labour charges, fittings & accessories , all complete , for all depths as per direction of Engineer-in-charge - 150 mm nominal size dia having minimum wall thickness 5.00 mm	metre	2323.73
23.10.3	Supplying , assembling, lowering and fixing in vertical position in bore well, ERW (Electric Resistance Welded) FE 410 mild steel screwed and socketed / plain ended casing pipes of required dia, conforming to IS:4270 , of reputed & approved make, including painted with outside surface with two coats of anticorrosive paint of approved brand and manufacture, including required hire & labour charges, fittings & accessories , all complete , for all depths as per direction of Engineer-in-charge - 200 mm nominal size dia having minimum wall thickness 5.40 mm	metre	2923.76
23.11.1	Supplying, assembling, lowering and fixing in vertical position in bore well, ERW (Electric Resistance Welded) FE 410 plain slotted (having slot of size 1.6/3.2mm) mild steel threaded and socketed / plain bevel ended pipe (type A) of required dia, conforming to IS: 8110 , of reputed and approved make, having wall thickness not less than 5.40 mm, including painted with outside surface with two coats of anticorrosive bitumestic paint of approved brand and manufacture, including hire & labour charges, fittings & accessories , all complete , for all depths as per direction of Engineer-in-charge- 100 mm nominal size dia	metre	1804.43
23.11.2	Supplying, assembling, lowering and fixing in vertical position in bore well, ERW (Electric Resistance Welded) FE 410 plain slotted (having slot of size 1.6/3.2mm) mild steel threaded and	metre	2438.30

23 . Rain Water Harvesting & TubeWells

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	socketed / plain bevel ended pipe (type A) of required dia, conforming to IS: 8110 , of reputed and approved make, having wall thickness not less than 5.40 mm, including painted with outside surface with two coats of anticorrosive bitumestic paint of approved brand and manufacture, including hire & labour charges, fittings & accessories , all complete , for all depths as per direction of Engineer-in-charge- 150 mm nominal size dia		
23.11.3	Supplying, assembling, lowering and fixing in vertical position in bore well, ERW (Electric Resistance Welded) FE 410 plain slotted (having slot of size 1.6/3.2mm) mild steel threaded and socketed / plain bevel ended pipe (type A) of required dia, conforming to IS: 8110 , of reputed and approved make, having wall thickness not less than 5.40 mm, including painted with outside surface with two coats of anticorrosive bitumestic paint of approved brand and manufacture, including hire & labour charges, fittings & accessories , all complete , for all depths as per direction of Engineer-in-charge- 200 mm nominal size dia	metre	3036.27
23.12	Development of tube well in accordance with IS: 2800 (part I) and IS: 11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit) , with required capacity air compressor, running the compressor for required time till well is fully developed, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water samples & getting tested in approved laboratory , including disinfection of tubewell, all complete including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction	per hour	1440.42
23.13.1	Providing and fixing suitable size threaded mild steel cap or spot welded plate to the top of bore well housing /casing pipe,removable as per requirement , all complete for borewell of - 100 mm dia	each	263.19
23.13.2	Providing and fixing suitable size threaded mild steel cap or spot welded plate to the top of bore well housing /casing pipe,removable as pre requirement , all complete for borewell of - 150 mm dia	each	298.75
23.13.3	Providing and fixing suitable size threaded mild steel cap or spot welded plate to the top of bore well housing /casing	each	381.27

23 . Rain Water Harvesting & TubeWells

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	pipe,removable as pre requirement , all complete for borewell of - 200 mm dia		
23.14.1	Providing and fixing M.S.clamp of required dia to the top of casing / housing pipe of tubewell as per IS:2800 (part I) , including necessary bolts & nuts of required size complete - 100 mm clamp	each	2158.61
23.14.2	Providing and fixing M.S.clamp of required dia to the top of casing / housing pipe of tubewell as per IS:2800 (part I) , including necessary bolts & nuts of required size complete - 150 mm clamp	each	2277.22
23.14.3	Providing and fixing M.S.clamp of required dia to the top of casing / housing pipe of tubewell as per IS:2800 (part I) , including necessary bolts & nuts of required size complete - 200 mm clamp	each	2590.35
23.15.1	Providing and fixing Bail plug / Bottom plug of required dia to the bottom of pipe assembly of tubewell as per IS:2800 (part I) - 100 mm dia	each	319.39
23.15.2	Providing and fixing Bail plug / Bottom plug of required dia to the bottom of pipe assembly of tubewell as per IS:2800 (part I) - 150 mm dia	each	395.50
23.15.3	Providing and fixing Bail plug / Bottom plug of required dia to the bottom of pipe assembly of tubewell as per IS:2800 (part I) - 200 mm dia	each	549.14

24 . Conservation of Heritage Buildings

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
24.1	Raking out joints of stone masonry surface to the required width and depth , with due care and precaution, by mechanical / manual means, including preparing and cleaning the surface for re- pointing / refilling of joints , including disposal of rubbish to the dumping ground within 50 metre lead	sqm	85.57
24.2	Providing and fixing double scaffolding system (cup lock type) on the exterior side of building / structure , upto 25 metre height, above ground level , including additional rows of scaffolding in stepped manner as per requirement of site, made with 40mm dia M.S.tube, placed 1.5 metre centre to centre ,horizontal & vertical tubes joint with cup & lock system with M.S.Tubes, M.S.Tube Challis, M.S.Clamps and staircase system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for execution of work of cleaning and / or pointing and / or applying chemical and removing it thereafter. The scaffolding system shall be stiffened with bracings, runners, connecting with the building etc, wherever required , if feasible , for inspection of work at required locations with essential safety features for the workmen etc., complete as per direction of Engineer-in-charges Note:(1) The elevational area of the scaffolding shall be measured for payment purpose.(2) The payment will be made once only for execution of all items for such works	sqm	412.92
24.3	Cleaning the sand stone surface and removing dirt, dust, bird dropping, grease, oil, algae, fungus , monkey beats, vegetable growth etc., including providing,applying and washing the surface with liquid ammonia chemical of 5% solution and other chemical cleaning agent as approved by archaeological survey of india of approved brand and manufacturer, with the help of required scrubbers and also cleaning with machine operated water jet mixed with desired quantity of fine silica where ever required, without causing any scratching / damage to the stone surface and finally washing the surface with clean water with the help of pressure jet machine , complete in all respect, including taking all precautions to safeguard ventilators, windows, doors etc. by suitable covering so as to avoid any damage to the building / structure, all as per direction of Engineer-in-charge (The rate is inclusive of all materials & labours involved except scaffolding)	sqm	268.30
24.4	Providing and applying antifungal wash treatment using 3% solution of sodium pentachlorophenate , of reputed brand and manufacturer, on cleaned sand stone surface at desired	sqm	97.37

24 . Conservation of Heritage Buildings

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	locations as per direction of Engineer-in-charge (The rate is inclusive of all materials and labours involved except scaffolding)		
24.5	Ruled / Flush pointing on red sand stone masonry surface with lime, surkhi and marble dust mortar in the ratio of 1:1.5:1/2 (one lime : 1.5 surki (50 % red and 50 % light yellow surki) : 1/2 marble dust). (The rate is inclusive of all materials & laboures involved except scaffolding)	sqm	440.10
24.6	Ruled / Flush pointing on white sand stone masonry surface with lime, surkhi and marble dust mortar in the ratio of 1:1.5 :1/2 (one lime : 1.5 surkhi (15 % dark red and 85 % light yellow surkhi) : 1/2 marble dust). (The rate is inclusive of all materials & labours involved except scaffolding)	sqm	440.10
24.7	Applying two or more coat of Ethyl Silicate chemical as approved by archaeological survey of india , of approved brand and manufacturer , with brush or spray on the existing stone masonry surface till there is no further absorption of chemical by stone surface , including protecting the applied surface from direct sunlight by suitable means during application , all complete as per direction of Engineer-in-charge (The rate is inclusive of all materials & labours involved except scaffolding)	sqm	480.28
24.8	Applying breathable , non -reactive, antifungal, and water repellent Silane / Siloxane chemical as approved by archaeological survey of india , of approved brand and manufacture , diluted with solvent mineral turpentine oil in the ratio of 1:12 (One part of approved chemical : 12 part of turpentine oil), on the existing sand stone masonry surface with two or more coats to give uniform application of chemical on the surface, all complete (The rate is inclusive of all materials & labours involved except scaffolding)	sqm	162.31

25 . Structural Glazing Aluminium Composite Panel

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
25.1	Providing and supplying aluminium extruded tubular and other aluminium sections as per the architectural drawings and approved shop drawings, the aluminium quality as per grade 6063 T5 or T6 as per BS 1474, including super durable powder coating of 60-80 microns conforming to AAMA 2604 of required colour and shade as approved (The item included cost of material such as cleats , sleeves , screws etc. necessary for fabrication of extruded aluminium frame work . Nothing extra shall be paid on this account). The weight of aluminium extruded section shall be taken for purpose of payment.	kg	525.71
25.2	Designing , fabricating , testing , protection , installing and fixing in position semi (grid) unitized system of structural glazing (with open joints) for linear as well as curvilinear portions of the building for all heights and all levels, including: a) Structural analysis & design and preparation of shop drawings for the specified design loads conforming to IS 875 Part III (the system must passed the proof test at 1.5 times design wind pressure without any failure) , including functional design of the aluminium sections for fixing glazing panels of various thicknesses, aluminium cleats, sleeves and splice plates etc. gaskets , screws, toggles, nuts, bolts, clamps etc., structural and weather silicone sealants , flashings , fire stop (barrier) - cum- smoke seals , microwave cured EPDM gaskets for water tightness , pressure equalisation & drainage and protection against fire hazard including: b) Fabricating and supplying serrated M.S.hot dip galvanised / aluminium alloy of 6005 T5 brackets of required sizes , sections and profiles etc. to accommodate 3 dimensional movement for achieving perfect verticality and fixing structural glazing system rigidly to the RCC / masonry / structural steel frame work of building structure using stainless steel anchor fasteners / bolts, nylon separator to prevent bimetallic contacts with nuts and washers etc. of stainless steel grade 316, of the required capacity and in required numbers c) Providing and filling , two part pump filled, structural silicone sealant and one part weather silicone sealant compatible with the structural silicone sealant of required bite size in a clean and controlled factory / work shop environment , including double sided spacer tape , setting blocks and backer rod , all of approved grade, brand and manufacture , as per the approved sealant design , within and all around the perimeter for holding glass d) Providing and fixing in position flashings of solid aluminium sheet 1 mm thick and of sizes, shapes and profiles, as required as per the site conditions, to seal the gap between the building	sqm	3811.60

25 . Structural Glazing Aluminium Composite Panel

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	structure and all its interfaces with curtain glazing to make it watertight e) Making provision for drainage of moisture / water that enters the curtain glazing system to make it watertight , by incorporating principles of pressure equalization , providing suitable gutter profiles at bottom (if required), making necessary holes of required sizes and of required numbers etc. complete . This item includes cost of all inputs of designing, labour for fabricating and installation of aluminium grid, installation of glazed units, T&P , scaffolding and other incidental charges including wastages etc., enabling temporary structures and services, cranes or cradles etc. as described above and as specified. The item includes the cost of getting all the structural and functional design including shop drawings checked by a structural designer, duly approved. The item also included the cost of all mock ups at site, cost of all samples of individual components for testing in an approved laboratory, field tests on the assembled working structural glazing as specified , cleaning and protection till the handing over of the building for occupation. In the end, the contractor shall provide a water tight structural glazing having all the performance characteristics etc. all complete as required, as per the architectural drawings , as per item description, as specified, as per the approved shop drawings and as per direction of Engineer-in-charge Note : -1. The cost of providing extruded aluminium frames , shadow boxes , extruded aluminium section capping for fixing in the grooves of the curtain glazing and vermin proof stainless steel wire mesh shall be paid for separately under relevant items under this sub-head . However , for the purpose of payment , only the actual area of structural glazing (including width of grooves) on the external face shall be measured in sqm . Upto two decimal places . Note: -2. The following performance test are to be conducted on structural glazing system if area of structural glazing exceeds 2500 sqm from the certified laboratories accredited by NABL (National Accreditation Board for Testing and Calibration laboratories) , Department of Science & Technologies , India . Cost of testing is payable separately . The NIT approving authority will decide the necessity of testing on the basis of cost of the work , cost of the test and importance of the work . Performance Testing of Structural glazing system . Tests to be conducted in the NABL accredited lab or any other accreditation body which operate in accordance with ISO/IEC 17011 and accredits labs as per ISO/IEC 17025 1. Performance Laboratory Test for Air Leakage Test (-50pa to -300pa) & (+50pa to +300pa) as per		

25 . Structural Glazing Aluminium Composite Panel

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	ASTM E-283-04 testing method for a range of testing limit 1 to 200 mVhr" 2. Static Water Penetration Test. (50 pa to 1500 pa) as per ASTM E - 331-09 testing method for a range upto 2000 ml" 3.Dynamic water Penetration (50pa to 1500pa) as per AAMA 501.01-05 testing method for a range upto 2000 ml" 4. Structural Performance Deflection and deformation by static air pressure test (1.5 times design wind pressure without any failure) as per ASTM E - 330-10 testing method for a range upto 50 mm" 5) Seismic Movement Test (upto 30mm) as per AAMA 501.4-09 testing method for Qualitative test" Tests to be conducted on site 6) Onsite Test for Water Leakage for a pressure range 50 kpa to 240 kpa (35psi) upto 2000 ml"		
25.3	Providing, assembling and supplying vision glass panels (IGUs) comprising of hermetically - sealed 6-12 -6 mm insulated glass (double glazed) vision panel units of size and shape as required and specified , comprising of an outer heat strengthened float glass 6mm thick , of approved colour and shade with reflective soft coating on surface # 2 of approved colour and shade , an inner Heat strengthened clear float glass 6mm thick , spacer tube 12mm wide , dessicants , including primary seal and secondary seal (structural silicone sealant) etc, all complete for the required performances , as per the Architectural drawings , as per the approved shop drawings , as specified and as per direction of Engineer-in-charge. The IGUs shall be assembled in the factory / workshop of the glass processor . (Payment for fixing of IGU Panels in the curtain glazing is included in cost of item No.25.2) For payment , only the actual area of glass on face # 1 of the glass panels (excluding the areas of the grooves and weather silicone sealant) provided and fixed in position , shall be measured in sqm . (i) Coloured tinted float glass 6mm thick substrate with reflective soft coating on face # 2 , + 12 mm Airgap + 6 mm Heat Strengthened clear Glass of approved make having properties as visible Light transmittance (VLT) of 25 to 35% , Light reflection internal 10 to 15 % , light reflection external 10 to 20 % , shading coefficient (0.25 - 0.28) and U value of 3.0 to 3.3 W / sq.m degree K etc. The properties of performance glass shall be decided by technical sanctioning authority as per the site requirement	sqm	6012.92
25.4	Extra for openable side / top hung vision glass panels (IGUs) including providing and supplying at site all accessories and	sqm	4733.15

25 . Structural Glazing Aluminium Composite Panel

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	hardwares for the openable panels as specified and of the approved make such as heavy duty stainless steel friction hinges , min 4 -point cremone locking sets with stainless steel plates , handles , buffers etc. Including necessary stainless steel screws / fasteners , nuts , bolts , washers etc. all complete as per the Architectural drawings, as per the approved shop drawings , as specified and as per direction of Engineer-in-charge		
25.5	Providing , fabricating and supplying shadow box of required size and shape , for fixing in the spandrel portion of the structural glazing , in linear as well as curvilinear portions of the building by providing semi - rigid, inorganic ,. Non - combustible fibre glass wool insulation 50 mm thick , conforming to IS : 8183 and BS: 3958 Part 5. The insulation layer shall have facing (factory bonded on surface # 1 of the fibre glass insulation layer) , of black non - woven fibre glass tissue of nominal thickness 0.5 mm and nominal mass not less than 60 gm / sqm , made of randomly oriented glass fibres distributed in a binder by a wet - lay process including fixing 1.5mm thick solid aluminium sheet backing using , 6 mm thick cement board including SS rivets , nuts , bolts , washers etc complete	sqm	2729.46
25.6	Providing and supplying Spandrel Glass Panels comprising of 6 mm thick heat strengthened monolithic, float glass of approved colour and shade with reflective soft coating on surface # 2 of approved colour and shade so as to match the colour and shade of the IGUs in the vision panels etc., all complete for the required performances as specified as per the Architectural drawings, as per the approved shop drawings, as specified and as per direction of Engineer-in-charge. For payment , only the actual area of glass on face # 1 of the glass panels (but excluding the area of grooves and weather silicone sealant) provided and fixed in position , shall be measured in sqm. (Payment for fixing of Spandrel Glass Panels in the curtain glazing is included in cost of relevant item*) (i) Coloured tinted float glass 6mm thick substrate with reflective soft coating on face # 2, having properties as visible Light transmittance (VLT) of 25 to 35 % , Light reflection internal 10 to 15% , light reflection external 10 to 20% , shading coefficient(0.25 - 0.28) and U value of 3.0 to 3.3 W/ sq.m K etc. The properties of performance glass shall be decided by technical sanctioning authority as per the site requirement	sqm	4353.00

25 . Structural Glazing Aluminium Composite Panel

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
25.8	"Design supply & installation of suspended Spider Glazing system designed to with stand the wind pressure as per IS 875 (Part - III). The Suspended System held with Spider Fittings of SS - 316 grade Steel of approved manufacturer with glass panel having 12mm thick clear toughened glass held together with SS - 316 Grade Stainless steel Spider & bolt assembly with laminated glass fins 21 mm thick . The Glass fins and glass panel assembly shall be connected to slab / beams by means of SS - 316 Grade stainless steel brackets & Anchor bolts and at the bottom using SS channel of 50x25x2mm using fastener & anchor bolts , non staining weather sealants of approved make, Teflon / nylon bushes and separators to prevent bimetallic contacts, all complete to perform as per specification and approved drawings . The complete system to be designed to accommodate thermal expansion & seismic movements etc . The joints between glass panels (6 to 8 mm) and gaps at the perimeter & in U channel of the assembly to be filled with non staining weather sealant , so as to make the entire system fully water proof & dust proof. The rate shall include all design, Engineering and shop drawing including approval from structural designer , labour ,T&P , scaffolding , other incidental charges including wastage, enabling temporary services all fitting fixers nut bolts, washer, Buffer plates, fastener, anchors, SS channel laminated glass etc. all complete For the purpose of payment , actual elevation area of Glazing including thickness of joints and the portion of Glass panels inside the SS channel shall be measured	sqm	11879.96

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
26.1	Providing & fixing in position Phenol bonded Bamboowood flooring with planks of sizes 14mm thick, minimum 1800mm length and minimum 100 mm wide, in approved colour, texture and finish, having Performance Appraisal Certificate (PAC) issued by Building Materials & Technology Promotion Council (BMTPC). The flooring shall be fixed with tongue and groove interlocking system, with underlayment of 4mm thick expanded polyethylene foam sheets having density 40kg/cum, over prepared surface with necessary quarter round planks of size 1900mm x 18mm and door reducer of size 1900mm x 44mm, wherever required. The bamboowood planks shall have minimum density of 1000 Kg/cum & minimum Hardness 1000 Kgf. with Eco friendly UV coating, all complete as per direction of the Engineer in-charge.	sqm	7609.49
26.2	Providing & fixing in position Phenol bonded Bamboo wood in wall skirting with planks of sizes 14mm thick, 1900mm length (minimum) and 85 mm wide (minimum) in approved colour , texture and finish , having Performance Appraisal Certificate (PAC) issued by Building Materials & Technology Promotion Council (BMTPC). The skirting shall be fixed with SS screws & rawl plugs, over underlayment of 4mm thick , expanded poly ethylene foam sheets having 40 kg / cum density over prepared surface. The bamboo wood planks shall have minimum density of 1000 kg / cum & minimum Hardness 1000 Kgf. With Eco friendly UV coating , all complete as per direction of Engineer-in-charge	sqm	7514.04
26.3	Providing & fixing in position Phenol bonded Bamboowood wall cladding at all height with planks of sizes 10mm thick, minimum 1800mm length and minimum 100 mm wide, in approved colour, texture and finish, having Performance Appraisal Certificate (PAC) issued by Building Materials & Technology Promotion Council (BMTPC), with necesasary profiled edges fixed with 40mm SS screws 5 nos in each tile to frame work made of second class teak wood of size 20x15 mm in centre of each tile and bottom and top of work height, 40x15mm placed at ends of each tile. The cladding shall be laid over backlayment of 1.00 mm thick expanded polyethylene foam of density 40kg/cum in two layers, first layer on wall surface before fixing wooden frame and second layer on frame under cladding. The bamboowood planks shall have minimum density of 1000 Kg/cum & minimum Hardness 1000 Kgf. with Eco friendly UV coating, all complete as per direction of the Engineer in-charge.	sqm	7983.54

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
26.3M	Providing & fixing in position Phenol bonded Bamboowood wall cladding at all height with planks of sizes 10mm thick , 1800mm length (minimum) and 130mm wide (minimum), in approved colour , texture and finish , having Performance Appraisal Certificate (PAC) issued by Building Materials & Technology Promotion Council (BMTPC) , with necessary profiled edges fixed with 40mm SS screws 5 nos in each tile to frame work made of teak wood (Malabar) of size 20x15mm in centre of each tile and bottom and top of work height , 40X15mm placed at ends of each tile. The cladding shall be laid over backlayment of 1.00 mm thick expanded poly ethylene foam of density 40kg /cum in two layers , first layer on wall surface before fixing wooden frame and second layer on frame under cladding . The bamboo wood planks shall have minimum density of 1000 Kg /cum & minimum Hardness 1000 Kgf.with Eco friendly UV coating , all complete as per direction of Engineer-in-charge	sqm	8001.79
26.4	Providing & fixing in position Phenol bonded Bamboo wood panelled or panelled and glazed shutters for doors windows , clerestorey windows with pre-molded 30mm thick planks , in approved colours , texture & finish. It shall have 10mm wide , 25mm deep groove to fit in pannels. The bamboo wood shall have minimum density of 1000 Kg/cum, minimum Hardness 1000 Kgf. All styles and rails shall have profiled interlocking system locked in place by bamboo pins, all complete as per direction of Engineer-in-charge. (the Panelling will be paid for separately)	sqm	650.48
26.5	Providing & fixing in position Phenol bonded Bamboo wood panelling of 10mm thick , in 25 to 40mm thick panelled or panelled & glazed shutters or doors , windows ,clerestorey windows , in approved colour , texture & finish. The bamboo wood planks shall have minimum density of 1000 Kg/cum & minimum Hardness 1000 Kgf. The panels shall have profiled interlocking system locked in place with bamboo pins all complete as per direction of Engineer-in-charge(area of opening for panel inserts excluding portion inside grooves or rebates to be measured)	sqm	1558.09
26.6	Providing & fixing in position 65mm thick factory made door frame of Phenol bonded Bamboo wood (superior class , interior use) , in approved colour , textures and finsh . The bamboo wood shall have minimum density of 1000 Kg / cum, minimum Hardness 1000 Kgf. The door frame shall have tenon & mortise interlocking system , to be fixed to the wall with 100	cum	63152.12

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	mm size G.I.screws all a complete as per direction of Engineer-in-charge		
26.6A	Providing, erecting, laying and fixing in position in 3.5 to 4mm tk bamboo mat corrugated sheet (BMCS) as per IS:15476-2004 in roofing with self drilling screws along with EPDM washers complete or with galvanized iron J or L hooks 8mm dia G.I.plain and bitumen washers etc, all complete as per direction of Engineer-in-charge	sqm	6395.37
26.6B	Providing, and fixing in position ridges of 3.5 to 4mm tk bamboo mat ridge cap (BMRC) as per IS:15476-2004 in roofing with self drilling screws along with EPDM washers complete or with galvanized iron J or L hooks 8mm dia G.I.plain and bitumen washers etc, all complete as per direction of Engineer-in-charge	metre	5267.47
26.6C	Providing and fixing at all height false ceiling of 4mm thick phenol bonded Bamboo mat board (595x595 mm) conforming to IS:13958-1994 including proving and fixing of frame work made of GI angle 25x25x0.4 mm thick all around suitably fixed to wall with the help of dash fastner and hanger frame (600x600 mm c/c) made GI slotted Tee having powder coating on bottom side (30x25x0.3mm thick for main member & 25x25x03 mm for cross member) connected to ceiling with 2.64 mm GI wire and anchor fastner at every junction and also including cost of making opening for light fittings, grills, diffusers, cut outs made with frame of perimeter channels suitably fixed all complete as per direction of Engineer-in-charge	sqm	4443.97
26.6D.1	Providing and fixing at bamboo mat board conforming to IS: 13958-1994 for psrtition to frame by bucking or studding with screws etc ., complete (Frames, backing or studding to be paid separately) - 3mm thickness	sqm	3168.93
26.6D.2	Providing and fixing at bamboo mat board conforming to IS: 13958-1994 for partion to frame by bucking or studding with screws etc ., complete (Frames, backing or studding to be paid separately) - 4mm thickness	sqm	3554.81
26.6D.3	Providing and fixing at bamboo mat board conforming to IS: 13958-1994 for partion to frame by bucking or studding with screws etc ., complete (Frames, backing or studding to be paid separately) - 6mm thickness	sqm	4160.51

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
26.6D.4	Providing and fixing at bamboo mat board conforming to IS: 13958-1994 for partition to frame by bucking or studding with screws etc ., complete (Frames, backing or studding to be paid separately) - 9mm thickness	sqm	5153.71
26.6D.5	Providing and fixing at bamboo mat board conforming to IS: 13958-1994 for partition to frame by bucking or studding with screws etc ., complete (Frames, backing or studding to be paid separately) - 12mm thickness	sqm	5871.75
26.6E.1	Providing and fixing at all height wall panelling with phenol bonded Bamboo mat board conforming to IS :13958-1994 including providing and fixing made of 50mm x 50mm hardwood plugs including cutting brick work and fixing in cement mortar and making good the wall etc. and also providing and fixing wooden moulded corner beading of triangular shape to the junction of panelling etc. with iron screws all complete as per direction of Engineer-in-charge - 9mm thickness	sqm	5054.46
26.6E.2	Providing and fixing at all height wall panelling with phenol bonded Bamboo mat board conforming to IS :13958-1994 including providing and fixing made of 50mm x 50mm hardwood plugs including cutting brick work and fixing in cement mortar and making good the wall etc. and also providing and fixing wooden moulded corner beading of triangular shape to the junction of panelling etc. with iron screws all complete as per direction of Engineer-in-charge - 12mm thickness	sqm	5772.50
26.7	Providing and fixing 50 mm thick extruded polystyrene rigid insulation board of required size between cavity wall, complying with ISO 4898:2008 & ASTM C 578-08b - type VI, having thermal conductivity of 0.0289 W/m K as per ASTM C 578 (measured as per IS 3346), compressive strength of > 350 kPa listed as per ASTM D 1621, density of 34-36 kg/m ³ as per ASTM D 1622, water absorptions ≤ 1% by volume as per ASTM D 2842, oxygen index of 24.1 to 28.1 listed as per ASTM D 2863, cell size 0.4 mm of dia (max) as per ASTM D 3576. Fire retardent property as per DIN 4102, Part 1 of class B2 and as per ASTM E84 class A, fixed with suitable water based adhesive and fastener, complete in all respect as per the direction of Engineer-in-Charge.	sqm	1163.29

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
26.8	Providing and fixing 50 mm thick extruded polystyrene rigid insulation board of required size underdeck on ceiling surface, complying with ISO 4898:2008 & ASTM C 578-08b - type VI, having thermal conductivity of 0.0289 W/m K as per ASTM C 578 (measured as per IS 3346), compressive strength of > 350 kPa listed as per ASTM D 1621, density of 34-36 kg/cum as per ASTM D 1622, water absorptions ≤ 1% by volume as per ASTM D 2842, oxygen index of 24.1 to 28.1 listed as per ASTM D 2863, cell size 0.4 mm of dia (max) as per ASTM D 3576. Fire retardent property as per DIN 4102, Part 1 of class B2 and as per ASTM E84 class A, fixed with suitable water based adhesive and fastener, complete in all respect as per the direction of Engineer-in-Charge.	sqm	1267.85
26.9	Providing and fixing factory made solid Foam uPVC profile for kitchen cabinet frame (45 x 20 mm) of approved shade , quality and make . The profile shall be laminated on both sides , made from rigid foam sheets (Single extruded) having density 600 Kg /cum and the exposed edges sealed with PVC edge beading of same shade and colour. The frame shall be fire retardent with necessary screw holding capacity. Frame shall be fixed to wall using Expendable Fastner with necessary stainless steel screws , all complete as per direction of Engineer-in-charge	metre	602.16
26.10	Providing and fixing factory made Kitchen Cabinet Shutter / Partition 20mm nominal thickness of approved shade , quality and make from rigid foam sheets (single extruded) having density 600 Kg / cum and laminated on both side by laminate Sheet / PVC foil lamination. The exposed edges shall be sealed with PVC edge beading of same shade and colour. The shutter shall be fire retardent having necessary screw holding capacity. Shutter shall be fixed to frame using approved hinges with necessary stainless steel screws , all complete.as per direction of Engineer-in-charge	sqm	7047.47
26.11	Providing and fixing concealed hinge of approved quality for 19-20mm thick door with stainless steel screws complete	no	154.34
26.12	Supplying and laying of bi-axial ectruded high modules polypropylene geogrid conforming to MORTH SPECIFICATION for base / sub-base reinforcement having minimum tensile strength 15kn/m in the longitudinal and transverse direction, with 5kn/m and 7kn/m tensile strength at 2% and 5% strain repactively in the longitudinal and transverse direction, junction efficiency not less than 95% and with 38mm	sqm	251.47

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	x 38 mm mesh opening		
26.13	Supplying & laying of bi-axial extruded high modulus polypropylene geogrid conforming to MORTH SPECIFICATION for base/sub-base reinforcement having minimum tensile strength 20kN/m in the longitudinal and transverse direction, with 7kN/m and 14kN/m tensile strength at 2% and 5% strain respectively in the longitudinal and transverse direction, junction efficiency not less than 95% and with 38mm X 38mm mesh opening.	sqm	282.77
26.14	Supplying & laying of bi-axial extruded high modulus polypropylene geogrid conforming to MORTH SPECIFICATION for base/sub-base reinforcement having minimum tensile strength 30kN/m in the longitudinal and transverse direction, with 10.5kN/m and 21kN/m tensile strength at 2% and 5% strain respectively in the longitudinal and transverse direction, junction efficiency not less than 95% and with 38mm X 38mm mesh opening.	sqm	431.43
26.15	Supplying and laying of bi-axial extruded high modulus polypropylene geogrid conforming to MORTH SPECIFICATION for base / sub-base reinforcement having minimum tensile strength 40kN/m in the longitudinal and transverse direction, with 14kN/m and 28kN/m tensile strength at 2% and 5% strain respectively in the longitudinal and transverse direction, junction efficiency not less than 95% and with 38mm x 38 mm mesh opening	sqm	619.22
26.16	Supplying & laying of drainage composite for use behind walls, between two different fills, alongside drains of road, below concrete lining of canals etc. Geocomposite for planar drainage, realized by thermobonding a draining core in extruded monofilaments with two filtering nonwoven geotextiles that may also be working as separation or protecting layers. The draining three dimensional core will have a "W" configuration as longitudinal parallel channels. Minimum thickness to be 7.2mm, with two filtering UV stabilized polypropylene nonwoven geotextile of minimum thickness of 0.75mm characteristic opening size (O90) of 110 micron and tensile strength of 8.0 kN/m that will be working as separation or protecting layer, geocomposite having in plane flow capacity of 2.1 L / (m.s) at hydraulic gradient of 1.0 & 20 kPa pressure and tensile strength of 18 kN/m , with mass per unit area of 740 gsm, supplied in the form of roll for easy transportation to site of work as per detailed specification all	sqm	1151.29

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	complete as per directions of Engineer in charge.		
26.17	Supplying & laying of drainage composite for use behind walls, between two different fills, alongside drains of road, below concrete lining of canals etc. having thermobonding a draining core - HDPE geonet comprises of two sets of parallel overlayed ribs integrally connected to have a rhomboidal shape with a polyethylene film and a nonwoven geotextile having mass per unit area 130 gsm and tensile strength of 8.0 kN/m that will be working as separation or protecting layer, geocomposite having in plane flow capacity of 0.7 L / (m.s) at hydraulic gradient of 1.0 & 20 kPa pressure and tensile strength of 13.5 kN/m , with mass per unit area of 830 gsm, at easily accessible location including top and bottom, with all leads and lifts, manpower and machinery, materials, labour etc. complete and as directed by Engineer - In - Charge.	sqm	1362.55
26.18.1	Supplying and laying high strength flexible geogrids (HSFG) as soil reinforcement / basal reinforcement as per MORTH 3100 and IRC 113, made of high tenacity polyester core with polyethylene coating with Minimum long term design strength(LTDS) of more than 50% of ultimate tensile strength at 30 degree celcius corresponding to 12% strain - Ultimate tensile strength -100 kn/m	sqm	509.68
26.18.2	Supplying and laying high strength flexible geogrids (HSFG) as soil reinforcement / basal reinforcement as per MORTH 3100 and IRC 113, made of high tenacity polyester core with polyethylene coating with Minimum long term design strength(LTDS) of more than 50% of ultimate tensile strength at 30 degree celcius corresponding to 12% strain - Ultimate tensile strength -150 kn/m	sqm	525.33
26.18.3	Supplying and laying high strength flexible geogrids (HSFG) as soil reinforcement / basal reinforcement as per MORTH 3100 and IRC 113, made of high tenacity polyester core with polyethylene coating with Minimum long term design strength(LTDS) of more than 50% of ultimate tensile strength at 30 degree celcius corresponding to 12% strain - Ultimate tensile strength -200 kn/m	sqm	713.12
26.18.4	Supplying and laying high strength flexible geogrids (HSFG) as soil reinforcement / basal reinforcement as per MORTH 3100 and IRC 113, made of high tenacity polyester core with polyethylene coating with Minimum long term design	sqm	791.36

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	strength(LTDS) of more than 50% of ultimate tensile strength at 30 degree celcius corresponding to 12% strain - Ultimate tensile strength -250 kn/m		
26.18.5	Supplying and laying high strength flexible geogrids (HSFG) as soil reinforcement / basal reinforcement as per MORTH 3100 and IRC 113, made of high tenacity polyester core with polyethylene coating with Minimum long term design strength(LTDS) of more than 50% of ultimate tensile strength at 30 degree celcius corresponding to 12% strain - Ultimate tensile strength -300 kn/m	sqm	807.01
26.18.6	Supplying and laying high strength flexible geogrids (HSFG) as soil reinforcement / basal reinforcement as per MORTH 3100 and IRC 113, made of high tenacity polyester core with polyethylene coating with Minimum long term design strength(LTDS) of more than 50% of ultimate tensile strength at 30 degree celcius corresponding to 12% strain - Ultimate tensile strength -350 kn/m	sqm	822.66
26.18.7	Supplying and laying high strength flexible geogrids (HSFG) as soil reinforcement / basal reinforcement as per MORTH 3100 and IRC 113, made of high tenacity polyester core with polyethylene coating with Minimum long term design strength(LTDS) of more than 50% of ultimate tensile strength at 30 degree celcius corresponding to 12% strain - Ultimate tensile strength -400 kn/m	sqm	1041.75
26.18.8	Supplying and laying high strength flexible geogrids (HSFG) as soil reinforcement / basal reinforcement as per MORTH 3100 and IRC 113, made of high tenacity polyester core with polyethylene coating with Minimum long term design strength(LTDS) of more than 50% of ultimate tensile strength at 30 degree celcius corresponding to 12% strain - Ultimate tensile strength -500 kn/m	sqm	1166.94
26.18.9	Supplying and laying high strength flexible geogrids (HSFG) as soil reinforcement / basal reinforcement as per MORTH 3100 and IRC 113, made of high tenacity polyester core with polyethylene coating with Minimum long term design strength(LTDS) of more than 50% of ultimate tensile strength at 30 degree celcius corresponding to 12% strain - Ultimate tensile strength -600 kn/m	sqm	1198.24
26.18.10	Supplying and laying high strength flexible geogrids (HSFG)	sqm	1443.93

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	as soil reinforcement / basal reinforcement as per MORTH 3100 and IRC 113, made of high tenacity polyester core with polyethylene coating with Minimum long term design strength(LTDS) of more than 50% of ultimate tensile strength at 30 degree celcius corresponding to 12% strain - Ultimate tensile strength -700 kn/m		
26.18.11	Supplying and laying high strength flexible geogrids (HSFG) as soil reinforcement / basal reinforcement as per MORTH 3100 and IRC 113, made of high tenacity polyester core with polyethylene coating with Minimum long term design strength(LTDS) of more than 50% of ultimate tensile strength at 30 degree celcius corresponding to 12% strain - Ultimate tensile strength -800 kn/m	sqm	1612.93
26.18.12	Supplying and laying high strength flexible geogrids (HSFG) as soil reinforcement / basal reinforcement as per MORTH 3100 and IRC 113, made of high tenacity polyester core with polyethylene coating with Minimum long term design strength(LTDS) of more than 50% of ultimate tensile strength at 30 degree celcius corresponding to 12% strain - Ultimate tensile strength -900 kn/m	sqm	1933.74
26.18.13	Supplying and laying high strength flexible geogrids (HSFG) as soil reinforcement / basal reinforcement as per MORTH 3100 and IRC 113, made of high tenacity polyester core with polyethylene coating with Minimum long term design strength(LTDS) of more than 50% of ultimate tensile strength at 30 degree celcius corresponding to 12% strain - Ultimate tensile strength -1000 kn/m	sqm	2191.95
26.18.14	Supplying and laying high strength flexible geogrids (HSFG) as soil reinforcement / basal reinforcement as per MORTH 3100 and IRC 113, made of high tenacity polyester core with polyethylene coating with Minimum long term design strength(LTDS) of more than 50% of ultimate tensile strength at 30 degree celcius corresponding to 12% strain - Ultimate tensile strength -1100 kn/m	sqm	2137.18
26.18.15	Supplying and laying high strength flexible geogrids (HSFG) as soil reinforcement / basal reinforcement as per MORTH 3100 and IRC 113, made of high tenacity polyester core with polyethylene coating with Minimum long term design strength(LTDS) of more than 50% of ultimate tensile strength at 30 degree celcius corresponding to 12% strain - Ultimate	sqm	2387.56

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	tensile strength -1200 kn/m		
26.19.1	Providing at all heights , levels and locations Aluminium profile industrial troughed sheet of Alloy 31500 / 31000 /40800 , conforming to IS 1254 , IS 737 , IS 2676 . The sheet shall be fixed using self drilling / self tapping SS screws of size 5.5 x 65 mm with EPDM seal complete upto required pitch in horizontal ,vertical or curved surfaces i/c cutting to size and shape where required as per specifications , detail drawings and direction of the Engineer-in-charge.The rate shall be inclusive of all screws , seal , ridge , labour , scaffolding , machinery for fixing and approved sealent where required etc. but excluding the cost of purlins , rafters and trusses - 0.71mm thick , the profile detail width 1044 / 920 mm , cover width 1000/875mm	sqm	1426.24
26.19.2	Providing at all heights , levels and locations Aluminium profile industrial troughed sheet of Alloy 31500 / 31000 /40800 , conforming to IS 1254 , IS 737 , IS 2676 . The sheet shall be fixed using self drilling / self tapping SS screws of size 5.5 x 65 mm with EPDM seal complete upto required pitch in horizontal ,vertical or curved surfaces i/c cutting to size and shape where required as per specifications , detail drawings and direction of the Engineer-in-charge.The rate shall be inclusive of all screws , seal , ridge , labour , scaffolding , machinery for fixing and approved sealent where required etc. but excluding the cost of purlins , rafters and trusses - 0.91mm thick , the profile detail width 1044 / 920 mm , cover width 1000/875mm	sqm	1850.35
26.22.1	Providing and fixing false ceiling at all heights with integral densified calcium silicate reinforced with fibre and natural filler false ceiling tiles of size 595 X 595 mm of approved texture , design and patterns as per CPWD specification 2019, to be laid in true horizontal level suspended on inter-locking metal T-Grid of hot dipped galvanised iron section of 0.33mm thick (galvanized @ 120 grams per sqm including both sides) comprising of main-T runners of size 24x38 mm of length 3000 mm, cross - T of size 24x32 mm of length 1200mm and secondary intermediate cross-T of size 24x32 mm of length 600mm to formgrid module of size 600x600mm, suspended from ceiling using galvanised mild steel items (galvanizing @ 80 grams per sqm) i.e 12x50 mm long dash fasteners, 6mm dia fully threaded hanger rod upto 1000 mm length and L-shape level adjuster of size 76x25x25x1.6mm fixed with grid and Z cleat of size 25x37x25x1.6mm thick with precut hole on both	sqm	2967.80

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	25mm flange to pierce into 12x50mm or even bigger size dash fastener if require, fixed with galvanised iron perimeter wall angle or size 24x24x0.40 mm of length 3000 mm to be fixed on periphery wall / partition with the help of plastic rawl plugs at 450mm center to center and 40mm long dry wall SS screws. The work shall be carried out as per specifications, drawing and as per direction of Engineer-in-charges- with 15mm thick Tegular edged light weight calcium silicate false ceiling tiles		
26.22.2	Providing and fixing false ceiling at all heights with integral densified calcium silicate reinforced with fibre and natural filler false ceiling tiles of size 595 X 595 mm of approved texture , design and patterns as per CPWD specification 2019, to be laid in true horizontal level suspended on inter-locking metal T-Grid of hot dipped galvanised iron section of 0.33mm thick (galvanized @ 120 grams per sqm including both sides) comprising of main-T runners of size 24x38 mm of length 3000 mm, cross - T of size 24x32 mm of length 1200mm and secondary intermediate cross-T of size 24x32 mm of length 600mm to formgrid module of size 600x600mm, suspended from ceiling using galvanised mild steel items (galvanizing @ 80 grams per sqm) i.e 12x50 mm long dash fasteners, 6mm dia fully threaded hanger rod upto 1000 mm length and L-shape level adjuster of size 76x25x25x1.6mm fixed with grid and Z cleat of size 25x37x25x1.6mm thick with precut hole on both 25mm flange to pierce into 12x50mm or even bigger size dash fastener if require, fixed with galvanised iron perimeter wall angle or size 24x24x0.40 mm of length 3000 mm to be fixed on periphery wall / partition with the help of plastic rawl plugs at 450mm center to center and 40mm long dry wall SS screws. The work shall be carried out as per specifications, drawing and as per direction of Engineer-in-charges - with 15mm thick tegular/ butt edged without perforation plain/designer light weight calcium silicate Anti-Microbial Bio-Safe coated false ceiling tiles Conforming to JIS-Z2801 and ASTM G-21	sqm	2720.80
26.23.1	Providing and fixing false ceiling at all heights with integral densified calcium silicate reinforced with fibre and natural filler false ceiling tiles of size 595x595mm of approved texture , design and patterns having NRC (Noise Reduction coefficient) of 0.50 (minimum) as per IS 8225:1987 , Light reflectance of 85% (minimum). Non combustible as per BS:476(part-4), fire performance as per BS:476(part 6 & 7) , humidity resistance of 100%, thermal conductivity < 0.043 W/m K as per ASTM 518:1991 , in true horizontal level suspended on interlocking metal powder coated T-grid of hot dipped galvanised iron section of 0.40 mm thick on Silhouette	sqm	2923.04

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	profile , rotary stiched doubles webbed white with 6mm reveal profile (white / black) , comprising of main -T runners of size 15x42mm of length 3000 mm ,cross -T of size 15x42mm of length 1200mm and secondary intermediate cross - T of size 15 x42 mm of length 600mm to form grid module of size 600 x600 mm , suspended from ceiling using galvanised mild steel items (galvanising @ 80grams per sqm) ie. 50mm long , 8mm outer diameter M-6 dash fasteners , 6mm dia fully threaded hanger rod upto 1000 mm length and L-shape level adjuster of size 85x85x2mm. Galvanised iron perimeter wall angle of size 22 x 19x0.40 mm of length 3000mm to be fixed on periphery wall / partition with the help of plastic rawl plugs at 450mm centre to centre and 40mm long dry wall S.S. screws . The work shall be carried out as per specifications , drawing and as per direction of Engineer-in-charges. - with 15mm thick integral densified micro edge light weight calcium silicate false ceiling tiles.		
26.24.1	Providing and fixing in position wall panelling at all heights with integral densified calcium silicate panels / tiles of size 595 x595 mm , having NRC (Noise Reduction coefficient) of 0.5 (minimum) as per IS 8225:1987, Light reflectance of 85 % (minimum). Non combustible as per BS:476(part-4), fire performance as per BS:476 (part 6&7) , humidity resistance of 100% , thermal conductivity < 0.043 W/m K as per ASTM 518:1991 , comprising of a frame made from especially fabricated galvalised mild steel sheet 0.50mm thick pressed section (galvanizing @ 120 grama per sqmincluding both sides) i.e. vertical studs of size 48 x 34x 36 mm are placed at 600mm centre to centre in a floor and ceiling channel section of size 50 x 32mm fixed to the floor and soffit at 600mm centres using 12mm dia , 50mm long wedge type expanded zinc alloy dash fastner with 10mm bolt. This same channel is then to be fixed in horizontal direction at 600mm centre to center so as to form a grid of 600mm x 600mm , Glasswool of 50mm thickness is then to be inserted in the slots and finally calcium silicate non combustible panels / tiles are to be screw fixed with self tapping pan head nickel coated mild steel screws of size 13 x 3.2mm on to this grid leaving an even groove of 1mm between the panels. The joints between the panels are to be duly jointed and finished using recommended jointing calcium silicate based compound and fibre joint tape roll 50mm wide (90metre) roll and two coats of primer suitable for panelling as per manufacturer,s specification as per direction of Engineer-in-charge - with 15 mm thick fully perforated square / butt edge light weight calcium silicate panels / tiles	sqm	3953.47

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
26.25	Providing and fixing 15mm thick false ceiling tiles at all heights with integral densified calcium silicate reinforced with fibre and natural filler false ceiling tiles of size 595x595 mm of approved texture , design and patterns having NRC (Noise reduction coefficient) of 0.50 (minimum) as per IS 8225:1987 , Light reflectance of 85% (minimum). Non combustible as per BS:476 (part -4) , fire performance as per BS:476(part 6&7), humidity resistance of 100% , thermal conductivity < 0.043 W/m K as per ASTM 518:1991 , in true horizontal level on the existing frame work consisting of T-sections and L sections suitably fixed according to tile size as per direction of Engineer-in-charge	sqm	2344.40
26.26.1	Providing & fixing false ceiling at all heights with GRG (Glass Fibre Reinforced Gypsum) false ceiling tiles of Size 595x595 mm of approved texture, design and patterns having moisture content less than 2%, humidity resistance of 99%, NRC0.50 to 0.75 as per IS 8225:1987, Non combustible as per BS 476 (part 4)-1970 and light reflectance of 85% (minimum) to be laid in true horizontal level suspended on inter-locking metal T-Grid of hot dipped galvanised iron section of 0.33mm thick (galvanized @ 120 grams per sqm including both sides) comprising of main-T runners of size 15x32 mm of length 3000 mm, cross - T of size 15x32 mm of length 1200 mm and secondary intermediate cross-T of size 15x32 mm of length 600mm to form grid module of size 600 x 600 mm, suspended from ceiling using galvanised mild steel items (galvanizing @ 80 grams per sqm) i.e. 50 mm long, 8 mm outer diameter M-6 dash fasteners, 6 mm dia fully threaded hanger rod upto 1000 mm length and L-shape level adjuster of size 85x25x2 mm. Galvanised iron perimeter wall angle of size 24x24x0.40 mm of length 3000 mm to be fixed on periphery wall / partition with the help of plastic rawl plugs at 450 mm center to center and 40 mm long dry wall wood screws. The work shall be carried out as per specifications, drawing and as per directions of the Engineer-in-Charge. -With semi perforated 12 mm thick micro tegular edged GRG false ceiling tiles.	sqm	2465.33
26.26.2	Providing & fixing false ceiling at all heights with GRG (Glass Fibre Reinforced Gypsum) false ceiling tiles of Size 595x595 mm of approved texture, design and patterns having moisture content less than 2%, humidity resistance of 99%, NRC0.50 to 0.75 as per IS 8225:1987, Non combustible as per BS 476 (part 4)-1970 and light reflectance of 85% (minimum) to be laid in true horizontal level suspended on inter-locking metal T-Grid of hot dipped galvanised iron section of 0.33mm thick	sqm	2607.23

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	(galvanized @ 120 grams per sqm including both sides) comprising of main-T runners of size 15x32 mm of length 3000 mm, cross - T of size 15x32 mm of length 1200 mm and secondary intermediate cross-T of size 15x32 mm of length 600mm to form grid module of size 600 x 600 mm, suspended from ceiling using galvanised mild steel items (galvanizing @ 80 grams per sqm) i.e. 50 mm long, 8 mm outer diameter M-6 dash fasteners, 6 mm dia fully threaded hanger rod upto 1000 mm length and L-shape level adjuster of size 85x25x2 mm. Galvanised iron perimeter wall angle of size 24x24x0.40 mm of length 3000 mm to be fixed on periphery wall / partition with the help of plastic rawl plugs at 450 mm center to center and 40 mm long dry wall wood screws. The work shall be carried out as per specifications, drawing and as per directions of the Engineer-in-Charge. With fully perforated 12 mm thick micro tegular edged or 10 mm thick square edged GRG false ceiling tiles.		
26.27.1	Providing and fixing mineral fibre false ceiling tiles at all heights of size 595X595mm of approved texture, design and pattern. The tiles should have Humidity Resistance (RH) of 99%, Light Reflectance $\geq 85\%$, Thermal Conductivity $k = 0.052 - 0.057$ w/m K, Fire Performance as per (BS 476 pt - 6 & 7) in true horizontal level suspended on interlocking T-Grid of hot dipped all round galvanized iron section of 0.33 mm thick (galvanized @120 gsm) comprising of main T runners of 15x32 mm of length 3000 mm, cross T of size 15x32mm of length 1200 mm and secondary intermediate cross T of size 15x32 mm of length 600 mm to form grid module of size 600x600 mm suspended from ceiling using galvanized mild steel item (galvanised@80gsm) 50 mm long 8mm outer diameter M-6 dash fasteners, 6 mm diameter fully threaded hanger rod up to 1000 mm length and L-shape level adjuster of size 85x25x2 mm, spaced at 1200 mm centre to centre along main 'T'. The system should rest on periphery walls /partitions with the help of GI perimeter wall angle of size 24x24X3000 mm made of 0.40 mm thick sheet, to be fixed to the wall with help of plastic rawl plug at 450 mm centre to centre & 40 mm long dry wall S.S. screws. The exposed bottom portion of all T-sections used in false ceiling support system shall be pre-painted with polyester baked paint, for all heights. The work shall be carried out as per specifications, drawings and as per directions of the engineer-in-charge. 26.27.1 With 16 mm thick beveled tegular mineral fibre false ceiling tile (NRC 0.55 to 0.6	sqm	3113.82
26.27.2	Providing and fixing mineral fibre false ceiling tiles at all	sqm	3480.09

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	heights of size 595X595mm of approved texture, design and pattern. The tiles should have Humidity Resistance (RH) of 99%, Light Reflectance $\geq 85\%$, Thermal Conductivity $k = 0.052 - 0.057$ w/m K, Fire Performance as per (BS 476 pt - 6 & 7) in true horizontal level suspended on interlocking T-Grid of hot dipped all round galvanized iron section of 0.33 mm thick (galvanized @120 gsm) comprising of main T runners of 15x32 mm of length 3000 mm, cross T of size 15x32mm of length 1200 mm and secondary intermediate cross T of size 15x32 mm of length 600 mm to form grid module of size 600x600 mm suspended from ceiling using galvanized mild steel item (galvanised@80gsm) 50 mm long 8mm outer diameter M-6 dash fasteners, 6 mm diameter fully threaded hanger rod up to 1000 mm length and L-shape level adjuster of size 85x25x2 mm, spaced at 1200 mm centre to centre along main 'T'. The system should rest on periphery walls /partitions with the help of GI perimeter wall angle of size 24x24X3000 mm made of 0.40 mm thick sheet, to be fixed to the wall with help of plastic rawl plug at 450 mm centre to centre & 40 mm long dry wall S.S. screws. The exposed bottom portion of all T-sections used in false ceiling support system shall be pre-painted with polyester baked paint, for all heights. The work shall be carried out as per specifications, drawings and as per directions of the engineer-in-charge. With 20 mm thick beveled tegular mineral fibre false ceiling tile (NRC 0.7)		
26.27.3	Providing and fixing mineral fibre false ceiling tiles at all heights of size 595X595mm of approved texture, design and pattern. The tiles should have Humidity Resistance (RH) of 99%, Light Reflectance $\geq 85\%$, Thermal Conductivity $k = 0.052 - 0.057$ w/m K, Fire Performance as per (BS 476 pt - 6 & 7) in true horizontal level suspended on interlocking T-Grid of hot dipped all round galvanized iron section of 0.33 mm thick (galvanized @120 gsm) comprising of main T runners of 15x32 mm of length 3000 mm, cross T of size 15x32mm of length 1200 mm and secondary intermediate cross T of size 15x32 mm of length 600 mm to form grid module of size 600x600 mm suspended from ceiling using galvanized mild steel item (galvanised@80gsm) 50 mm long 8mm outer diameter M-6 dash fasteners, 6 mm diameter fully threaded hanger rod up to 1000 mm length and L-shape level adjuster of size 85x25x2 mm, spaced at 1200 mm centre to centre along main 'T'. The system should rest on periphery walls /partitions with the help of GI perimeter wall angle of size 24x24X3000 mm made of 0.40 mm thick sheet, to be fixed to the wall with help of plastic rawl plug at 450 mm centre to centre & 40 mm long dry wall S.S. screws. The exposed bottom portion of all T-	sqm	3229.14

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	sections used in false ceiling support system shall be pre-painted with polyester baked paint, for all heights. The work shall be carried out as per specifications, drawings and as per directions of the engineer-in-charge. With 16 mm thick beveled tegular mineral fibre Anti-microbial false ceiling tile confirming to ISO 5 (class 100) specifications		
26.28.1	Chipping of unsound / weak concrete material from slabs , beams , columns etc. with manual Chisel and / or by standard power driven percussion type or of approved make including tapering of all edges , making square shoulders of cavities including cleaning the exposed concrete surface and reinforcement with wire brushes etc. and disposal of debris for all lead and lifts all complete as per direction of Engineer-in-charge - 75 mm average thickness	sqm	481.12
26.28.2	Chipping of unsound / weak concrete material from slabs , beams , columns etc. with manual Chisel and / or by standard power driven percussion type or of approved make including tapering of all edges , making square shoulders of cavities including cleaning the exposed concrete surface and reinforcement with wire brushes etc. and disposal of debris for all lead and lifts all complete as per direction of Engineer-in-charge- 50 mm average thickness	sqm	326.04
26.28.3	Chipping of unsound / weak concrete material from slabs , beams , columns etc. with manual Chisel and / or by standard power driven percussion type or of approved make including tapering of all edges , making square shoulders of cavities including cleaning the exposed concrete surface and reinforcement with wire brushes etc. and disposal of debris for all lead and lifts all complete as per direction of Engineer-in-charge - 25 mm average thickness	sqm	161.96
26.29.1	Cleaning of reinforcement from rust from the reinforcing bars to give it a total rust free steel surface by using alkaline chemical rust remover of approved make with paint brush and removing loose particles after 24 hours of its application with wire brush and thoroughly washing with water and allowing it to dry , all complete as per direction of the Engineer-in-charge- Bars upto 12mm diameter	metre length of bar	10.01
26.29.2	Cleaning of reinforcement from rust from the reinforcing bars to give it a total rust free steel surface by using alkaline chemical rust remover of approved make with paint brush and	metre length of bar	20.02

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	removing loose particles after 24 hours of its application with wire brush and thoroughly washing with water and allowing it to dry , all complete as per direction of the Engineer-in-charge- Bars above 12mm diameter		
26.30.1	Drilling suitable holes in reinforced or plain cement concrete with power driven drill machine to a minimum depth of 100mm upto 200mm in RCC beams , lintels , columns and slabs to introduce steel bars for sunshades / balconies including fixing the steel bars in position using epoxy resin anchor grout of approved make but excluding the cost of reinforcement , all complete as per direction of the Engineer-in-charge- Upto and including 12mm dia	hole	182.17
26.31.1	Providing, mixing and applying bonding coat of approved adhesive on chipped portion of RCC as per specifications and direction of Engineer-In-charge complete in all respect. 26.31.1SBR Polymer (@10% of cement weight) modified cementitious bond coat @ 2.2 kg cement per sqm of surface area mixed with specified proportion of approved polymer	sqm	185.70
26.31.2	Providing , mixing and applying bonding coat of approved adhesive on chipped portion of RCC as per specifications and direction complete in all respect - Epoxy bonding adhesive having coverage 2.20 sqm /kg of approved make	sqm	545.65
26.32.1	Providing , mixing and applying SBR polymer (of approved make) modified Cement mortar in proportion of 1:4 (1 cement : 4 graded fine aggregate with polymer minimum 2% by wt.of cement used) as per specifications and directions of Engineer-in-charge.Note: Measurement and Payment : The Pre-measurement of thickness shall be done just after the surface preparation is completed and payment under this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding / tapping with a blunt metal instrument and / or the 75mm size cube curing strength at the end of 28 days to be not less than 30 N / Sqmm) - 12mm average thickness	sqm	468.33
26.32.2	Providing , mixing and applying SBR polymer (of approved make) modified Cement mortar in proportion of 1:4 (1 cement : 4 graded fine aggregate with polymer minimum 2% by wt.of cement used) as per specifications and direction. Note: Measurement and Payment : The Pre-measurement of thickness shall be done just after the surface preparation is	sqm	714.20

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	completed and payment under this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding / tapping with a blunt metal instrument and / or the 75mm size cube crushing strength at the end of 28 days to be not less than 30 N / Sqmm) - 25 mm average thickness in two layers		
26.32.3	Providing , mixing and applying SBR polymer (of approved make) modified Cement mortar in proportion of 1:4 (1 cement : 4 graded fine aggregate with polymer minimum 2% by wt.of cement used) as per specifications and direction. Note: Measurement and Payment : The Pre-measurement of thickness shall be done just after the surface preparation is completed and payment under this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding / tapping with a blunt metal instrument and / or the 75mm size cube crushing strength at the end of 28 days to be not less than 30 N / Sqmm) - 50 mm average thickness in two layers	sqm	1428.41
26.33.1	Providing , mixing and applying SBR polymer (of approved make @ minimum 2% by wt.of cement used) modified plain / reinforced cement concrete for structural members having minimum characteristic compressive strength (with ordinary portland cement , coarse sand and graded stone aggregate of 10 mm maximum size in proportion as per design criteria) with specified average thickness . Note: Rates shall be for finished surface area of concrete and shall include the cost of labour , concrete and appropriate approved Super - Plasticiser for rendering concrete as flowable and SBR polymer but shall exclude cost of reinforcement , bond coat , Shear Keys , centering and shuttering , strutting , propping etc., (Payment under this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding / tapping with a blunt metal instrument) - 50 mm thick in Grade M 25 with cement content not less than 330 kg per cum	sqm	686.81
26.33.2	Providing , mixing and applying SBR polymer (of approved make @ minimum 2% by wt.of cement used) modified plain / reinforced cement concrete for structural members having minimum characteristic compressive strength (with ordinary portland cement , coarse sand and graded stone aggregate of 10 mm maximum size in proportion as per design criteria) with specified average thickness . Note: Rates shall be for finished surface area of concrete and	sqm	1030.22

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	shall include the cost of labour , concrete and appropriate approved Super - Plasticiser for rendering concrete as flowable and SBR polymer but shall exclude cost of reinforcement , bond coat , Shear Keys , centering and shuttering , strutting , propping etc., (Payment under this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding / tapping with a blunt metal instrument) - 75 mm thick in Grade M 25 with cement content not less than 330 kg per cum		
26.34.1	Providing and laying SBR Polymer modified (of approved make @ minimum 2% by wt.of cement used) plain / reinforced concrete jacket for the structural members e.g. columns , pillars , piers , beams etc with concrete having the specified minimum characteristic compressive strength (with ordinary portland cement , coarse and graded stone aggregate of 10mm maximum size in proportion as per design criteria) with specified average thickness all - round existing core of RCC member. Note: Rates shall be for finished surface area of concrete and shall include the cost of making holes in existing RCC slab , if required , for pouring concrete in shuttering mould of jacket and appropriate approved Super - Plasticiser for rendering concrete as flowable self compacting and SBR polymer but shall exclude cost of reinforcement , bond coat , Shear Keys , centering and shuttering , strutting , propping etc (Payment undr this item shall be made only after proper wet curing has been done and surface has been satifactorily evaluated by sounding/ tapping with a blunt metal instrument) - 50mm thick in Grade M25 with cement concrete not less than 330 kg per cum	sqm	686.81
26.34.2	Providing and laying SBR Polymer modified (of approved make @ minimum 2% by wt.of cement used) plain / reinforced concrete jacket for the structural members e.g. columns , pillars , piers , beams etc with concrete having the specified minimum characteristic compressive strength (with ordinary portland cement , coarse and graded stone aggregate of 10mm maximum size in proportion as per design criteria) with specified average thickness all - round existing core of RCC member. Note: Rates shall be for finished surface area of concrete and shall include the cost of making holes in existing RCC slab , if required , for pouring concrete in shuttering mould of jacket and appropriate approved Super - Plasticiser for rendering concrete as flowable self compacting and SBR polymer but shall excude cost of reinforcement , bond coat , Shear Keys , centering and shuttering , strutting , propping etc (Payment undr this item shall be made only after proper wet curing has	sqm	1030.22

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	been done and surface has been satisfactorily evaluated by sounding/ tapping with a blunt metal instrument) - 75mm thick in Grade M25 with cement concrete not less than 330 kg per cum		
26.34.3	Providing and laying SBR Polymer modified (of approved make @ minimum 2% by wt.of cement used) plain / reinforced concrete jacket for the structural members e.g. columns , pillars , piers , beams etc with concrete having the specified minimum characteristic compressive strength (with ordinary portland cement , coarse and graded stone aggregate of 10mm maximum size in proportion as per design criteria) with specified average thickness all - round existing core of RCC member. Note: Rates shall be for finished surface area of concrete and shall include the cost of making holes in existing RCC slab , if required , for pouring concrete in shuttering mould of jacket and appropriate approved Super - Plasticiser for rendering concrete as flowable self compacting and SBR polymer but shall excude cost of reinforcement , bond coat , Shear Keys , centering and shuttering , strutting , propping etc (Payment undr this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding tapping with a blunt metal instrument) - 100mm thick in Grade M25 with cement concrete not less than 330 kg per cum	sqm	1373.63
26.35.1	Providing and injecting approved grout in proportion recommended by the manufacturers into cracks / honey-comb area of concrete / masonry by suitable gun / pump at required pressure including cutting of Nipples after curing etc complete as per direction of Engineer-in-charges. (The payment shall be made on the basis of actual weight of approved grout injected) - Stirrer mixed Acrylic Polymer of approved make @ 2% of weight of cement used) modified Cement slurry made with non shrink compound in concrete / RCC work)	kg	117.96
26.35.2	Providing and injecting approved grout in proportion recommended by the manufacturers into cracks / honey-comb area of concrete / masonry by suitable gun / pump at required pressure including cutting of Nipples after curing etc complete as per direction of Engineer-in-charges (The payment shall be made on the basis of actual weight of approved grout injected) - Stirrer mixed SBR Polymer (of approved make) modified Cement slurry made with Shrinkage Compensating Cement in concrete / RCC work	kg	125.21

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
26.35.3	Providing and injecting approved grout in proportion recommended by the manufacturers into cracks / honey-comb area of concrete / masonry by suitable gun / pump at required pressure including cutting of Nipples after curing etc complete as per direction of Engineer-in-charges (The payment shall be made on the basis of actual weight of approved grout injected) - Epoxy injection grout in concrete / RCC work of approved make	kg	1138.71
26.36.1	Providing , erecting , maintaining and removing temporary protective screens made out of specified fabric with all necessary fixing arrangement to ensure that it remains in position for the work duration as required by the Engineer-in-charge.- Wooven PVC cloth	sqm	55.06
26.37	Cleaning of exposed concrete surface of sticking material including loose and foreign material by sand blasting with fine aggregate followed by and including cleaning with oil free air blast as per direction of Engineer-in-charge	sqm	860.41
26.38.1	Shotcreting R.C.C. columns, beams and slabs etc. in layers with approved design mix concrete having the specified minimum characteristic compressive strength [with ordinary portland cement, coarse sand and graded stone aggregate of 10 mm maximum size in proportion as per design criteria] including the cost of centering and shuttering at edges and corners etc. as directed by Engineer- in-Charge Note: Rates shall include the providing necessary ground wires etc. The levelling gauges, if used, shall be paid for separately. Payment under this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding/tapping with a blunt metal instrument.25mm thick in Grade M 25 with cement content not less than 330 kg per cum	sqm	951.38
26.38.2	Shotcreting R.C.C. columns, beams and slabs etc. in layers with approved design mix concrete having the specified minimum characteristic compressive strength [with ordinary portland cement, coarse sand and graded stone aggregate of 10 mm maximum size in proportion as per design criteria] including the cost of centering and shuttering at edges and corners etc. as directed by Engineer- in-Charge-Note: Rates shall include the providing necessary ground wires etc. The levelling gauges, if used, shall be paid for separately. Payment under this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by	sqm	1456.84

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	sounding/tapping with a blunt metal instrument.-50mm thick in Grade M 25 with cement content not less than 330 kg per cum		
26.38.3	Shotcreting R.C.C. columns, beams and slabs etc. in layers with approved design mix concrete having the specified minimum characteristic compressive strength [with ordinary portland cement, coarse sand and graded stone aggregate of 10 mm maximum size in proportion as per design criteria] including the cost of centering and shuttering at edges and corners etc. as directed by Engineer- in-Charge Note: Rates shall include the providing necessary ground wires etc. The levelling gauges, if used, shall be paid for separately. Payment under this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding/tapping with a blunt metal instrument.75mm thick in Grade M 25 with cement content not less than 330 kg per cum	sqm	2083.78
26.39	Providing and inserting 12mm dia galvanised steel injection nipple in honey comb area and along crack line including drilling of holes of required diameter (20mm to 30mm) up to depth from 30mm to 80mm at required spacing and making the hole & crack dust free by blowing compressed air, sealing the distance between injection nipple with adhesive chemical of approved make and allow it to cure complete as per direction of Engineer-In-Charge.	hole	294.06
26.40	Providing and fixing hard drawn steel wire fabric of size 75 x25 mm mesh or other suitable size wire mesh to be fixed & firmly anchored to the concrete surface by means of "L" shaped mild steel shear key welded with existing reinforcement including the cost of materials, labour, tool & plants as approved by Engineer-in-charge.	sqm	1356.41
26.41	Designing, providing, installing and fixing factory finished custom designed cold form Light Gauge Steel Framed super structure comprising of steel wall panel, trusses, purlins etc manufactured out of minimum 0.75 mm thick steel sheet as per design requirements. The steel sheet shall be galvanized (AZ-150gms Aluminium Zinc Alloy coated steel having minimum yield strength 300-550 Mpa) conforming to AISI specifications and IBC 2009 for cold formed steel framing and construction and also as per IS: 875-1987, ISO 800-1984 and IS:801- 1975. The wind load shall be as per provisions of IS 875 (part -III). LGSFS frame shall be designed as per IS: 801 using commercially available software such as Frame CAD Pro-11.7/	kg	311.84

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	STAAD PRO-V8i/ArchitekV2.5.16/ Revit architecture-2011 or equivalent. Proper usage of Connection Accessories like Heavy Duty Tension Ties, Light Duty Hold-ons, Twist Straps (to connect truss with wall frames), Strong Tie, Tie Rod, H-Brackets, Boxing Sections, L-Shaped Angles for better structural stability. The framing section shall be cold form C-type having minimum web depth 89 mm x 39mm flange x 11mm lip in required length as per structural design requirement duly punched with dimple/slot at required locations as per approved drawings. The slots will be along centre line of webs and shall be spaced minimum 250mm away from both ends of the member. The frame can be supplied in panelized or knock down condition in specific dimensions and fastened with screws extending through the steel beyond by minimum of three exposed threads. All self drilling tapping screws for joining the members shall have a Type II coating in accordance with ASTM B633(13) or equivalent corrosion protection of gauge 10 & 12, TPI 16 & 8 of length 20mm. The frames shall be fixed to RCC slab or Tie beam over Neoprene rubber using self expanding carbon steel anchor bolt of dia as per approved drawings. design subject to minimum 12mm diameter and 121mm length conforming to AISI 304 and 316 at 500mm c/c with minimum embedment of 100mm in RCC (RCC to be paid separately) and located not more than 300mm from corners or termination of bottom tracks complete in all respects. The item also includes the submission of stability reports duly examined and issued by any NIT/IIT. The rate includes the concept design, detailed design, fabrication of sections, transportation, installation and all required fixing arrangement at site as described above.		
26.42.1	Providing and fixing of external walls system on Light gauge steel frame work with outer face cement boards as per standard sizes fixed with self-drilling / tapping screws / fastners @ 60 cm c/c of approved make. A groove of 2mm to 3mm shall be maintained and grooves shall be sealed with silicon based sealent. The board shall be fixed in a staggered pattern. Screws shall be counter sunk rip head of 1.60 mm to 4mm thick or 8 to 10 gauge of length varring from 25 to 45mm and. Internal face 12.5mm thick gypsum plaster board fixed on cement board as per standard sizes fixed with self-drilling / tapping screws / fastners @ 60cm c/c of approved make, proper taping and jointin to be done using fibre mesh tape and epoxy and acrylic, based jointing compound for seamless finish.(cost of frame work to be paid for separately) - Outer face- Outer face having 6mm thick fibre cement board Type A, Category - IV as per IS:14862:2000 fixed on 9mm thick fiber cement board, Type	sqm	5978.29

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	A, Category -IV as per IS:14862:2000 (High pressure steam cured) Inner Face - 12.5mm thick gypsum plaster board conforming to IS:2095-2011 fixed on 8mm thick fibre cement board of Type B, Category -III as per IS:14862:2000 (High pressure steam cured)		
26.42.1A	Providing and fixing of external walls system on Light gauge steel frame work with outer face cement boards as per standard sizes fixed with self-drilling / taping screws / fastners @ 60 cm c/c of approved make. A groove of 2mm to 3mm shall be maintained and grooves shall be sealed with silicon based sealant. The board shall be fixed in a staggered pattern. Screws shall be counter sunk rip head of 1.60 mm to 4mm thick or 8 to 10 gauge of length varring from 25 to 45mm and. Internal face 12.5mm thick gypsum plaster board fixed on cement board as per standard sizes fixed with self-drilling / taping screws / fastners @ 60cm c/c of approved make, proper taping and jointin to be done using fibre mesh tape and epoxy and acrylic, based jointing compound for seamless finish.(cost of frame work to be paid for separately) - Outer face- Outer face having 6mm thick fibre cement board Type A, Category - III as per IS:14862:2000 fixed on 9mm thick fiber cement board, Type A, Category -III as per IS:14862:2000 (High pressure steam cured) Inner Face - 12.5mm thick gypsum plaster board conforming to IS:2095-2011 fixed on 8mm thick fibre cement board of Type B, Category -III as per IS:14862:2000 (High pressure steam cured)	sqm	3869.59
26.42.2	Providing and fixing of external walls system on Light gauge steel frame work with outer face cement boards as per standard sizes fixed with self-drilling / taping screws / fastners @ 60 cm c/c of approved make. A groove of 2mm to 3mm shall be maintained and grooves shall be sealed with silicon based sealant. The board shall be fixed in a staggered pattern. Screws shall be counter sunk rip head of 1.60 mm to 4mm thick or 8 to 10 gauge of length varring from 25 to 45mm and. Internal face 12.5mm thick gypsum plaster board fixed on cement board as per standard sizes fixed with self-drilling / taping screws / fastners @ 60cm c/c of approved make, proper taping and jointin to be done using fibre mesh tape and epoxy and acrylic, based jointing compound for seamless finish.(cost of frame work to be paid for separately) - Outer face- Outer face having 8mm thick fibre cement bonded particle board fixed on 10mm thick cement bonded particle board. (Termite, Fire and Moisture Resistance) as per IS:14276:1995. Inner Face - 12.5mm thick gypsum plaster board conforming to IS:2095-2011 fixed on 8mm thick fibre cement bonded particle board	sqm	4335.14

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	(Termite, fire and moisture resistance) conforming to IS:14276:1995)		
26.43.1	Providing and fixing internal wall pannels on Light gauge steel frame work with 12.5mm thick gypsum plaster board conforming IS 2095:2011 fixed on cement board as per standard sizes fixed with self - drilling / taping screws / fastners @ 60cm centre to centre of approved make , screws shall be of counter sunk rib head of 1.60mm to 4mm thick or 8 to 10 gauge of length varying from 25 to 45 mm . Proper taping and jointing to be done using fibre mesh tape and epoxy and acrylic based jointing compound for seamless finish. (Cost of frame work to be paid for separately) - Cement Fibre Board 8mm thick of Type B, Category III as per IS 14862:2000 (High pressure Steam Cured)	sqm	3271.04
26.43.2	Providing and fixing internal wall pannels on Light gauge steel frame work with 12.5mm thick gypsum plaster board conforming IS 2095:2011 fixed on cement board as per standard sizes fixed with self - drilling / taping screws / fastners @ 60cm centre to centre of approved make , screws shall be of counter sunk rib head of 1.60mm to 4mm thick of 8 to 10 gauge of length varying from 25 to 45 mm . Proper taping and jointing to be done using fibre mesh tape and epoxy and acrylic based jointing compound for seamless finish. (Cost of frame work to be paid for separately) - Cement bonded Board 8mm (termite, fire & moisture resistance), as per IS:14276:1995	sqm	3202.19
26.44	Providing and fixing in all exteriors face panels breathable vapour barrier underneath the cement fibre board as per National Building Code 2009 complete as per direction of Engineer-in-charge	sqm	479.72
26.45.1	Supplying and installation of moisture resistant / fire resistant cement board as per standard sizes fixed with self-drilling / taping screws . Screws shall be of counter sunk rib head of 1.60mm to 4mm thick or 8 to 10 gauge of length varying from 25 to 45 mm.- Cement Fiber Board 6mm thick as per IS 14862:2000 of type B (High pressure Steam Cured)	sqm	2016.16
26.45.2	Supplying and installation of moisture resistant / fire resistant cement board as per standard sizes fixed with self-drilling / taping screws . Screws shall be of counter sunk rib head of 1.60mm to 4mm thick or 8 to 10 gauge of length varying from 25 to 45 mm.- Cement bonded particle board 8mm thick	sqm	1362.03

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	(termite, Fire & Moisture Resistance), as per IS:14276:1995		
26.46	Providing and fixing in position , 200 mm thick factory made Expanded Polystyrene Core (EPS Core) wall panels consisting of EPS core sandwiched between two engineered sheets of welded wire fabric mesh duly finished with shotcrete materials on outer faces . The fabric mesh shall be made of 3mm dia G.I.wire mesh with 50mm pitch in both the directions and on both faces of the wall, kept at 120-135 mm gap and connected by the zigzag G.I.wire of 3mm dia at alternate row by welding (at an angle ranging from 50 -70 degree) . The EPS core shall consist of 100 mm thick EPS of density not less than 20kg /cum. Both the outer faces of the panel shall be finished by applying the layer of 50mm thick cement mortar 1:3 (1cement :3 fine aggregate) (not having more than 40% stone chips of size upto 6mm) .A with the help of shotcreting / guniting equipment etc at a pressure not less than 1 bar (100Kn/sqm) and both surfaces finished with trowel. Fixing operations of wall panels shall be completed in all respect as per drawings and specifications and under the overall direction of the Engineer-in-charge	sqm	5095.96
26.47	Providing and fixing in position , 230 mm thick factory made Expanded Polystyrene Core (EPS Core) roof / floor panels made of 3mm dia G.I.wire mesh with 50mm pitch in both the directions and on both faces of panel, kept at 120-135 mm gap and connected by the zig zag G.I.wire of 3 mm dia at alternate row by welding (at an angle ranging from 50-70 degree). The EPS core shall consist of 100mm thick EPS of density not less than 20kg / per cum. The bottom side of the panel shall be finished by applying a layer of 60 -65 mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) (not having more than 40% stone chips of size upto 6mm) . At with the help of shotcreting equipment etc at a pressure of not less than 1 bar (100Kn/sqm) and surface finished with trowel. The top face of the panel shall be provided and finished by applying 70-75 mm thick layer of cement concrete 1:1.5:3 (1 cement :1.5fine aggregate: 3 graded stone aggregate 20mm nominal size). Fixing operations of roof /floor panels shall be completed in all respect as per drawings and specifications and under the overall direction of the Enginner-in-charge	sqm	5596.81
26.48	"Providing and fixing of customized Aluminium form work for monolithic construction on RCC members with repetitive usage made up of aluminium sheets/plates of minimum 4mm thickness and grade 6061 (Type-6). The formwork comprises	sqm	498.45

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	of (a) wall panel, rocker, kicker and internal soffit corner, external soffit corner, external corner, internal corner etc., (b) beam components i.e, beam side panel, prop head for soffit beam, beams soffit panel, beam soffit bulk head and (c) deck components i.e. deck panel, deck prop, prop length, deck mid, soffit length, deck beam bar. The panels are held in position by a simple pin and wedge system that passes through holes in the out side rib of each panel. The tolerance of finished panel shall not be less than (-1 mm) and shall conform to IS 14987-1999. Pins and wedges to be made of high grade hot dipped galvanized mild steel. This form work also comprises of M.S. angle iron, "Z" shaped brackets braced diagonally at 0.90 to 1.00 metre centre to centre on external wall face just the level below on which to lay M.S. square tube panels (Challis) and guard railing supports to form working platform and 40 mm dia G.I./M.S. telescopic adjustable props to support deck formwork and beam soffit panels including de-shuttering the formwork from odd/even level to be shifted/lifted to next alternate odd/even level before which the points and shuttering surface to be thoroughly cleaned, pins greasing and shuttering surface oiling properly before fixing all complete including sealing of gap between kicker plates of wall panel and floors (if any) as per design of formwork as provided by shuttering supplier and as per direction of the Engineer-in-charge including filling and finishing the holes of varied sizes and shapes (left by keys/pins of aluminium form work shuttering while de-shuttering) with GP-2 cementitious polymer compound mixed with water in ratio prescribed by manufacturer to form consistent workable enough for pushing it in the holes upto full depth of wall using appropriate tools and finishing smooth all complete as per directions of the Engineer-in-charge."		
26.49.1	Providing and fixing in position factory made EPS cement sandwich wall/roof/floor light weight solid core panels made of core material of EPS granule balls / beads (conforming to IS 4671:1984 and shall have density not less than 15kg per cum) adhesive, cement, sand, flyash and other bonding material in mortar state processed to form in a preset mould. The outer face on both sides of the panels will be non asbestos fibre cement board conforming to IS 14862 :2000 or Calcium silicate board conforming to EN 14306:2009 of 5mm thick each. Panel shall be laid on 6mm thick cement mortar (1cement: 2 fine sand) mixed with chemical adhesive of 0.5kg per 50 kg of cement or shall be preferably fixed into 'C' channel made of 1.2mm thick MS plate screwed/fastened to the slab /column/beam etc. The panel shall be fixed vertically with	sqm	1442.87

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	tongue and groove joint and horizontally locked with steel bar between each other and floors and filled with cement mortar and adhesive. Panels should be used as floor & roofing with additional structural support, steel or RCC depending upon the design. All the operation shall be completed in all respect as per drawings, Manufacturers specifications and under the overall direction of Engineer-in-charge (Cost fo all the material is included except "C channel" which will be paid separately) - Non load bearing panels 50mm thick of required size		
26.49.2	Providing and fixing in position factory made EPS cement sandwich wall/roof/floor light weght solid core panels made of core material of EPS granule balls / beads (conforming to IS 4671:1984 and shall have density not less than 15kg per cum) adhesive, cement , sand, flyashand other bonding material in mortar state processed to form in a preset mould. The outer face on both sides of the panels will be non aasbestos fibre cement board conforming to IS 14862 :2000 or Calcium silicate board conforming to EN 14306:2009 of 5mm thick each. Panel shall be laid on 6mm thick cement mortar (1cement: 2 fine sand) mixed with chemical adhesive of 0.5kg per 50 kg of cement or shall be preferably fixed into 'C' channel made of 1.2mm thick MS plate screwed/fastened to the slab /column/beam etc. Tha panel shall fixed vertically with tongue and groove joint and horizontally locked with steel bar between each other and floors and filled with cement mortar and adhesive. Panels should be used as floor & roofing with additional structural support, steel or RCC depending upon the design. All the operation shall be completed in all respect as per drawings, Manufacturers specifications and under the overall direction of Engineer-in-charge (Cost fo all the material is included except "C channel" which will be paid separately) - Non load bearing panels 60mm thick of required size	sqm	1630.11
26.49.3	Providing and fixing in position factory made EPS cement sandwich wall/roof/floor light weght solid core panels made of core material of EPS granule balls / beads (conforming to IS 4671:1984 and shall have density not less than 15kg per cum) adhesive, cement , sand, flyashand other bonding material in mortar state processed to form in a preset mould. The outer face on both sides of the panels will be non aasbestos fibre cement board conforming to IS 14862 :2000 or Calcium silicate board conforming to EN 14306:2009 of 5mm thick each. Panel shall be laid on 6mm thick cement mortar (1cement: 2 fine sand) mixed with chemical adhesive of 0.5kg per 50 kg of cement or shall be preferably fixed into 'C' channel made of 1.2mm thick MS plate screwed/fastened to	sqm	2014.37

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	the slab /column/beam etc. Tha panel shall fixed vertically with tongue and groove joint and horizontally locked with steel bar between each other and floors and filled with cement mortar and adhesive. Panels should be used as floor & roofing with additional structural support, steel or RCC depending upon the design. All the operation shall be completed in all respect as per drawings, Manufacturers specifications and under the overall direction of Engineer-in-charge (Cost fo all the material is included except "C channel" which will be paid separately) - Non load bearing panels 75mm thick of required size		
26.49.4	Providing and fixing in position factory made EPS cement sandwich wall/roof/floor light weght solid core panels made of core material of EPS granule balls / beads (conforming to IS 4671:1984 and shall have density not less than 15kg per cum) adhesive, cement , sand, flyashand other bonding material in mortar state processed to form in a preset mould. The outer face on both sides of the panels will be non aasbestos fibre cement board conforming to IS 14862 :2000 or Calcium silicate board conforming to EN 14306:2009 of 5mm thick each. Panel shall be laid on 6mm thick cement mortar (1cement: 2 fine sand) mixed with chemical adhesive of 0.5kg per 50 kg of cement or shall be preferably fixed into 'C' channel made of 1.2mm thick MS plate screwed/fastenened to the slab /column/beam etc. Tha panel shall fixed vertically with tongue and groove joint and horizontally locked with steel bar between each other and floors and filled with cement mortar and adhesive. Panels should be used as floor & roofing with additional structural support, steel or RCC depending upon the design. All the operation shall be completed in all respect as per drawings, Manufacturers specifications and under the overall direction of Engineer-in-charge (Cost fo all the material is included except "C channel" which will be paid separately) - Non load bearing panels 90mm thick of required size	sqm	2343.27
26.49.5	Providing and fixing in position factory made EPS cement sandwich wall/roof/floor light weght solid core panels made of core material of EPS granule balls / beads (conforming to IS 4671:1984 and shall have density not less than 15kg per cum) adhesive, cement , sand, flyashand other bonding material in mortar state processed to form in a preset mould. The outer face on both sides of the panels will be non aasbestos fibre cement board conforming to IS 14862 :2000 or Calcium silicate board conforming to EN 14306:2009 of 5mm thick each. Panel shall be laid on 6mm thick cement mortar (1cement: 2 fine sand) mixed with chemical adhesive of 0.5kg per 50 kg of cement or shall be preferably fixed into 'C'	sqm	2753.57

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	channel made of 1.2mm thick MS plate screwed/fastened to the slab /column/beam etc. Tha panel shall fixed vertically with tongue and groove joint and horizontally locked with steel bar between each other and floors and filled with cement mortar and adhesive. Panels should be used as floor & roofing with additional structural support, steel or RCC depending upon the design. All the operation shall be completed in all respect as per drawings, Manufacturers specifications and under the overall direction of Engineer-in-charge (Cost fo all the material is included except "C channel" which will be paid separately) - Non load bearing panels 100mm thick of required size		
26.50.1	Providing and fixing in position factory made non asbestos fibre reinforced aerated cement sandwich wall/roof/floor light weight solid core panels made of light weight cement concrete core composed of OPC cement, pulverized flyash, quick lime, cotton pulp and gypsum in mortar state mixed with aeration agent in a preset mould. The outer face on both sides of the panels will be non asbestos fibre cement board conforming to IS 14862 :2000. These solid wall panels are installed using galvanised iron steel track/C channel of 1mm thick of required sizes as recommended by manufacturer's and fixed to floor and RCC soffit in plumb to each other with cement based polymer modified jointing compound. The exposed surface finished with fibre mesh/glass fibre tape with polmer based joining compound having superior flexibility. Pannels should be used as floor and roofing with additional structural support, steel or RCC depending upon the design. All the operation shall be in all respect as per drawings, Manufacturers specifications and under the over all direction of Engineer- in- charge (Cost of all the material is included except " tracks/C channel" which will be paid separately) - Non load bearing pannels 50 mm thick of required size (Minimum 4mm thick fibre cement board type B, category III as per IS: 14862:2000 on both faces)	sqm	1659.40
26.50.1A	Providing and fixing in position factory made non asbestos fibre reinforced aerated cement sandwich wall/roof/floor light weight solid core panels made of light weight cement concrete core composed of OPC cement, pulverized flyash, quick lime, cotton pulp and gypsum in mortar state mixed with aeration agent in a preset mould. The outer face on both sides of the panels will be non asbestos fibre cement board conforming to IS 14862 :2000. These solid wall panels are installed using galvanised iron steel track/C channel of 1mm thick of required sizes as recommended by manufacturer's and fixed to floor and RCC soffit in plumb to each other with cement based polymer modified jointing compound. The exposed surface finished	sqm	1776.63

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	with fibre mesh/glass fibre tape with polmer based joining compound having superior flexibility. Pannels should be used as floor and roofing with additional structural support, steel or RCC depending upon the design. All the operation shall be in all respect as per drawings, Manufacturers specifications and under the over all direction of Engineer- in- charge (Cost of all the material is included except " tracks/C channel" which will be paid separately) - Non load bearing pannels 50 mm thick of required size (Minimum 4mm thick fibre cement board type A, category III as per IS: 14862:2000 on both faces)		
26.50.1B	Providing and fixing in position factory made non asbestos fibre reinforced aerated cement sandwich wall/roof/floor light weight solid core panels made of light weight cement concrete core composed of OPC cement, pulverized flyash, quick lime, cotton pulp and gypsum in mortar state mixed with aeration agent in a preset mould. The outer face on both sides of the panels will be non asbestos fibre cement board conforming to IS 14862 :2000. These solid wall panels are installed using galvanised iron steel track/C channel of 1mm thick of required sizes as recommended by manufacturer's and fixed to floor and RCC soffit in plumb to each other with cement based polymer modified jointing compound. The exposed surface finished with fibre mesh/glass fibre tape with polmer based joining compound having superior flexibility. Pannels should be used as floor and roofing with additional structural support, steel or RCC depending upon the design. All the operation shall be in all respect as per drawings, Manufacturers specifications and under the over all direction of Engineer- in- charge (Cost of all the material is included except " tracks/C channel" which will be paid separately) - Non load bearing pannels 50 mm thick of required size (Minimum 4mm thick fibre cement board type A, category IV as per IS: 14862:2000 on both faces)	sqm	2248.81
26.50.2	Providing and fixing in position factory made non asbestos fibre reinforced aerated cement sandwich wall/roof/floor light weight solid core panels made of light weight cement concrete core composed of OPC cement, pulverized flyash, quick lime, cotton pulp and gypsum in mortar state mixed with aeration agent in a preset mould. The outer face on both sides of the panels will be non asbestos fibre cement board conforming to IS 14862 :2000. These solid wall panels are installed using galvanised iron steel track/C channel of 1mm thick of required sizes as recommended by manufacturer's and fixed to floor and RCC soffit in plumb to each other with cement based polymer modified jointing compound. The exposed surface finished with fibre mesh/glass fibre tape with polmer based joining	sqm	2001.32

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	compound having superior flexibility. Pannels should be used as floor and roofing with additional structural support, steel or RCC depending upon the design. All the operation shall be in all respect as per drawings, Manufacturers specifications and under the over all direction of Engineer- in- charge (Cost of all the material is included except " tracks/C channel" which will be paid separately) - Non load bearing pannels 75mm thick of required size (Minimum 5mm thick fibre cement board type B category III as per IS: 14862:2000 on both faces)		
26.50.2A	Providing and fixing in position factory made non asbestos fibre reinforced aerated cement sandwich wall/roof/floor light weight solid core panels made of light weight cement concrete core composed of OPC cement, pulverized flyash, quick lime, cotton pulp and gypsum in mortar state mixed with aeration agent in a preset mould. The outer face on both sides of the panels will be non asbestos fibre cement board conforming to IS 14862 :2000. These solid wall panels are installed using galvanised iron steel track/C channel of 1mm thick of required sizes as recommended by manufacturer's and fixed to floor and RCC soffit in plumb to each other with cement based polymer modified jointing compound. The exposed surface finished with fibre mesh/glass fibre tape with polmer based joining compound having superior flexibility. Pannels should be used as floor and roofing with additional structural support, steel or RCC depending upon the design. All the operation shall be in all respect as per drawings, Manufacturers specifications and under the over all direction of Engineer- in- charge (Cost of all the material is included except " tracks/C channel" which will be paid separately) - Non load bearing pannels 75mm thick of required size (Minimum 5mm thick fibre cement board type A category III as per IS: 14862:2000 on both faces)	sqm	1939.45
26.50.2B	Providing and fixing in position factory made non asbestos fibre reinforced aerated cement sandwich wall/roof/floor light weight solid core panels made of light weight cement concrete core composed of OPC cement, pulverized flyash, quick lime, cotton pulp and gypsum in mortar state mixed with aeration agent in a preset mould. The outer face on both sides of the panels will be non asbestos fibre cement board conforming to IS 14862 :2000. These solid wall panels are installed using galvanised iron steel track/C channel of 1mm thick of required sizes as recommended by manufacturer's and fixed to floor and RCC soffit in plumb to each other with cement based polymer modified jointing compound. The exposed surface finished with fibre mesh/glass fibre tape with polmer based joining compound having superior flexibility. Pannels should be used	sqm	2530.49

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	as floor and roofing with additional structural support, steel or RCC depending upon the design. All the operation shall be in all respect as per drawings, Manufacturers specifications and under the over all direction of Engineer- in- charge (Cost of all the material is included except " tracks/C channel" which will be paid separately) - Non load bearing pannels 75mm thick of required size (Minimum 5mm thick fibre cement board type A category IV as per IS: 14862:2000 on both faces)		
26.51	Supplying of standard quality GFRG panel of 124 mm thickness with modular cavities purchased from GFRG panel manufacturing plant in the country, cut to required wall sizes and floor/ roof slab sizes in correct length and height, including cutting of door, window and ventilators opening as per the cutting drawing prepared by architects / design enginners for the construction of GFRG building and loaded in stillages for transportation to the construction site. Cost of panel includes security deposits, hire charges of stillages & jaws, cost of transportation in trucks / lorries without any damages upto 300kms including all leads and lifts from GFRG manufacturing plant to construction site and unloading at site using suitable fork lift / crane. (Payment shall be made on the basis of area of one side of panel without reduction of opening of door / window / ventilator). For transportation above 300kms additional charges to be paid.	sqm	1581.21
26.52	Erection of GFRG Panels in walls in all floors using suitable crane as per instructions of Engineer-in-Charge, as per cutting drawings and structural drawings, in perfect line and plumb, above RCC plinth beam/GFRG panel below and provide necessary lateral/ slanting support to keep the wall panel in safe position, providing & tying of Reinforcement as per structural drawings and applying a coat of water repellant coating Zycosil/equivalent or equivalent product (1 Zycosil/equivalent compound :10 water) to saturation level over RCC plinth beam to provide water proofing treatment to joint between wall panel & plinth beam as per the guide lines / instruction by the engineer in charge. (Cost of reinforcement, water proofing of walls and plinth beam/GFRG panel below joints and installation of door/ window frames before filling of concrete shall be paid separately). The rate quoted shall include making provision for laying of lintels, beams, sunshades, staircase beams, lofts, plumbing work, electrical conduits and any structural insertion etc., as per the drawing and direction of the engineer in charge. The payment shall be made based on the actual exposed area (one side only) of the panel.-The work shall be carried out as per the Special	sqm	304.53

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	Conditions For Glass Fibre Reinforced Gypsum (GFRG) Structures mentioned in NIT.- Note: i) When cutting panel, "A" side is to be for outside or external surface of respective external wall and B side is to be for internal surface of wall ii)Erection of panel is to be with reference to both building plan & cutting drawing by following notational mark indicated in the cutting drawing as well as notional mark written on each panel cut as per cutting drawing		
26.53	"Filling of empty cavities (as shown in the structural design drawing) with quarry dust mixed with 5% cement (by volume). After initial infill of 50 mm thick with M25 concrete at base/bottom of cavities to seal off, infill wall panel cavities in 3 stages as detailed below, (i) 1st pour / infill to be limited to 0.3 to 0.50 m height from bottom of the panel.(ii) 2nd Pour/ infill: infilling shall be done only after 90 minutes interval between successive pours. The maximum height of infill shall be restricted to 1.5m height or up to the top level of door / window.(iii) 3rd pour/infill: After an interval of 90 minutes of second pour, infill or pour the balance height up to the bottom of embedded RCC tie beam Pour enough water just required to dampen the dry mix enough to form cake form after each stage.(cost of laying M25 concrete shall be paid separately)(If any rain falls in between any stages of concrete pour, make sure to cover the panel top to prevent ingress of water or water falling into the cavities. In case of water collection over the concrete inside the panel, drill 10mm hole in GFRG panel immediately above concrete filled level to drain out water before pour/in-fill of balance concreting) "	cum	2957.55
26.54	"Laying of GFRG panel as roof / floor slab panel and staircase panel using suitable crane as per instructions of Engineer-in-Charge, including providing support system with 25mm x 300mm-400 mm wide plywood, as runner with proper prop below proposed micro beams including (a) Cutting of top flange of panel to 180 mm wide (leaving 25mm projection on either side) to provide RCC embedded micro beam as per cutting drawings and structural drawings. (b) Reinforcement for micro beams and tie beams to be provided in position with proper anchorage as per structural drawings. © Provision for Electrical cabling, fan hooks and laying of pipes for plumbing work. (d) Concreting of Tie beam, micro beam and top of GFRG panels (50 mm thick) with M-25 cement concrete mix using coarse aggregate of size less than 20 mm including laying of 10 gauge 100x100 size weld mesh with 25 mm effective cover from the panel top. "	sqm	206.76

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
26.55	Supplying and fixing 10 gauge weld mesh of size 100mm x 100mm for floor / roof slab concrete screed over the micro beams as reinforcement . The weld mesh shall be fixed as per drawing	sqm	262.00
26.56	Application of ZMB 60/equivalent solution (100 Kg ZMB 60/equivalent, 1 litre ZMB Nano Thinner, 20 litre water & 1 Litre Zycoprime/equivalent = 122 litre/kg) over already applied coat of Zycosil/equivalent & Zycoprime/equivalent solution on the top of all the RCC plinth beams by brush/spray coat before erection of GFRG over RCC plinth beams in GF. In the case of upper floors 150 mm wide on floor slab for all the external walls, bath/toilet/wet areas (3 hrs drying time) before erection of wall panel on upper floors including erection of parapet wall.	sqm	372.44
26.57	After erection of GFRG wall panels, seal all GFRG wall joints with paper tape temporarily. Water proofing treatment of vertical joints with Zycosil/equivalent water proofing Solution (1 litre of Zycosil/equivalent & 20 litres of water stirred first & 2 litres of Zycoprime/equivalent added and stirred (total 23 litres)) with 50 ml syringe till the gap and in filled concrete is completely saturated. After removing the paper seal, seal off the vertical joints with water proofing material "Grout RW/equivalent " (Sealing cost excluded.)	metre	102.42
26.58	"Filling of joints between RCC plinth beam / floor slab and wall panel of external walls, toilet / bath room / wet areas walls on all floor and parapet wall over roof slab, stair case head room at the time of erection of GFRG panels with Grout RW/equivalent sealant compound after the erection of panel before the infill of concrete in panel cavities and fine finish. This applies for all horizontal and vertical joints between GFRG wall and slab panels. "	metre	53.88
26.59	Water proofing treatment of Vertical joints (of external side and internal side) between door frame, window & Ventilator frames (on all four sides) of outer wall over the Zycosil / equivalent & Zycoprime / equivalent solution already applied (before the installation of door / window / ventilator frames in position) and fine finish with Grout RW/equivalent	metre	54.70
26.60	Water proofing treatment of RCC sunshade with Zycosil / equivalent water proofing solution (1 litre of Zycosil / equivalent & 20 litres of water stirred first & 2 litres of Zycoprime/equivalent added and stirred (total 23 litres) till it	sqm	167.12

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	meets the saturation level and testing as per RILEM or by water drops test in which water drops do not absorb but drops remain or rolls		
26.61	In-filling / sealing of joint between RCC lintel cum sunshade and wall (on external side) in all floors by pushing in Grout RW / equivalent in paste form and coving 20mm x20mm after applying a coat of Zycosil / equivalent and Zycoprime / equivalent solution before cement plastering of top, bottom and sides of RCC sunshade	metre	54.70
26.62	Designing, Providing, installing and fixing factory finished customized design pregalvanized high tensile steel joists manufactured from G350 Z275 confirming to IS:277:1992, minimum coating of galvanizing 275 gm / sqm, minimum yield stress 35 Mpa & minimum tensile strength of 380 Mpa placed 1.23 metre apart to support the load of slab etc as per the design & directions of Engineer-in-charge	kg	159.44
26.63	Providing and fixing special adjustable lockbars of mild steel E-250 to support the temporary plywood for work between joists during construction as per design & directions of the engineer-in-charge	kg	32.80
26.64.1	Centering and shuttering with 12mm thick shuttering plywood confirming to IS 4990:2011 and removal of form at all heights, Plywood will be supported on lock bars. - suspended floors, roofs, landings, balconies and access platform	sqm	155.25
26.65	Providing and fixing roofing consist of 0.8 mm thick galvanized steel deck sheet confirming to IS 277:1992 used as permanent shuttering over which MS wire mesh 3mm laid at 100x100 mm grid including edge trim covered with concrete. This metal deck will be supported on structural steel beam with shear studs. (Structural steel like beam, column, joists etc. & concrete of different grade as per design will be paid separately)	sqm	1769.25
26.66	Providing and fixing in position, 130 mm thick factory made Expanded Polystyrene Core (EPS Core) wall panels consisting of EPS core sandwiched between two Engineered sheets of welded wire fabric mesh duly finished with shortcrete materials on outer faces. The fabric mesh shall be made of 3 mm dia zinc coated G.I. wire mesh with 50 mm pitch in both the directions and on both faces of the wall and connected by GI wire of 3mm	sqm	2642.66

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	dia at alternate row by welding. The EPS core shall consist of 60 mm thick EPS of density not less than 16 kg/ per cum. Both the outer faces of the panel shall be finished by applying the layer of 35 mm thick cement mortar 1:3 {1 cement: 3 coarse sand (not having more than 40% stone chips of size upto 6 mm)} with the help of shotcreting/guniting equipment etc at a pressure not less than 1 bar (100KN/m ²) and both surfaces finished with trowel. Fixing operations of wall panels shall be completed in all respect as per drawings and specifications and under the overall direction of the Engineer-in-charge.		
26.67	Providing and fixing of external thermal insulation and composite system with First layer of self-extinguishing type Expanded Polystyrene (EPS) insulation boards of 120 mm thick (max 1mX0.5m section), confirming to IS 4671:1984, having thermal conductivity of 0.034 W/mK, (measured as per IS 3346-1980), density of 20-24 kg/m ³ measured as per IS 5688-1982, Fire retardant property self-extinguishing type as per EN 13501-1, bonded with special polymer modified cementitious adhesive confirming to EOTA ETAG 004 (European Technical Approval) formulated to bond polystyrene insulation boards to typical mineral substrate (according to ETAG 004) and Polypropylene mechanical fasteners with plastic pin confirming to EOTA ETAG 014 (European Technical Approval) having dia 10mm & L=200mm on finished level wall and the junction between two adjacent EPS boards to be sealed with low expansion moisture cure Polyurethane Foam. Second layer consists of Fiberglass mesh covered with alkali-resistant coating, mass per unit area ≥145 gm/m ² , mesh size: 3.9x4.0 mm ±10% embedded in special polymer modified cementitious Base Coat with hydrophobes and the corners will be protected with Corner-beads with alkali-resistant mesh wings at least 10 cm wide, mesh mass per unit area min 145 gm/m ² . The surface will be levelled, finished, made smooth complete in all respect as per manufactures specification and as per direction of Engineer-in-charges.	sqm	4271.55
26.68.1	Providing and laying factory made Precast concrete solid blocks of 200 mm thickness of grade M10 made of C&D waste from approved manufacturer in foundation and plinth in:- Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	8275.19
26.69.1	Providing and laying factory made Precast concrete solid blocks of 200 mm thickness of grade M10 made of C&D waste from approved manufacturer in foundation and plinth level	cum	11147.53

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	upto floor V level- Cement mortar 1:6 (1 cement : 6 coarse sand)		
26.70.1	Providing and laying half block masonry with factory made Precast concrete solid blocks of 100 mm thickness of grade M10 made of C&D waste from approved manufacturer in foundation and plinth in: Cement mortar 1:4(1 cement : 4 coarse sand)	sqm	1010.80
26.71.1	Providing and laying half block masonry with factory made Precast concrete solid blocks of 100 mm thickness of grade M10 made of C&D waste from approved manufacturer in superstructure above plinth level up to floor V level: Cement mortar 1:4 (1 cement : 4 coarse sand)	sqm	1248.39
26.72	Providing and laying 60mm thick factory made cement concrete paver block of approved shape and colour of M -30 grade made of C&D waste by block making machine with vibratory compaction laid in required pattern and including over 50mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge.	sqm	957.44
26.73.1.1	Fabrication & Manufacturing of Prestressed Hollow Core slab (Hollow area 25 to 30%) of different thickness & modular width 1200mm in Controlled Factory Environment with approved methodology confirming to IS 10297:1982 by using long line casting method having arrangement of proper steel bed. Concreting should be done by batch mixing plant capable of producing zero slump concrete , transported through automatic shuttels of standard make & layed on bed with the help of extruder / Slipformer, finishing ,curing and also provision of steam curing, cutting, making necessary cutout / holes of required sizes for services in slab element after achieving required strength, yard handling & stacking all complete as per approved shop drawings & design mix as per the direction of the Engineer-in-charge.(Cost of strands should be paid separately). Note : Excess / less cement over the specified cement content used as per design mix is payable / recoverable separately) - Concrete Grade M-40 (Cement content 400 Kg) - 100mm thick hollow core slab	metre	1458.12
26.73.1.2	Fabrication & Manufacturing of Prestressed Hollow Core slab (Hollow area 25 to 30%) of different thickness & modular width 1200mm in Controlled Factory Environment with	metre	1696.40

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	approved methodology confirming to IS 10297:1982 by using long line casting method having arrangement of proper steel bed. Concreting should be done by batch mixing plant capable of producing zero slump concrete , transported through automatic shuttels of standard make & layed on bed with the help of extruder / Slipformer, finishing ,curing and also provision of steam curing, cutting, making necessary cutout / holes of required sizes for services in slab element after achieving required strength, yard handling & stacking all complete as per approved shop drawings & design mix as per the direction of the Engineer-in-charge.(Cost of strands should be paid separately). Note : Excess / less cement over the specified cement content used as per design mix is payable / recoverable separately) - Concrete Grade M-40 (Cement content 400 Kg) - 120mm thick hollow core slab		
26.73.1.3	Fabrication & Manufacturing of Prestressed Hollow Core slab (Hollow area 25 to 30%) of different thickness & modular width 1200mm in Controlled Factory Environment with approved methodology confirming to IS 10297:1982 by using long line casting method having arrangement of proper steel bed. Concreting should be done by batch mixing plant capable of producing zero slump concrete , transported through automatic shuttels of standard make & layed on bed with the help of extruder / Slipformer, finishing ,curing and also provision of steam curing, cutting, making necessary cutout / holes of required sizes for services in slab element after achieving required strength, yard handling & stacking all complete as per approved shop drawings & design mix as per the direction of the Engineer-in-charge.(Cost of strands should be paid separately). Note : Excess / less cement over the specified cement content used as per design mix is payable / recoverable separately) - Concrete Grade M-40 (Cement content 400 Kg) - 150mm thick hollow core slab	metre	2053.80
26.73.1.4	Fabrication & Manufacturing of Prestressed Hollow Core slab (Hollow area 25 to 30%) of different thickness & modular width 1200mm in Controlled Factory Environment with approved methodology confirming to IS 10297:1982 by using long line casting method having arrangement of proper steel bed. Concreting should be done by batch mixing plant capable of producing zero slump concrete , transported through automatic shuttels of standard make & layed on bed with the help of extruder / Slipformer, finishing ,curing and also provision of steam curing, cutting, making necessary cutout / holes of required sizes for services in slab element after achieving required strength, yard handling & stacking all	metre	2493.08

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	complete as per approved shop drawings & design mix as per the direction of the Engineer-in-charge.(Cost of strands should be paid separately). Note : Excess / less cement over the specified cement content used as per design mix is payable / recoverable separately) - Concrete Grade M-40 (Cement content 400 Kg) - 200mm thick hollow core slab		
26.73.1.5	Fabrication & Manufacturing of Prestressed Hollow Core slab (Hollow area 25 to 30%) of different thickness & modular width 1200mm in Controlled Factory Environment with approved methodology confirming to IS 10297:1982 by using long line casting method having arrangement of proper steel bed. Concreting should be done by batch mixing plant capable of producing zero slump concrete , transported through automatic shuttels of standard make & layed on bed with the help of extruder / Slipformer, finishing ,curing and also provision of steam curing, cutting, making necessary cutout / holes of required sizes for services in slab element after achieving required strength, yard handling & stacking all complete as per approved shop drawings & design mix as per the direction of the Engineer-in-charge.(Cost of strands should be paid separately). Note : Excess / less cement over the specified cement content used as per design mix is payable / recoverable separately) - Concrete Grade M-40 (Cement content 400 Kg) - 250mm thick hollow core slab	metre	3049.65
26.73.1.6	Fabrication & Manufacturing of Prestressed Hollow Core slab (Hollow area 25 to 30%) of different thickness & modular width 1200mm in Controlled Factory Environment with approved methodology confirming to IS 10297:1982 by using long line casting method having arrangement of proper steel bed. Concreting should be done by batch mixing plant capable of producing zero slump concrete , transported through automatic shuttels of standard make & layed on bed with the help of extruder / Slipformer, finishing ,curing and also provision of steam curing, cutting, making necessary cutout / holes of required sizes for services in slab element after achieving required strength, yard handling & stacking all complete as per approved shop drawings & design mix as per the direction of the Engineer-in-charge.(Cost of strands should be paid separately). Note : Excess / less cement over the specified cement content used as per design mix is payable / recoverable separately) - Concrete Grade M-40 (Cement content 400 Kg) - 300mm thick hollow core slab	metre	3606.23
26.73.1.7	Fabrication & Manufacturing of Prestressed Hollow Core slab	metre	4162.80

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	(Hollow area 25 to 30%) of different thickness & modular width 1200mm in Controlled Factory Environment with approved methodology confirming to IS 10297:1982 by using long line casting method having arrangement of proper steel bed. Concreting should be done by batch mixing plant capable of producing zero slump concrete , transported through automatic shuttels of standard make & layed on bed with the help of extruder / Slipformer, finishing ,curing and also provision of steam curing, cutting, making necessary cutout / holes of required sizes for services in slab element after achieving required strength, yard handling & stacking all complete as per approved shop drawings & design mix as per the direction of the Engineer-in-charge.(Cost of strands should be paid separately). Note : Excess / less cement over the specified cement content used as per design mix is payable / recoverable separately) - Concrete Grade M-40 (Cement content 400 Kg) - 350mm thick hollow core slab		
26.73.1.8	Fabrication & Manufacturing of Prestressed Hollow Core slab (Hollow area 25 to 30%) of different thickness & modular width 1200mm in Controlled Factory Environment with approved methodology confirming to IS 10297:1982 by using long line casting method having arrangement of proper steel bed. Concreting should be done by batch mixing plant capable of producing zero slump concrete , transported through automatic shuttels of standard make & layed on bed with the help of extruder / Slipformer, finishing ,curing and also provision of steam curing, cutting, making necessary cutout / holes of required sizes for services in slab element after achieving required strength, yard handling & stacking all complete as per approved shop drawings & design mix as per the direction of the Engineer-in-charge.(Cost of strands should be paid separately). Note : Excess / less cement over the specified cement content used as per design mix is payable / recoverable separately) - Concrete Grade M-40 (Cement content 400 Kg) - 400mm thick hollow core slab	metre	4719.37
26.73.2.1	Extra for using M-50 (cement content 425kg) instead of M-40 - 100 mm thick hollow core slab	metre	23.42
26.73.2.2	Extra for using M-50 (cement content 425kg) instead of M-40 - 120 mm thick hollow core slab	metre	28.10
26.73.2.3	Extra for using M-50 (cement content 425kg) instead of M-40 - 150 mm thick hollow core slab	metre	35.13

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
26.73.2.4	Extra for using M-50 (cement content 425kg) instead of M-40 - 200 mm thick hollow core slab	metre	43.71
26.73.2.5	Extra for using M-50 (cement content 425kg) instead of M-40 - 250 mm thick hollow core slab	metre	54.64
26.73.2.6	Extra for using M-50 (cement content 425kg) instead of M-40 - 300 mm thick hollow core slab	metre	65.57
26.73.2.7	Extra for using M-50 (cement content 425kg) instead of M-40 - 350 mm thick hollow core slab	metre	76.50
26.73.2.8	Extra for using M-50 (cement content 425kg) instead of M-40 - 400 mm thick hollow core slab	metre	87.42
26.73.3.1	Extra for using M-60 (cement content 440kg) instead of M-40 - 100 mm thick hollow core slab	metre	37.47
26.73.3.2	Extra for using M-60 (cement content 440kg) instead of M-40 - 120 mm thick hollow core slab	metre	44.93
26.73.3.3	Extra for using M-60 (cement content 440kg) instead of M-40 - 150 mm thick hollow core slab	metre	56.20
26.73.3.4	Extra for using M-60 (cement content 440kg) instead of M-40 - 200 mm thick hollow core slab	metre	69.90
26.73.3.5	Extra for using M-60 (cement content 440kg) instead of M-40 - 250 mm thick hollow core slab	metre	87.42
26.73.3.6	Extra for using M-60 (cement content 440kg) instead of M-40 - 300 mm thick hollow core slab	metre	104.94
26.73.3.7	Extra for using M-60 (cement content 440kg) instead of M-40 - 350 mm thick hollow core slab	metre	122.37
26.73.3.8	Extra for using M-60 (cement content 440kg) instead of M-40 - 400 mm thick hollow core slab	metre	139.89
26.74.1	Fabrication & Manufacturing of solid precast concrete element with provisions of shear keys, connecting loops, dowel tubes and proper lifting accessories for walls, beams, slabs, stairs,	cum	22382.50

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	columns etc, of various thickness, shape and size of different concrete grades manufactured in controlled factory environment with approved methodology including moulds(Pallet systems, Tilts form , table moulds, battery moulds, vertical moulds, beam moulds, column moulds, stair case moulds, Façade mould , etc), mixing transporting and placing of concrete, vibrating, curing, finishing, making necessary cutout/ holes of required sizes for services, yard handling & stacking all complete as per IS 11447:1985 and as per approved shop drawings and design mix as per the direction of Engineer -in-charge (Cost of reinforcement,Mechanical, Electrical and Plumbing inserts will be paid separately). - Note: Excess/ less cement over the specified cement content used as per design mix is payable / recoverable separately) - Concrete grade M-35		
26.74.2	Extra for using M-40 instead of M-35	cum	312.22
26.74.3	Extra for using M-50 instead of M-35	cum	572.41
26.74.4	Extra for using M-60 instead of M-35	cum	728.51
26.75	Providing and laying in position Prestressing steel strands (low relaxation) on hollow core bed by using mechanical pulling arrangement like Rabbit/ Bed master including all accessories for Stressing & destressing operations as per approved make conforming to IS1343 & grade FY - 1860 etc, complete as per drawings and direction Engineer-in-charge	kg	78.68
26.76.1	Transportation of Precast Elements by flat bed Tractor (Double / Triple axle 40 ft length with proper accessories like A frame etc), from factory, including the cost of loading, unloading and stacking at site with the help of required capacity cranes - Lead within 15KM	MT	640.68
26.76.2	Add/deduct over item 26.76.1 for every additional lead of 5km	MT	103.34
26.77.1	Erection & Installation of Precast / Prestressed concrete elements in correct & final position with proper line level and plumb at site making all arrangements (i.e cranes,push-pull jacks & all other T&P for lifting Placing & Alignments of elements , within erection tolerance as per IS 15916 as per approved shop drawings and all complete as per the direction	sqm	225.23

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	of Engineer -in-charge but excluding the cost of sim pads, non shrink grout and steel works i.e hangers. All work upto fifth floor. Prestressed hollow core slab upto 200mm thickness		
26.77.2	Erection & Installation of Precast / Prestressed concrete elements in correct & final position with proper line level and plumb at site making all arrangements (i.e cranes,push-pull jacks & all another T&P for lifting Placing & Alignments of elements , within erection tolerance as per IS 15916 as per approved shop drawings and all complete as per the direction of Engineer -in-charge but excluding the cost of sim pads, non shrink grout and steel works i.e hangers. All work upto fifth floor. Prestressed hollow core slab above 200mm upto 400mm thickness	sqm	338.75
26.77.3	Erection & Installation of Precast / Prestressed concrete elements in correct & final position with proper line level and plumb at site making all arrangements (i.e cranes,push-pull jacks & all another T&P for lifting Placing & Alignments of elements , within erection tolerance as per IS 15916 as per approved shop drawings and all complete as per the direction of Engineer -in-charge but excluding the cost of sim pads, non shrink grout and steel works i.e hangers. All work upto fifth floor. Solid Concrete wall elements	cum	2954.18
26.78.1	Providing and applying weather proof sealant on outer joints of approved make confirming to IS & directed by Engineer -in-charge. Sealant 25mm x10mm at joints	metre	420.93
26.79.1	Providing & laying of levelling sim pads required sizes (5x5cm to 10x10cm) of PVC/ Rubber to adjust level of bearing surface of supporting members as per the direction of Engineer in charge. - 2mm thick	nos	30.16
26.79.2	Providing & laying of levelling sim pads required sizes (5x5cm to 10x10cm) of PVC/ Rubber to adjust level of bearing surface of supporting members as per the direction of Engineer in charge. - 5mm thick	nos	37.27
26.79.3	Providing & laying of levelling sim pads required sizes (5x5cm to 10x10cm) of PVC/ Rubber to adjust level of bearing surface of supporting members as per the direction of Engineer in charge. - 10mm thick	nos	51.50

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
26.80.1	Providing & Grouting of dowel tubes / Shear keys /Joints of precast members with M-60 grade cementitious grout (Non Shrink) of approved make by suitable means (Free flowing / pump), curing etc . Complete as per direction of Engineer-in-charge.(The payment shall be made on the basis of actual weight of approved grout injected) - Stirrer mixed cementitious grout (non shrink) of approved make I dowel tubes / Shear keys / Joints of precast members.	kg	84.90
26.81	Providing and fixing Scaffolding net of required width made of high density Polyethylene UV stablized knitted on warp knitting machines having density 100grams/ sqm and shading coefficient minimum 75% around the construction site / for vertical extension as per requirement including fastening / tying with building / scaffolding pipes or with any other fixtures etc. complete as per direction of Engineer-in-charge. (One time payment shall be made for providing scaffolding net from start of work till completion of work including shifting if any. The Scaffolding net shall be the property of the contractor on completion of the work)	sqm	35.52
26.82	"Providing and laying rigid EPS (cellular plastic material) blocks conforming to ASTM standards/specifications of minimum density 21.60 Kg/cum on floors, steps, stage etc. of required size and shape as per direction of Engineer-in-charge. This shall include the following operation. The EPS blocks shall be cut to required shape and sizes including cuttings for passing of services, joined together with synthetic resin adhesives as per relevant specifications and packed/placed in position for stepped floor or platform formation. The top and sides surfaces to be provided with GI woven wire mesh of aperture 5.45 mm (with wire dia 0.90 mm) secured to EPS blocks with wire pins/clips. Horizontal top surface to be provided with 20 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate upto 6mm chippings) and vertical surface to be provided with 12mm cement plaster 1:4 (1 cement : 4 coarse sand). The concrete/plastered surfaces so prepared shall be scratched with wire brushes to form burrs, so as to act as base for flooring or veneering/panelling to be done later as per approved design (which shall be paid for separately complete as per direction of Engineer-in-charge. "	sqm	2527.77
26.83	"Applying stamping finish to the top surface of freshly laid plain/reinforced cement concrete of specified grade in porticos, sidewalks, driveways, pool decks and open yards as per direction of Engineer-in-charge. The process shall include the	sqm	778.71

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	following:-• The concrete shall be placed and screeded to the finished grade, and floated to a uniform surface by using standard finishing techniques. The approved color hardener @ 2.7 kg/sqm shall be applied evenly to the surface of the fresh concrete by the dry shake method by sprinkling in two or more shakes, floated after each shake and trowelled only after the final floating. The approved release agent @ 0.113 kg/sqm shall be applied evenly to the trowelled surface before stamping or the said release agent can be applied to the flexible polyurethane stamp moulds of approved design and in required sizes to achieve final stamped pattern. These stampings shall be placed on the surface of concrete in three to four pieces at a time and tapped gently with rammers of sufficient size & weight to leave proper stamp marks and the process repeated for the remaining concrete surface till the whole surface to be stamped is completed within the time while concrete is in plastic stage of setting. • After stamping, the curing shall be done as per manufactures specifications. After initial curing the imprinted joints shall be grouted using cement slurry mixed with color hardener as per the requirement. The surface shall be sealed by applying acrylic based sealer not less than 0.167 litre/sqm.on finished surface. • The construction joints shall be provided by groove cutting of size 4mm x 20mm in panel size 3m x 3 m or lesser as per the site conditions and filling the same with 10 mm baker rod and providing and laying (PU) Polyurethane based joint sealer of approved make as per manufacturer's specifications and finished by applying Polyurethane resin based top protective clear coat of minimum 80 micron applied with rollers on properly cured and dry clean surface. (Cost of concrete for flooring is not included in this item which shall be paid separately.)"		
26.84.1	"Supplying and laying of Uni-Axial Woven Polyester Geogrid conforming to MORTH 3100 and IRC113, as soil reinforcement/basal reinforcement including accessories like tie-strips, nuts & bolts and loops/lugs for joining reinforcing elements with the fascia pannels, overlaps and other protective elements for synthetic geo-grids and all other activities required for reinforced soil walls, slopes etc complete as per design requirements, manufacturer specifications and as per direction of Engineer-in-charge. Uni Axial Woven polyester geogrid of minimum tensile strength 40KN/m in the Longitudinal direction and 20 KN/m in the Transverse direction.	sqm	299.09
26.84.2	Supplying and laying of Uni-Axial Woven Polyester Geogrid conforming to MORTH 3100 and IRC113, as soil	sqm	341.43

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	reinforcement/basal reinforcement including accessories like tie-strips, nuts & bolts and loops/lugs for joining reinforcing elements with the fascia pannels, overlaps and other protective elements for synthetic geo-grids and all other activities required for reinforced soil walls, slopes etc complete as per design requirements, manufacturer specifications and as per direction of Engineer-in-charge.Uni Axial Woven polyester geogrid of minimum tensile strength 60KN/m in the Longitudinal direction and 20 KN/m in the Transverse direction.		
26.84.3	Supplying and laying of Uni-Axial Woven Polyester Geogrid conforming to MORTH 3100 and IRC113, as soil reinforcement/basal reinforcement including accessories like tie-strips, nuts & bolts and loops/lugs for joining reinforcing elements with the fascia pannels, overlaps and other protective elements for synthetic geo-grids and all other activities required for reinforced soil walls, slopes etc complete as per design requirements, manufacturer specifications and as per direction of Engineer-in-charge.Uni Axial Woven polyester geogrid of minimum tensile strength 80KN/m in the Longitudinal direction and 30 KN/m in the Transverse direction.	sqm	422.84
26.84.4	Supplying and laying of Uni-Axial Woven Polyester Geogrid conforming to MORTH 3100 and IRC113, as soil reinforcement/basal reinforcement including accessories like tie-strips, nuts & bolts and loops/lugs for joining reinforcing elements with the fascia pannels, overlaps and other protective elements for synthetic geo-grids and all other activities required for reinforced soil walls, slopes etc complete as per design requirements, manufacturer specifications and as per direction of Engineer-in-charge.Uni Axial Woven polyester geogrid of minimum tensile strength 100KN/m in the Longitudinal direction and 30 KN/m in the Transverse direction.	sqm	483.08
26.84.5	Supplying and laying of Uni-Axial Woven Polyester Geogrid conforming to MORTH 3100 and IRC113, as soil reinforcement/basal reinforcement including accessories like tie-strips, nuts & bolts and loops/lugs for joining reinforcing elements with the fascia pannels, overlaps and other protective elements for synthetic geo-grids and all other activities required for reinforced soil walls, slopes etc complete as per design requirements, manufacturer specifications and as per direction of Engineer-in-charge.Uni Axial Woven polyester	sqm	515.65

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	geogrid of minimum tensile strength 120KN/m in the Longitudinal direction and 30 KN/m in the Transverse direction.		
26.84.6	Supplying and laying of Uni-Axial Woven Polyester Geogrid conforming to MORTH 3100 and IRC113, as soil reinforcement/basal reinforcement including accessories like tie-strips, nuts & bolts and loops/lugs for joining reinforcing elements with the fascia pannels, overlaps and other protective elements for synthetic geo-grids and all other activities required for reinforced soil walls, slopes etc complete as per design requirements, manufacturer specifications and as per direction of Engineer-in-charge. Uni Axial Woven polyester geogrid of minimum tensile strength 150KN/m in the Longitudinal direction and 30 KN/m in the Transverse direction.	sqm	636.13
26.84.7	Supplying and laying of Uni-Axial Woven Polyester Geogrid conforming to MORTH 3100 and IRC113, as soil reinforcement/basal reinforcement including accessories like tie-strips, nuts & bolts and loops/lugs for joining reinforcing elements with the fascia pannels, overlaps and other protective elements for synthetic geo-grids and all other activities required for reinforced soil walls, slopes etc complete as per design requirements, manufacturer specifications and as per direction of Engineer-in-charge. Uni Axial Woven polyester geogrid of minimum tensile strength 200KN/m in the Longitudinal direction and 30 KN/m in the Transverse direction.	sqm	741.97
26.84.8	Supplying and laying of Uni-Axial Woven Polyester Geogrid conforming to MORTH 3100 and IRC113, as soil reinforcement/basal reinforcement including accessories like tie-strips, nuts & bolts and loops/lugs for joining reinforcing elements with the fascia pannels, overlaps and other protective elements for synthetic geo-grids and all other activities required for reinforced soil walls, slopes etc complete as per design requirements, manufacturer specifications and as per direction of Engineer-in-charge. Uni Axial Woven polyester geogrid of minimum tensile strength 250KN/m in the Longitudinal direction and 30 KN/m in the Transverse direction.	sqm	896.65
26.84.9	Supplying and laying of Uni-Axial Woven Polyester Geogrid conforming to MORTH 3100 and IRC113, as soil reinforcement/basal reinforcement including accessories like	sqm	1030.16

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	tie-strips, nuts & bolts and loops/lugs for joining reinforcing elements with the facia pannels, overlaps and other protective elements for synthetic geo-grids and all other activities required for reinforced soil walls, slopes etc complete as per design requirements, manufacturer specifications and as per direction of Engineer-in-charge. Uni Axial Woven polyster geogrid of minimum tensile strength 300KN/m in the Longitudinal direction and 30 KN/m in the Transverse direction.		
26.85.1	Supplying and laying of Bi-Axial Woven Polyster Geogrid conforming to MORTH 3100 and IRC113, as soil reinforcement/basal reinforcement of granular road base and sub base, area stalilization, track bed stabilization, load transfer platforms Including accessories like tie-strips, nuts & bolts and loops/lugs for joining reinforcing elements with the facia pannels, overlaps and other protective elements for synthetic geo-grids and all other activities required etc. complete as per design requirements, manufacturer specifications and as per direction of Engineer-in-charge.. Bi Axial Woven polyster geogrid of minimum tensile strength 20KN/m in both Longitudinal and Transverse direction.	sqm	253.50
26.85.2	Supplying and laying of Bi-Axial Woven Polyster Geogrid conforming to MORTH 3100 and IRC113, as soil reinforcement/basal reinforcement of granular road base and sub base, area stalilization, track bed stabilization, load transfer platforms Including accessories like tie-strips, nuts & bolts and loops/lugs for joining reinforcing elements with the facia pannels, overlaps and other protective elements for synthetic geo-grids and all other activities required etc. complete as per design requirements, manufacturer specifications and as per direction of Engineer-in-charge.. Bi Axial Woven polyster geogrid of minimum tensile strength 40KN/m in both Longitudinal and Transverse direction.	sqm	362.59
26.85.3	Supplying and laying of Bi-Axial Woven Polyster Geogrid conforming to MORTH 3100 and IRC113, as soil reinforcement/basal reinforcement of granular road base and sub base, area stalilization, track bed stabilization, load transfer platforms Including accessories like tie-strips, nuts & bolts and loops/lugs for joining reinforcing elements with the facia pannels, overlaps and other protective elements for synthetic geo-grids and all other activities required etc. complete as per design requirements, manufacturer specifications and as per direction of Engineer-in-charge..	sqm	457.03

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	Bi Axial Woven polyster geogrid of minimum tensile strength 60KN/m in both Longitudinal and Transverse direction.		
26.86.1	Providing and fixing factory made single extruded WPC (Wood Polymer composite) solid door / window / Ceosetory windows and Other frames/ Chowkhat comprising of virgin PVC polymer of K value 58-60 (Suspension Grade) calcium carbonate and natural fibers (wood powder/ rice husk/ wheat husk) and non toxic additives (maximum toxicity index 12 for 100 gms) fabricated with miter joints after applying PVC solvent cement and screwed with full body threaded star headed SS screws having minimum frames density of 750 kg / cum, screw withdrawal strength of 2200 N (Face) and 1100 N (Edge), minimum compresssive strength of 58N/sq.mm, modulus of elasticity 900 N/sq.mm and resistance to spread of flame of class A category with property of being termite / borer proof, water / moisture proof and fire retardant and fixed in position of with M.S hold fast/lugs /SS dash fasteners of required dia and length complete as per direction of Engineer-in-charge (M.S hold fast/lugs or SS dash fastners shall be paid for separately) Note: For WPC solid door / window frames, minus 5mm tolerance in dimensions i.e. depth and width of profile shall be acceptable . Variation in profile dimension on plus side shall be acceptable but no extra payments on this account shall be made. - Frame size 45 x 70 mm	metre	717.56
26.86.2	Providing and fixing factory made single extruded WPC (Wood Polymer composite) solid door / window / Ceosetory windows and Other frames/ Chowkhat comprising of virgin PVC polymer of K value 58-60 (Suspension Grade) calcium carbonate and natural fibers (wood powder/ rice husk/ wheat husk) and non toxic additives (maximum toxicity index 12 for 100 gms) fabricated with miter joints after applying PVC solvent cement and screwed with full body threaded star headed SS screws having minimum frames density of 750 kg / cum, screw withdrawal strength of 2200 N (Face) and 1100 N (Edge), minimum compresssive strength of 58N/sq.mm, modulus of elasticity 900 N/sq.mm and resistance to spread of flame of class A category with property of being termite / borer proof, water / moisture proof and fire retardant and fixed in position of with M.S hold fast/lugs /SS dash fasteners of required dia and length complete as per direction of Engineer-in-charge (M.S hold fast/lugs or SS dash fastners shall be paid for separately) Note: For WPC solid door / window frames, minus 5mm tolerance in dimensions i.e. depth and width of profile shall be acceptable . Variation in profile dimension on plus side shall be acceptable but no extra payments on this	metre	930.95

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	account shall be made. - Frame size 45 x 85 mm		
26.86.3	Providing and fixing factory made single extruded WPC (Wood Polymer composite) solid door / window / Ceosetory windows and Other frames/ Chowkhat comprising of virgin PVC polymer of K value 58-60 (Suspension Grade) calcium carbonate and natural fibers (wood powder/ rice husk/ wheat husk) and non toxic additives (maximum toxicity index 12 for 100 gms) fabricated with miter joints after applying PVC solvent cement and screwed with full body threaded star headed SS screws having minimum frames density of 750 kg / cum, screw withdrawal strength of 2200 N (Face) and 1100 N (Edge), minimum compresssive strength of 58N/sq.mm, modulus of elasticity 900 N/sq.mm and resistance to spread of flame of class A category with property of being termite / borer proof, water / moisture proof and fire retardant and fixed in position of with M.S hold fast/lugs /SS dash fasteners of required dia and length complete as per direction of Engineer-in-charge (M.S hold fast/lugs or SS dash fastners shall be paid for separately) Note: For WPC solid door / window frames, minus 5mm tolerance in dimensions i.e. depth and width of profile shall be acceptable . Variation in profile dimension on plus side shall be acceptable but no extra payments on this account shall be made. - Frame size 50 x 100 mm	metre	952.29
26.86.4	Providing and fixing factory made single extruded WPC (Wood Polymer composite) solid door / window / Ceosetory windows and Other frames/ Chowkhat comprising of virgin PVC polymer of K value 58-60 (Suspension Grade) calcium carbonate and natural fibers (wood powder/ rice husk/ wheat husk) and non toxic additives (maximum toxicity index 12 for 100 gms) fabricated with miter joints after applying PVC solvent cement and screwed with full body threaded star headed SS screws having minimum frames density of 750 kg / cum, screw withdrawal strength of 2200 N (Face) and 1100 N (Edge), minimum compresssive strength of 58N/sq.mm, modulus of elasticity 900 N/sq.mm and resistance to spread of flame of class A category with property of being termite / borer proof, water / moisture proof and fire retardant and fixed in position of with M.S hold fast/lugs /SS dash fasteners of required dia and length complete as per direction of Engineer-in-charge (M.S hold fast/lugs or SS dash fastners shall be paid for separately) Note: For WPC solid door / window frames, minus 5mm tolerance in dimensions i.e. depth and width of profile shall be acceptable . Variation in profile dimension on plus side shall be acceptable but no extra payments on this account shall be made. - Frame size 50 x 125 mm	metre	1080.33

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
26.86.5	Providing and fixing factory made single extruded WPC (Wood Polymer composite) solid door / window / Ceosetory windows and Other frames/ Chowkhat comprising of virgin PVC polymer of K value 58-60 (Suspension Grade) calcium carbonate and natural fibers (wood powder/ rice husk/ wheat husk) and non toxic additives (maximum toxicity index 12 for 100 gms) fabricated with miter joints after applying PVC solvent cement and screwed with full body threaded star headed SS screws having minimum frames density of 750 kg / cum, screw withdrawal strength of 2200 N (Face) and 1100 N (Edge), minimum compresssive strength of 58N/sq.mm, modulus of elasticity 900 N/sq.mm and resistance to spread of flame of class A category with property of being termite / borer proof, water / moisture proof and fire retardant and fixed in position of with M.S hold fast/lugs /SS dash fasteners of required dia and length complete as per direction of Engineer-in-charge (M.S hold fast/lugs or SS dash fastners shall be paid for separately) Note: For WPC solid door / window frames, minus 5mm tolerance in dimensions i.e. depth and width of profile shall be acceptable . Variation in profile dimension on plus side shall be acceptable but no extra payments on this account shall be made. - Frame size 65 x 100 mm	metre	1108.78
26.86.6	Providing and fixing factory made single extruded WPC (Wood Polymer composite) solid door / window / Ceosetory windows and Other frames/ Chowkhat comprising of virgin PVC polymer of K value 58-60 (Suspension Grade) calcium carbonate and natural fibers (wood powder/ rice husk/ wheat husk) and non toxic additives (maximum toxicity index 12 for 100 gms) fabricated with miter joints after applying PVC solvent cement and screwed with full body threaded star headed SS screws having minimum frames density of 750 kg / cum, screw withdrawal strength of 2200 N (Face) and 1100 N (Edge), minimum compresssive strength of 58N/sq.mm, modulus of elasticity 900 N/sq.mm and resistance to spread of flame of class A category with property of being termite / borer proof, water / moisture proof and fire retardant and fixed in position of with M.S hold fast/lugs /SS dash fasteners of required dia and length complete as per direction of Engineer-in-charge (M.S hold fast/lugs or SS dash fastners shall be paid for separately) Note: For WPC solid door / window frames, minus 5mm tolerance in dimensions i.e. depth and width of profile shall be acceptable . Variation in profile dimension on plus side shall be acceptable but no extra payments on this account shall be made. - Frame size 65 x 125 mm	metre	1371.97

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
26.86.7	Providing and fixing factory made single extruded WPC (Wood Polymer composite) solid door / window / Ceosetory windows and Other frames/ Chowkhat comprising of virgin PVC polymer of K value 58-60 (Suspension Grade) calcium carbonate and natural fibers (wood powder/ rice husk/ wheat husk) and non toxic additives (maximum toxicity index 12 for 100 gms) fabricated with miter joints after applying PVC solvent cement and screwed with full body threaded star headed SS screws having minimum frames density of 750 kg / cum, screw withdrawal strength of 2200 N (Face) and 1100 N (Edge), minimum compresssive strength of 58N/sq.mm, modulus of elasticity 900 N/sq.mm and resistance to spread of flame of class A category with property of being termite / borer proof, water / moisture proof and fire retardant and fixed in position of with M.S hold fast/lugs /SS dash fasteners of required dia and length complete as per direction of Engineer-in-charge (M.S hold fast/lugs or SS dash fastners shall be paid for separately) Note: For WPC solid door / window frames, minus 5mm tolerance in dimensions i.e. depth and width of profile shall be acceptable . Variation in profile dimension on plus side shall be acceptable but no extra payments on this account shall be made. - Frame size 65 x 150 mm	metre	1620.93
26.87.1	Providing and fixing factory made single extruded WPC (Wood Polymer Composite) solid plain flush door shutter of required size comprising of virgin polymer K value 58-60 (Suspension Grade), calcium carbonate and natural fibres (wood powder/ rice husk/ wheat husk) and non toxic additives (maximum toxicity index of 12 for 100 gms) having minimum density of 650 kg/cum and screw withdrawl strength of 1800 N (Face) and 900 N (Edge), minimum compressive strength 50 N/sq.mm , modulus of elasticity 850 N/sq.mm and resistance to spread of flame of class A category with property of being temite/borer proof, water/moisture proof and fire retardant and fixing with stainless steel butt hinges of required size with necessary full body threaded star headed counter sunk S.S.screws, all as per direction of Engineer-in-charge. (Note: Stainless steel butt hinges and necessary S.S.screws shall be paid separately) -30mm thick	sqm	4225.23
26.87.2	Providing and fixing factory made single extruded WPC (Wood Polymer Composite) solid plain flush door shutter of required size comprising of virgin polymer K value 58-60 (Suspension Grade), calcium carbonate and natural fibres (wood powder/ rice husk/ wheat husk) and non toxic additives (maximum toxicity index of 12 for 100 gms) having minimum density of 650 kg/cum and screw withdrawl strength of 1800 N	sqm	4865.42

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	(Face) and 900 N (Edge), minimum compressive strength 50 N/sq.mm , modulus of elasticity 850 N/sq.mm and resistance to spread of flame of class A category with property of being termite/borer proof, water/moisture proof and fire retardant and fixing with stainless steel butt hinges of required size with necessary full body threaded star headed counter sunk S.S.screws, all as per direction of Engineer-in-charge. (Note: Stainless steel butt hinges and necessary S.S.screws shall be paid separately) -35mm thick		
26.88.1	Providing and fixing factory made single extruded WPC (Wood Polymer Composite) solid decorative type flush door shutter of required size comprising of virgin polymer K value 58-60 (Suspension Grade), calcium carbonate and natural fibers (wood powder/ rice husk/ wheat husk) and non toxic additives (maximum toxicity index of 12 for 100 gms) having minimum density of 650 kg/cum and screw withdrawl strength of 1800 N (Face) and 900 N (Edge), minimum compressive strength 50N/sq.mm , modulus of elasticity 850 N/sq.mm and resistance to spread of flame of class A category with property of being termite/borer proof, water/moisture proof and fire retardant. WPC to be laminated with PVC foil of minimum 14 microns thick of approved design pasted with hot melt adhesive on both faces of shutter and fixing with stainless steel butt hinges of required size with necessary full body threaded star headed counter sunk S.S.screws, all as per direction of Engineer-in-charge. (Note: Stainless steel butt hinges and necessary S.S.screws shall be paid separately) - 30mm thick	sqm	4637.15
26.88.2	Providing and fixing factory made single extruded WPC (Wood Polymer Composite) solid decorative type flush door shutter of required size comprising of virgin polymer K value 58-60 (Suspension Grade), calcium carbonate and natural fibers (wood powder/ rice husk/ wheat husk) and non toxic additives (maximum toxicity index of 12 for 100 gms) having minimum density of 650 kg/cum and screw withdrawl strength of 1800 N (Face) and 900 N (Edge), minimum compressive strength 50N/sq.mm , modulus of elasticity 850 N/sq.mm and resistance to spread of flame of class A category with property of being termite/borer proof, water/moisture proof and fire retardant. WPC to be laminated with PVC foil of minimum 14 microns thick of approved design pasted with hot melt adhesive on both faces of shutter and fixing with stainless steel butt hinges of required size with necessary full body threaded star headed counter sunk S.S.screws, all as per direction of Engineer-in-charge. (Note: Stainless steel butt hinges and necessary S.S.screws shall be paid separately) - 35mm thick	sqm	5277.33

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
26.89.1	Providing and fixing factory made single extruded WPC (Wood Polymer Composite) solid board one side white color and other side of board laminated with PVC foil of minimum 14 micron thickness of approved design pasted with hot melt adhesive for cup boards, work stations and bathroom/ kitchen cabinet etc. of required sizes comprising of virgin polymer of K value 58-60 (Suspension Grade), calcium carbonate and natural fibers (wood powder/ rice husk/ wheat husk) and non toxic additives (maximum toxicity index of 12 for 100 gms) having minimum density of 650 kg/cum and screw withdrawl strength of 1800 N (Face) and 900 N (Edge), minimum compressive strength 50N/sq.mm , modulus of elasticity 850 N/sq.mm and resistance to spread of flame of class A category with property of being termite/borer proof, water/moisture proof and fire retardant and fixing with stainless steel piano hinges/ soft close clip on concealed hinges of required size with necessary full body threaded star headed counter sunk S.S.screws, all as per direction of Engineer-in-charge. (Note: Stainless steel piano hinges/ soft close clip on concealed hinges and necessary S.S.screws shall be paid separately) - 18 mm thick	sqm	2940.12
26.89.2	Providing and fixing factory made single extruded WPC (Wood Polymer Composite) solid board one side white color and other side of board laminated with PVC foil of minimum 14 micron thickness of approved design pasted with hot melt adhesive for cup boards, work stations and bathroom/ kitchen cabinet etc. of required sizes comprising of virgin polymer of K value 58-60 (Suspension Grade), calcium carbonate and natural fibers (wood powder/ rice husk/ wheat husk) and non toxic additives (maximum toxicity index of 12 for 100 gms) having minimum density of 650 kg/cum and screw withdrawl strength of 1800 N (Face) and 900 N (Edge), minimum compressive strength 50N/sq.mm , modulus of elasticity 850 N/sq.mm and resistance to spread of flame of class A category with property of being termite/borer proof, water/moisture proof and fire retardant and fixing with stainless steel piano hinges/ soft close clip on concealed hinges of required size with necessary full body threaded star headed counter sunk S.S.screws, all as per direction of Engineer-in-charge. (Note: Stainless steel piano hinges/ soft close clip on concealed hinges and necessary S.S.screws shall be paid separately) - 25 mm thick	sqm	3807.93
26.90.1	Providing and fixing factory made single extruded WPC (Wood Polymer Composite) solid plain white color board for	sqm	1099.91

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	backing of cup boards and bathroom/ kitchen cabinet etc. of required sizes comprising of virgin polymer K value 58-60 (Suspension Grade), calcium carbonate and natural fibers (wood powder/ rice husk/ wheat husk) and non toxic additives (maximum toxicity index of 12 for 100 gms) having minimum density of 650 kg/cum and screw withdrawal strength of 1800 N (Face) and 900 N (Edge), minimum compressive strength 50N/sq.mm , modulus of elasticity 850 N/sq.mm and resistance to spread of flame of class A category with property of being termite/borer proof, water/moisture proof and fire retardant and fixing with stainless steel screws etc all as per direction of Engineer-in-charge. (Note: Stainless steel screws shall be paid separately) - 6 mm thick		
26.90.2	Providing and fixing factory made single extruded WPC (Wood Polymer Composite) solid plain white color board for backing of cup boards and bathroom/ kitchen cabinet etc. of required sizes comprising of virgin polymer K value 58-60 (Suspension Grade), calcium carbonate and natural fibers (wood powder/ rice husk/ wheat husk) and non toxic additives (maximum toxicity index of 12 for 100 gms) having minimum density of 650 kg/cum and screw withdrawal strength of 1800 N (Face) and 900 N (Edge), minimum compressive strength 50N/sq.mm , modulus of elasticity 850 N/sq.mm and resistance to spread of flame of class A category with property of being termite/borer proof, water/moisture proof and fire retardant and fixing with stainless steel screws etc all as per direction of Engineer-in-charge. (Note: Stainless steel screws shall be paid separately) - 12 mm thick	sqm	1697.41
26.91	Providing and fixing factory made 18mm thick single extruded WPC(Wood Polymer Composite) solid plain white color board Jali, CNC (Computer numeric control) routed of approved design by Engineer-in-charge which are machine cut for duct/shaft covering, partions and facades comprising of virgin polymer of K value 58-60 (Suspension Grade), calcium carbonate and natural fibers (wood powder/ rice husk/ wheat husk) and non toxic additives (maximum toxicity index of 12 for 100 gms) having minimum density of 650 kg / cum and screw withdrawal strength of 1800 N (Face) minimum compressive strength 50N/sq.mm, modulus of elasticity 850N/sq.mm and resistance to spread of flame of Class A category with properties of being termite/borer proof, water/moisture proof and fire retardant and fixing on M.S.(mild steel) frame made of 25 x25 x 1.5mm squire hollow box section including applying a priming coat of approved steel primer, placed at grid made at 1.0x1.0 m or as per requirement at site	sqm	3373.56

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	with necessary Stainless steel fasteners and SS screws etc all complete as per direction of Engineer-in-charge. (Note: M.S.(mild steel) frame work with priming coat and necessary SS fasteners and SS screws shall be paid separately)		
26.92.1	Providing and fixing of façade at all heights with extruded hollow Clay / Terracotta ventilated rainscreen tiles of height 250/ 300/ 400mm and length of 595mm of approved texture, design and pattern having Flexural Strength/ Modulus of Rupture of >- 14 N/sq.m and maximum water absorption of 10% tested as per ISO 10545-4:2004(E) and ISO 10545 - 3:1995 respectively in true level fixed to a supporting aluminium frame work (Alloy 6063 T5/T6) consisting of vertical 'T' (for intermediates) 'L' (for ends / termination)/ Tubular sections (at corners) of size 80x60x2mm /40x60x2mm/40x40x2mm respectively, spaced at maximum spacing of 600mm c/c matching to the tile vertical grid, and horizontal aluminium 'C' - clamps of size 56x25x2mm thickness of length of 150mm at junction of tiles and of length 75mm at wall ends / corners fixed on top of the vertical sections at spacing of 250/ 300/ 400 mm c/c matching to the tile horizontal grid with two numbers of self-drilling / self-tapping SS screws of size 5.5x25mm with EPDM washers. The Vertical 'T'/'L'/Tubular' sections shall be fixed to the wall using HDG (hot-dip-galvanized) steel L-brackets (galvanizing thickness of minimum 80 microns) of size 110x 80x6mm at intermediate vertical aluminium profile and of size 220x110x12mm at outer corners and stainless steel grade 304, M10 full threaded anchor fasteners with nylon sleeve 100mm long (for brick work) and M8 expansions anchor fasteners 75mm long for concrete surface, spacing of brackets to be based on a structural / static calculation. The brackets shall be of length 175mm at junction of two vertical aluminium profiles and of length 100mm at intermediate points of vertical profiles and shall be fixed to the vertical aluminium T / L/ Tubular profiles using two numbers self-drilling / self-tapping SS screws of size 5.5x25mm with EPDM washers. EPDM gasket to be fixed in between brackets and vertical profiles. The tiles shall be mounted on the 'C' clamps such that the tiles are supported at top and bottom at both ends. The tiles shall be additionally secured to the horizontal 'C' clamps using special SS clips of required size which shall be inserted and pressed into position on the 'C' clamps holding the tiles and the cut-tiles shall be glued at points to the horizontal 'C' clamps by using MS Polymer sealant adhesive. The vertical joint open groove between two adjacent tiles shall be 5mm. The tiles and system shall be designed to resist wind load as per IS 875 (Part 3)	sqm	6170.55

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	according to different zones. The tiles shall be installed using the ventilated rain screen principle with provision for natural ventilation of the space between the façade tiles and the structural wall. The work shall be carried out as per specification, drawing and as per direction of Engineer-in-charge. Note: Scaffolding wherever required to be paid separately. - With 16mm thickness (+/- 10%) terracotta tiles of grey color		
26.92.2	Providing and fixing of façade at all heights with extruded hollow Clay / Terracotta ventilated rainscreen tiles of height 250/ 300/ 400mm and length of 595mm of approved texture, design and pattern having Flexural Strength/ Modulus of Rupture of >- 14 N/sq.m and maximum water absorption of 10% tested as per ISO 10545-4:2004(E) and ISO 10545 - 3:1995 respectively in true level fixed to a supporting aluminium frame work (Alloy 6063 T5/T6) consisting of vertical 'T' (for intermediates) 'L' (for ends / termination)/ Tubular sections (at corners) of size 80x60x2mm /40x60x2mm/40x40x2mm respectively, spaced at maximum spacing of 600mm c/c matching to the tile vertical grid, and horizontal aluminium 'C' - clamps of size 56x25x2mm thickness of length of 150mm at junction of tiles and of length 75mm at wall ends / corners fixed on top of the vertical sections at spacing of 250/ 300/ 400 mm c/c matching to the tile horizontal grid with two numbers of self-drilling / self-tapping SS screws of size 5.5x25mm with EPDM washers. The Vertical 'T'/'L'/Tubular' sections shall be fixed to the wall using HDG (hot-dip-galvanized) steel L-brackets (galvanizing thickness of minimum 80 microns) of size 110x 80x6mm at intermediate vertical aluminium profile and of size 220x110x12mm at outer corners and stainless steel grade 304, M10 full threaded anchor fasteners with nylon sleeve 100mm long (for brick work) and M8 expansions anchor fasteners 75mm long for concrete surface, spacing of brackets to be based on a structural / static calculation. The brackets shall be of length 175mm at junction of two vertical aluminium profiles and of length 100mm at intermediate points of vertical profiles and shall be fixed to the vertical aluminium T / L/ Tubular profiles using two numbers self-drilling / self-tapping SS screws of size 5.5x25mm with EPDM washers. EPDM gasket to be fixed in between brackets and vertical profiles. The tiles shall be mounted on the 'C' clamps such that the tiles are supported at top and bottom at both ends. The tiles shall be additionally secured to the horizontal 'C' clamps using special SS clips of required size which shall be inserted and pressed into position on the 'C' clamps holding the tiles and the cut-tiles	sqm	5928.96

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	shall be glued at points to the horizontal 'C' clamps by using MS Polymer sealant adhesive. The vertical joint open groove between two adjacent tiles shall be 5mm. The tiles and system shall be designed to resist wind load as per IS 875 (Part 3) according to different zones. The tiles shall be installed using the ventilated rain screen principle with provision for natural ventilation of the space between the façade tiles and the structural wall. The work shall be carried out as per specification, drawing and as per direction of Engineer-in-charge. Note: Scaffolding wherever required to be paid separately. - With 16mm thickness (+/- 10%) terracotta tiles of other than grey color		
26.93.1	Providing and fixing of façade at all heights with extruded hollow Clay / Terracotta ventilated rainscreen tiles of height 259/ 309/ 409mm and length of 595mm of approved texture, design and pattern having Flexural Strength/ Modulus of Rupture of >- 14 N/sq.m and maximum water absorption of 10% tested as per ISO 10545-4:2004(E) and ISO 10545 - 3:1995 respectively in true level fixed to a supporting aluminium frame work (Alloy 6063 T5/T6) consisting of vertical 'T' (for intermediates) 'L' (for ends / termination)/ Tubular sections (at corners) of size 80x60x2mm /40x60x2mm/40x40x2mm respectively, spaced at maximum spacing of 600mm c/c matching to the tile vertical grid, and horizontal aluminium 'C' - clamps of size 56x25x2mm thickness of length of 150mm at junction of tiles and of length 75mm at wall ends / corners fixed on top of the vertical sections at spacing of 250/ 300/ 400 mm c/c matching to the tile horizontal grid with two numbers of self-drilling / self-tapping SS screws of size 5.5x25mm with EPDM washers. The Vertical 'T'/'L'/Tubular' sections shall be fixed to the wall using HDG (hot-dip-galvanized) steel L-brackets (galvanizing thickness of minimum 80 microns) of size 110x 80x6mm at intermediate vertical aluminium profile and of size 220x110x12mm at outer corners and stainless steel grade 304, M10 full threaded anchor fasteners with nylon sleeve 100mm long (for brick work) and M8 expansions anchor fasteners 75mm long for concrete surface, spacing of brackets to be based on a structural / static calculation. The brackets shall be of length 175mm at junction of two vertical aluminium profiles and of length 100mm at intermediate points of vertical profiles and shall be fixed to the vertical aluminium T / L/ Tubular profiles using two numbers self-drilling / self-tapping SS screws of size 5.5x25mm with EPDM washers. EPDM gasket to be fixed in between brackets and vertical profiles. The tiles shall be mounted on the 'C' clamps such that the tiles are	sqm	6064.85

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	supported at top and bottom at both ends. The tiles shall be additionally secured to the horizontal 'C' clamps using special SS clips of required size which shall be inserted and pressed into position on the 'C' clamps holding the tiles and the cut-tiles shall be glued at points to the horizontal 'C' clamps by using MS Polymer sealant adhesive. The vertical joint open groove between two adjacent tiles shall be 5mm. The tiles and system shall be designed to resist wind load as per IS 875 (Part 3) according to different zones. The tiles shall be installed using the ventilated rain screen principle with provision for natural ventilation of the space between the façade tiles and the structural wall. The work shall be carried out as per specification, drawing and as per direction of Engineer-in-charge. Note: Scaffolding wherever required to be paid separately. - With 24mm thickness (+/- 10%) terracotta tiles of grey color		
26.93.2	Providing and fixing of façade at all heights with extruded hollow Clay / Terracotta ventilated rainscreen tiles of height 259/ 309/ 409mm and length of 595mm of approved texture, design and pattern having Flexural Strength/ Modulus of Rupture of >- 14 N/sq.m and maximum water absorption of 10% tested as per ISO 10545-4:2004(E) and ISO 10545 - 3:1995 respectively in true level fixed to a supporting aluminium frame work (Alloy 6063 T5/T6) consisting of vertical 'T' (for intermediates) 'L' (for ends / termination)/ Tubular sections (at corners) of size 80x60x2mm /40x60x2mm/40x40x2mm respectively, spaced at maximum spacing of 600mm c/c matching to the tile vertical grid, and horizontal aluminium 'C' - clamps of size 56x25x2mm thickness of length of 150mm at junction of tiles and of length 75mm at wall ends / corners fixed on top of the vertical sections at spacing of 250/ 300/ 400 mm c/c matching to the tile horizontal grid with two numbers of self-drilling / self-tapping SS screws of size 5.5x25mm with EPDM washers. The Vertical 'T'/'L'/Tubular' sections shall be fixed to the wall using HDG (hot-dip-galvanized) steel L-brackets (galvanizing thickness of minimum 80 microns) of size 110x 80x6mm at intermediate vertical aluminium profile and of size 220x110x12mm at outer corners and stainless steel grade 304, M10 full threaded anchor fasteners with nylon sleeve 100mm long (for brick work) and M8 expansions anchor fasteners 75mm long for concrete surface, spacing of brackets to be based on a structural / static calculation. The brackets shall be of length 175mm at junction of two vertical aluminium profiles and of length 100mm at intermediate points of vertical profiles and shall be fixed to the vertical aluminium T / L/ Tubular	sqm	5743.84

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	profiles using two numbers self-drilling / self-tapping SS screws of size 5.5x25mm with EPDM washers. EPDM gasket to be fixed in between brackets and vertical profiles. The tiles shall be mounted on the 'C' clamps such that the tiles are supported at top and bottom at both ends. The tiles shall be additionally secured to the horizontal 'C' clamps using special SS clips of required size which shall be inserted and pressed into position on the 'C' clamps holding the tiles and the cut-tiles shall be glued at points to the horizontal 'C' clamps by using MS Polymer sealant adhesive. The vertical joint open groove between two adjacent tiles shall be 5mm. The tiles and system shall be designed to resist wind load as per IS 875 (Part 3) according to different zones. The tiles shall be installed using the ventilated rain screen principle with provision for natural ventilation of the space between the façade tiles and the structural wall. The work shall be carried out as per specification, drawing and as per direction of Engineer-in-charge. Note: Scaffolding wherever required to be paid separately. - With 24mm thickness (+/- 10%) terracotta tiles of other than grey color		
26.94	Designing, shop fabricating, supplying , erecting, stripping and shifting of customized Modular Tunnel Formwork system for cast-in-situ monolithic RCC structures, using precision steel cubical formworks are molds with minimum 3mm thick hot rolled plain painted/hot dip galvanized M.S. sheets for panel in contact area with necessary framing and allied accessories as per CPWD specifications including transporting, storage, assembly, hoisting and placing in position for supporting and holding the formwork in place till initial setting of the concrete then stripping the formwork, propping to support horizontal surface cleaning and oiling etc. for shifting to the next cycle, inclusive of all labour, machines and T&P requirements taking all safety measures etc. as per design and cycle programme all complete as per direction of Engineer-in-charge. Design of Tunnel Formwork system shall be provided by concerned service provider/vendor and the rate is inclusive of all the elements and all operations for all heights.	sqm	335.76
26.95.1	"Providing and installation of factory made Structural Stay in place form work system with double faced panels for walls, single faced panels for roof/ floor slabs, L-shaped single faced panels for corners, with necessary scaffolding, struts, bracing etc. Complete as per CPWD specification and directions of the Engineer in Charge. Design of walls and other members to be provided by the supplier & shall be duly vetted by any engineering institute of National repute such as IITs, NITs etc.	sqm	3244.58

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	and nothing extra shall be payable on this account (Additional steel reinforcement/dowels, design mix concrete of specified grade, electrical and plumbing conduits insert for services and plastering on either side of walls shall be paid for separately)." Note:- This item shall be adopted for building upto G+3 Storeys only excluding seismic zone V. Double panel of required thickness (110mm & above) with minimum weight of panel as 11.05 kg per sqm for walls with corresponding corners and jambs strips.		
26.95.2	"Providing and installation of factory made Structural Stay in place form work system with double faced panels for walls, single faced panels for roof/ floor slabs, L-shaped single faced panels for corners, with necessary scaffolding, struts, bracing etc. Complete as per CPWD specification and directions of the Engineer in Charge. Design of walls and other members to be provided by the supplier & shall be duly vetted by any engineering institute of National repute such as IITs, NITs etc. and nothing extra shall be payable on this account (Additional steel reinforcement/dowels, design mix concrete of specified grade, electrical and plumbing conduits insert for services and plastering on either side of walls shall be paid for separately)." Note:- This item shall be adopted for building upto G+3 Storeys only excluding seismic zone V.-Single panel for slabs with minimum weight of panel as 4.05 kg/sqm for walls with corresponding corners and jambs strips.	sqm	2020.36
26.96.1	"Providing and placing ""Stay in Place PVC Wall formwork"" made up of extruded Unplasticised Poly Vinyl Chloride (uPVC) consisting of Main panel, 3 way Connector, Starter Channel, Joint Panel, Connection Panels, Door/Window frame/trim panels etc. all complete as per manufacturer design and for all heights as per direction of Engineer-in-charge. (Note: Suitable for in fill walls with appropriate Structural system)." 125 mm wide Stay in Place PVC Wallform made of minimum 2.50 mm thick sections and minimum weight 21.97 kg /sqm of formwork.	sqm	3181.47
26.96.2	"Providing and placing ""Stay in Place PVC Wall formwork"" made up of extruded Unplasticised Poly Vinyl Chloride (uPVC) consisting of Main panel, 3 way Connector, Starter Channel, Joint Panel, Connection Panels, Door/Window	sqm	4138.78

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	frame/trim panels etc. all complete as per manufacturer design and for all heights as per direction of Engineer-in-charge. (Note: Suitable for in fill walls with appropriate Structural system)." 165mm wide Stay in Place PVC Wallform made of minimum 2.50 mm thick sections and minimum weight 29 kg /sqm of formwork.		

30 . Irrigation

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
30.1	Earthwork in rough excavation and dressing up in embankment for roads , flood banks , marginal banks and guide banks or filling up ground depression lead upto 50 m and lift upto 1.5 m in all kinds of soil (Payment shall be made based on levels) - by manual means	cum	457.95
30.1A	Preparation of steel mould of size 0.5x0.5x0.45m	cum	475.54
30.1B	Preparation of steel mould of size 0.9x0.9x0.45 (6mm thick plate)	cum	244.12
30.2	Earth work in rough excavation , banking excavated earth in layers not exceeding 20cm in depth , breaking clods watering rolling each layer with 1/2 tonne roller or wooden or steel rammers and dressing up in embankment for roads flood banks , marginal banks and guide banks or filling up ground depression , lead upto 50m and lift upto 1.5m in all kinds of soil. The Payment shall be based on levels	cum	767.31
30.3A	Collection of gravel and banking the gravel in layers not exceeding 20 cm in depth breaking clods, watering , rolling each layers with 1/2 tonne roller or wooden or steel rammers and dressing up in embankment for roads flood banks, marginal banks and guide baks etc and lift upto 1.5 m in all kinds of soil. The quantity of the fill shall be calculated based on levels and then reduced by 10% for the purpose of payment	cum	1347.25
30.4	Banking available earth in layers not exceeding 20cm in depth breaking clods, watering , rolling each layers with 1/2 tonne roller or wooden or steel rammers and dressing up in embankments for roads flood banks , marginal banks and guide banks etc and lift upto 1.5m in all kinds of soil. The quantity of the fill shall be calculated based on levels and then reduced by 10% for the purpose of payment	cum	310.15
30.5	Earth work in rough excavation and dressing up in embankment by using machinery for roads , flood banks, marginal banks and guide banks or filling up ground depression within a initial lead of 50m and lift upto 6m in all kinds of soil (Payment shall be made based on levels)	cum	79.85
30.7	Supply of Quarry rubbish including stacking to department gauge for premeasurement and spreading required thickness	cum	1822.15

30 . Irrigation

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
30.8	Providing and fixing 110 mm dia PVC pipes (4kg / cm ²) in weep holes including cement concrete 1:5:10 (one cement : 5 sand : 10 graded stone aggregate) and filling of pebbles etc.,	metre	363.06
30.9	Supplying and placing in position HDPE cement bags filled with sand for breach closing / diversion arrangement. The cost includes the cost of empty HDPE bags , labour charges for filling the bags and placing in position , removing the bags from site after completing the work etc., complete	bag	88.20
30.10	Removing and repacking of rough stone for revetment etc., complete	cum	2627.82
30.11	Supplying with gravel for apron and rivetment	cum	1327.99
30.12	Providing and laying brick block of size 0.34 x 0.34 x 0.3mts . In C.M 1:4 (1 cement : 4 fine aggregate) using well burnt country bricks of class designation 35 for launching apron including the bed, laying to the required levels , slop etc. complete	cum	10041.72
30.13	Providing and laying brick block of size 0.34 x 0.34 x 0.23 mts . In C.M 1:4 (1 cement : 4 fine aggregate) using well burnt country bricks of class designation 35 for apron and revetment including levelling the bed, laying to the required levels , slop etc.complete	cum	10041.72
30.13C	Providing and laying precast cement concrete blocks for launching apron of size 0.5 x 0.5 x 0.45 m in cement concrete 1:3:6 (1 cement : 3 sand : 6 graded stone aggregate) using 6mm thick steel mould including consolidation , curing and placing in position etc.,complete	cum	9796.33
30.13D	Providing and laying precast cement concrete blocks for launching apron of size 0.9 x 0.9 x 0.45 m in cement concrete 1:3:6 (1 cement : 3 sand : 6 graded stone aggregate) using 6mm thick steel mould including consolidation , curing and placing in position etc.,complete	cum	9546.55
30.14	Dry stone pitching on slopes to required thickness and profile with hammer dressed garnite stones having no side less than 15 cum for revetment works , preparing surface etc., complete	cum	5138.25

30 . Irrigation

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
30.14L	Cost of labour for stone pitching	cum	3416.86
30.15	Earth work in rough excavation over area not exceeding 30 cm thick and dressing up in embankment by using machinery for roads , flood banks , marginal banks and guide banks on filling up ground depression within a initial lead of 50 m and lift upto 6m in all kinds of soil	sqm	23.98
30.16	Demarcation of field boundaries to the tank site and planting survey stone wherever necessary. The rate to include all cost for surveyor,Chainman , earthwork excavation, conveyance of stones to the workspot and labour for erection etc., complete (The rate excluded the cost of survey stone)	hectare	4679.06
30.17	Demarcation of field boundaries to the supply channels and planting survey stone wherever necessary. The rate to include all cost for surveyor , Chainman, earthwork excavation conveyance of stones to the workspot and labour for erection etc., complete (The rate excluded the cost of survey stone)	RMt	49.22
30.18	Grouting the revetment not less than 15 cm deep with cement concrete 1:5:10 (one cement , five sand , and ten graded stone aggregate of 12.50 mm size) and pointing the same with cement mortar 1:5 (one cement and five sand) to give an even and smooth surface)	sqm	840.97
30.19	Collection and supply of stone boulders at Various weights including the charges for conveyance , pre - weighing the loaded vechile and post - weighing the empty vehicle and placing the boulders to the required slope and section by using suitable machinery including handling and packing charges , crane charges etc., complete . The payment will be made based on weight basis. The quantity will be counter checked by way of volumes computed based on pre-levels and post-levels of the section and the volume thus computed will be arrived in weight after reducing for the corresponding voids depending on the size of stone boulders . This rate shall include the costs of formation of approach track for tranportations of materials men and machinery for the placing and dumping the boulders in position for groins / sea protection wall / rock revetment as per sectional drawing etc.,complete. The specific gravity of stone shall be from 2.90 to 3.02. Bedding layer after deducting 30% voids. Using 10mm to 50 kg	MT	1795.87

30 . Irrigation

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
30.20	Collection and supply of stone boulders at Various weights including the charges for conveyance , pre - weighing the loaded vechile and post - weighing the empty vehicle and placing the boulders to the required slope and section by using suitable machinery including handling and packing charges , crane charges etc., complete . The payment will be made based on weight basis. The quantity will be counter checked by way of volumes computed based on pre-levels and post-levels of the section and the volume thus computed will be arrived in weight after reducing for the corresponding voids depending on the size of stone boulders . This rate shall include the costs of formation of approach track for tranportations of materials men and machinery for the placing and dumping the boulders in position for groins / sea protection wall / rock revetment as per sectional drawing and harbouring works also etc., complete. The specific gravity of stone shall be from 2.90 to 3.02.Core after deducting 30% voids. Using 5kg to 100kg	MT	2481.83
30.20A	Collection and supply of stone boulders at Various weights including the charges for conveyance , pre - weighing the loaded vechile and post - weighing the empty vehicle and placing the boulders to the required slope and section by using suitable machinery including handling and packing charges , crane charges etc., complete . The payment will be made based on weight basis. The quantity will be counter checked by way of volumes computed based on pre-levels and post-levels of the section and the volume thus computed will be arrived in weight after reducing for the corresponding voids depending on the size of stone boulders . This rate shall include the costs of formation of approach track for tranportations of materials men and machinery for the placing and dumping the boulders in position for groins / sea protection wall / rock revetment as per sectional drawing and harbouring works also etc., complete. The specific gravity of stone shall be from 2.90 to 3.02.Toe after deducting 30% voids. Using 100kg to 300 Kg	MT	2481.83
30.20B	Collection and supply of stone boulders at Various weights including the charges for conveyance , pre - weighing the loaded vechile and post - weighing the empty vehicle and placing the boulders to the required slope and section by using suitable machinery including handling and packing charges , crane charges etc., complete . The payment will be made based on weight basis. The quantity will be counter checked by way of volumes computed based on pre-levels and post-levels of the section and the volume thus computed will be arrived in weight after reducing for the corresponding voids depending on the size of stone boulders . This rate shall include the costs of	MT	2481.83

30 . Irrigation

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	formation of approach track for transportations of materials men and machinery for the placing and dumping the boulders in position for groins / sea protection wall / rock revetment as per sectional drawing and harbouring works also etc., complete. The specific gravity of stone shall be from 2.90 to 3.02. Secondary layer after deducting 30% voids. Using 100kg to 300 Kg		
30.20C	Collection and supply of stone boulders at Various weights including the charges for conveyance , pre - weighing the loaded vehicle and post - weighing the empty vehicle and placing the boulders to the required slope and section by using suitable machinery including handling and packing charges , crane charges etc., complete . The payment will be made based on weight basis. The quantity will be counter checked by way of volumes computed based on pre-levels and post-levels of the section and the volume thus computed will be arrived in weight after reducing for the corresponding voids depending on the size of stone boulders . This rate shall include the costs of formation of approach track for transportations of materials men and machinery for the placing and dumping the boulders in position for groins / sea protection wall / rock revetment as per sectional drawing and harbouring works also etc., complete. The specific gravity of stone shall be from 2.90 to 3.02. Armour layer after deducting 40% voids. Using 1.25 tonne to 2.00 tonne	MT	2481.83
30.22	Dry excavation in the shore area between sea and back water. The rate shall include the cost of labour , material , consumables , POL , spare parts etc. The payment shall be made based on levels	cum	1778.29
30.25	Providing and laying filter media for fine aggregate under concrete block loose apron (as filter media) to required thickness including removal of foreign matters, ramming , consolidation with watering	cum	2635.00
30.26	Providing and laying filter media using HBG metal of 10mm size to a required thickness	cum	2485.35
30.26A	Providing and laying filter media using HBG metal of 12.5 mm size to a required thickness	cum	2485.35
30.26B	Providing and laying filter media using HBG metal of 20 mm size to a required thickness	cum	2528.03

30 . Irrigation

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
30.26C	Providing and laying filter media using HBG metal of 40 mm size to a required thickness	cum	2485.35
30.26D	Providing and laying filter media using HBG metal of 63 mm size to a required thickness	cum	1759.80
30.27	Providing and fixing cement concrete rings of 900 mm dia. 300mm height and 40 mm thick in 1:2:4 (one cement , two sand , and four 12mm HBG metal) with slots in the walls and provided with nominal reinforcement . The rate to include the cost of cement concrete rings, transportation to site , labour for erection , fixing with cement mortar 1:3 (one cement and three sand) all complete	Nos	397.67
30.27A	Providing and fixing cement concrete rings of 900 mm dia. 300mm height and 40 mm thick in 1:2:4 (one cement , two sand , and four 12mm HBG metal) and provided with nominal reinforcement . The rate to include the cost of cement concrete rings, transportation to site , labour for erection , fixing with cement mortar 1:3 (one cement and three sand) all complete	no	354.97
30.27B	Providing and fixing cement concrete rings of 900 mm dia. 300mm height and 40 mm thick in 1:2:4 (one cement , two sand , and four 12mm HBG metal) cast monolithic with cover slab with nominal reinforcement . The rate to include the cost of cement concrete rings, transportation to site , labour for erection , fixing with cement mortar 1:3 (one cement and three sand) all complete	No	667.98
30.28	Providing and fixing UPVC top cover suitable for 150mm dia pipe. The rate to include the cost of cover , transportation to site and fixing in position	No	366.78
30.29	Supplying and lowering of UPVC 150mm dia Plain casing pipe confirming to IS: 12818-1992 with relevant amendments with class designation CM and with minimum wall thickness of 7.5 mm as per I.S.Code into the bore well with proper vertical alignments etc. Including the cost of materials , but excluding the cost of labour for positioning the assembly for lowering purpose using contractor's rig	Rmt	946.94
30.30	Extra for providing 3 mm slots in 150mm dia.UPVC casing pipes	Rmt	78.25

30 . Irrigation

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
30.30A	Extra for providing 3mm slots in 200 mm dia .UPVC casing pipes	Rmt	102.43
30.31	Supplying and packing of 8mm size down gauge graded pebble including filling the annular space gradually complete. The pebbles should be of free from disintegrated pieces.(It will measure in stack for the purpose of payment)	cum	6037.10
30.32	Providing and fixing netlon mesh	sqm	410.87
30.33	Supplying and fixing 8" to 4" dia M.S.saddle set with 4" dia coupling suited to connect 4" dia pipes	each	2790.82
30.34	Supplying and lowering of UPVC 200 mm dia Plain casing pipe confirming to IS. 12818-1992 with relevant amendments with class designation CM and with minimum wall thickness of 10mm as per I.S.Code into the bore well with proper vertical alignments etc. Including the cost of materials , but excluding the cost of labour for positioning the assembly for lowering purpose using contractor's rig excluding the hire charges thereof	Rmt	2361.02
30.35	Supplying and lowering of UPVC ribbed screen slotted pipe 200 mm dia confirming to IS. 12818-1992 with relevant amendments with class designation 'RS' and with minimum wall thickness as per I.S.Code into the bore well with proper vertical alignments etc. Including the cost of materials , but excluding the cost of labour for positioning the assembly for lowering purpose using contractor's rig excluding the hire charges thereof	Rmt	1688.10
30.36	Supplying and fixing of MS centering guide of size 25 mm x 3mm thickness suitable for UPVC pipe including the cost of materials but excluding the cost of labour for positioning the assembly for lowering purpose using contractors rig excluding the hire charges thereof - 200 mm dia	each	324.36
30.37	Desilting the canal by removing silt, slush and debries from the bed of the drain removing the grass , bushes etc., complete in unhygienic and foul condition including disposal of the same within an average lead of 1KM without polluting the environment by mechanical means	cum	659.06
30.38	Desilting the canal by removing silt, slush and debries from the	cum	627.10

30 . Irrigation

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	bed of the drain removing the grass , buses etc., complete in unhygenic and foul condition including disposal of the same within an average lead of 1KM without polluting the environment by manual means		
30.39	Conveyance of excavated earth with in a lead of 5km radius beyond the initial lead of 50m and filling up in embankments for roads , flood banks , marginal banks etc. in all kinds of soils. The quantity of conveyed earth shall be calculated based on level and the total quantity shall be reduced by 20% for the purpose of payment	cum	423.51

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.4.3	Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete - 100 to 150 mm nominal bore.	each	3976.50
31.5.1A	Making connection of uPVC distribution branch with Upvc main of following sizes by providing and fixing tee including cutting the pipe etc.,complete.-63 mm dia to 90 mm dia nominal bore.	Each	1491.90
31.5.1B	Making connection of uPVC distribution branch with Upvc main of following sizes by providing and fixing tee including cutting the pipe etc.,complete.-110 mm dia to 160 mm dia nominal bore.	Each	2209.24
31.5.2A	Making connection of uPVC distribution branch with G.I main of following sizes by providing and fixing necessary fittings such as cost of lead, lead caulked joint including cutting,threading and testing of joints etc.,complete.- 63 mm dia to 90 mm dia nominal bore.	Each	5217.32
31.5.2B	Making connection of uPVC distribution branch with G.I main of following sizes by providing and fixing necessary fittings such as cost of lead, lead caulked joint including cutting,threading and testing of joints etc.,complete.- 110 mm dia to 160 mm dia nominal bore.	Each	6301.39
31.5.3A	Making connection of G.I distribution branch with C.I/PVC main of following size by providing and fixing tee including cutting and threading the pipe etc.,complete.- 20 mm dia nominal bore.	Each	270.36
31.6A	Providing and fixing water meter and stop cock in 25mm G.I pipe line including cutting and threading the pipe, making long screws, bolts, nuts, rubber insertions and testing the water meter etc. complete.	each	2987.21
31.6B	Providing and fixing water meter make and stop cock in 25mm G.I pipe line including cutting and threading the pipe, making long screws, bolts, nuts, rubber insertions and testing the water meter etc. complete.	each	3674.34
31.9.1	Providing and fixing brass gate valve with C.I. wheel of	each	200.42

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	approved quality (screwed end) - 15mm nominal bore.		
31.11.7.2	Providing and fixing gun metal non-return valve of approved quality (screwed end) - 100 mm nominal bore - vertical.	each	1572.13
31.45.1	Providing lead caulked joint to spun iron or C.I./D.I. pipes and specials including testing of the joints but excluding the cost of pig lead - 80 mm diameter pipe.	Joints	571.81
31.47.13	Providing flanged joints to double flanged C.I. /D.I.pipes and specials including necessary bolts, nuts, rubber insertion and testing of joints etc.,complete - 700mm diameter pipe.	each	7276.47
31.47.14	Providing flanged joints to double flanged C.I./D.I. pipes and specials including necessary bolts, nuts, rubber insertion and testing of joints etc.,complete - 750mm diameter pipe.	each	9029.83
31.47.15	Providing flanged joints to double flanged C.I./D.I. pipes and specials including necessary bolts, nuts, rubber insertion and testing of joints etc.,complete - 800mm diameter pipe.	each	9481.29
31.47.16	Providing flanged joints to double flanged C.I./D.I. pipes and specials including necessary bolts, nuts, rubber insertion and testing of joints etc.,complete - 900mm diameter pipe.	each	10820.49
31.47.17	Providing flanged joints to double flanged C.I. /D.I.pipes and specials including necessary bolts, nuts, rubber insertion and testing of joints etc.,complete - 1000mm diameter pipe.	each	12088.07
31.48.1A	Providing and fixing C.I. sluice valve (PN 1) (with cap) conforming to IS 14846 and ISI marked, with bolts, nuts, rubber insertion etc.,complete(the tail pieces if required will be paid separately) - 80 mm dia.	each	6941.78
31.48.3A	Providing and fixing C.I. sluice valve (PN 1.6) (with cap) conforming to IS 14846 and ISI marked, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 80 mm dia.	each	7436.27
31.48.3H	Providing and fixing C.I. sluice valve (PN 1.6) (with cap) conforming to IS 14846 and ISI marked, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 350 mm dia.	each	70794.05

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.48.3I	Providing and fixing C.I. sluice valve (PN 1.6) (with cap) conforming to IS 14846 and ISI marked, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 400 mm dia.	each	87771.80
31.48.3J	Providing and fixing C.I. sluice valve (PN 1.6) (with cap) conforming to IS 14846 and ISI marked, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 450 mm dia.	each	112619.62
31.48.3K	Providing and fixing C.I. sluice valve (PN 1.6) (with cap) conforming to IS 14846 and ISI marked, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 500 mm dia.	each	164112.29
31.48.3L	Providing and fixing C.I. sluice valve (PN 1.6) (with cap) conforming to IS 14846 and ISI marked, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 600 mm dia.	each	218221.03
31.48.4A	Providing and fixing C.I. sluice valve (PN 1.6) (with handwheel) conforming to IS 14846 and ISI marked, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 80 mm dia.	each	7531.59
31.48.4B	Providing and fixing C.I. sluice valve (PN 1.6) (with handwheel) conforming to IS 14846 and ISI marked, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 100 mm dia.	each	9868.73
31.48.4C	Providing and fixing C.I. sluice valve (PN 1.6) (with handwheel) conforming to IS 14846 and ISI marked, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 125 mm dia.	each	12319.11
31.48.4D	Providing and fixing C.I. sluice valve (PN 1.6) (with handwheel) conforming to IS 14846 and ISI marked, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 150 mm dia.	each	15169.39
31.48.4E	Providing and fixing C.I. sluice valve (PN 1.6) (with handwheel) conforming to IS 14846 and ISI marked, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if	each	23354.00

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	required will be paid separately) - 200 mm dia.		
31.48.4F	Providing and fixing C.I. sluice valve (PN 1.6) (with handwheel) conforming to IS 14846 and ISI marked, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 250 mm dia.	each	36536.57
31.48.4G	Providing and fixing C.I. sluice valve (PN 1.6) (with handwheel) conforming to IS 14846 and ISI marked, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 300 mm dia.	each	46682.17
31.48.4H	Providing and fixing C.I. sluice valve (PN 1.6) (with handwheel) conforming to IS 14846 and ISI marked, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 350 mm dia.	each	71774.25
31.48.4I	Providing and fixing C.I. sluice valve (PN 1.6) (with handwheel) conforming to IS 14846 and ISI marked, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 400 mm dia.	each	88750.58
31.48.4J	Providing and fixing C.I. sluice valve (PN 1.6) (with handwheel) conforming to IS 14846 and ISI marked, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 450 mm dia.	each	114688.14
31.48.4K	Providing and fixing C.I. sluice valve (PN 1.6) (with handwheel) conforming to IS 14846 and ISI marked, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 500 mm dia.	each	164112.29
31.48.4L	Providing and fixing C.I. sluice valve (PN 1.6) (with handwheel) conforming to IS 14846 and ISI marked, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 600 mm dia.	each	220293.81
31.48.5A	Providing and fixing C.I. Single air valve with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 20 mm dia.	each	1089.74
31.48.6A	Providing and fixing C.I. Double air valve with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 40 mm dia.	each	2562.59

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.48.6C	Providing and fixing C.I. Double air valve with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 65 mm dia.	each	3389.58
31.48.6F	Providing and fixing C.I. Double air valve with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 150 mm dia.	each	10731.51
31.48.6G	Providing and fixing C.I. Double air valve with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 200 mm dia.	each	20460.36
31.48.8A	Providing and fixing C.I. Ball type non return valve (PN 1) conforming to IS 318 & IS 1363, with bolts, nuts, rubber insertion etc.,complete - 80 mm dia.	Each	9005.57
31.48.8B	Providing and fixing C.I. Ball type non return valve (PN 1) conforming to IS 318 & IS 1363, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 100 mm dia.	Each	14902.54
31.48.8C	Providing and fixing C.I. Ball type non return valve (PN 1) conforming to IS 318 & IS 1363, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 150 mm dia.	Each	22357.30
31.48.8D	Providing and fixing C.I. Ball type non return valve (PN 1) conforming to IS 318 & IS 1363, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 200 mm dia.	Each	35165.88
31.48.8E	Providing and fixing C.I. Ball type non return valve (PN 1) conforming to IS 318 & IS 1363, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 250 mm dia.	Each	53944.96
31.48.8F	Providing and fixing C.I. Ball type non return valve (PN 1) conforming to IS 318 & IS 1363, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 300 mm dia.	Each	78167.49
31.48.8G	Providing and fixing C.I. Ball type non return valve (PN 1)	Each	116116.32

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	conforming to IS 318 & IS 1363, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 350mm dia.		
31.48.9A	Providing and fixing C.I. Butterfly valve (PN 1) conforming to IS 13095 and ISI marked, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 50mm dia.	Each	2196.84
31.48.9B	Providing and fixing C.I. Butterfly valve (PN 1) conforming to IS 13095 and ISI marked, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 65mm dia.	Each	2679.11
31.48.9C	Providing and fixing C.I. Butterfly valve (PN 1) conforming to IS 13095 and ISI marked, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 80mm dia.	Each	3279.46
31.48.9D	Providing and fixing C.I. Butterfly valve (PN 1) conforming to IS 13095 and ISI marked, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 100mm dia.	Each	4262.64
31.48.9E	Providing and fixing C.I. Butterfly valve (PN 1) conforming to IS 13095 and ISI marked, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 125mm dia.	Each	5920.01
31.48.9F	Providing and fixing C.I. Butterfly valve (PN 1) conforming to IS 13095 and ISI marked, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 150mm dia.	Each	7709.83
31.48.9G	Providing and fixing C.I. Butterfly valve (PN 1) conforming to IS 13095 and ISI marked, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 200mm dia.	Each	12018.16
31.48.9H	Providing and fixing C.I. Butterfly valve (PN 1) conforming to IS 13095 and ISI marked, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 250mm dia.	Each	16330.45

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.48.9I	Providing and fixing C.I. Butterfly valve (PN 1) conforming to IS 13095 and ISI marked, with bolts, nuts, rubber insertion etc.,complete (the tail pieces if required will be paid separately) - 300mm dia.	Each	20960.42
31.77.8	Repainting G.I.pipes and fittings with white paint of approved quality - 80 mm diameter pipe	metre	41.39
31.77.9	Repainting G.I.pipes and fittings with white paint of approved quality - 100 mm diameter pipe	metre	50.97
31.77.10	Repainting G.I.pipes and fittings with white paint of approved quality - 125 mm diameter pipe	metre	62.36
31.77.11	Repainting G.I.pipes and fittings with white paint of approved quality - 150 mm diameter pipe	metre	73.75
31.78.9	Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality - 100 mm diameter pipe.	metre	63.02
31.78.10	Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality - 125 mm diameter pipe.	metre	78.08
31.78.11	Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality - 150 mm diameter pipe.	metre	92.67
31.79	Providing and filling sand of grading zone V or coarser grade around the G.I. pipes in external work.	cum	2808.28
31.79.10	Providing and filling sand of grading zone V or coarser grade around the G.I. pipes external work - 125 mm dia pipe.	metre	1394.51
31.120.1L	Providing and laying Ductile Iron socket and spigot pipes of class K7 conforming to IS specification 8329/2000 and ISI marked suitable for tyton /push on joints in good condition including transportation of D.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS 12288 and CPWD specification. (earth work and jointing of pipes with rubber gasket will be paid separately) -750mm dia.	metre	20168.32

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.122.1L	Providing and laying Ductile Iron Double flanged pipes of class K9 conforming to IS specification 8329/2000 and ISI marked suitable for flanged joints in good condition including transportation of D.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches(or fixing in over head tanks above ground level) laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS12288 and CPWD specification . (earth work and jointing of pipes with rubber insertion will be paid separately) -800mm dia.	metre	61646.08
31.122.1M	Providing and laying Ductile Iron Double flanged pipes of class K9 conforming to IS specification 8329/2000 and ISI marked suitable for flanged joints in good condition including transportation of D.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches(or fixing in over head tanks above ground level) laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS12288 and CPWD specification . (earth work and jointing of pipes with rubber insertion will be paid separately) -900mm dia.	metre	84623.89
31.122.1N	Providing and laying Ductile Iron Double flanged pipes of class K9 conforming to IS specification 8329/2000 and ISI marked suitable for flanged joints in good condition including transportation of D.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches(or fixing in over head tanks above ground level) laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS12288 and CPWD specification . (earth work and jointing of pipes with rubber insertion will be paid separately) -1000mm dia.	metre	98936.09
31.123.1A	Providing and fixing in position S&S standard D.I. specials such as tees, bends, collors, tapers, caps etc.conforming to IS specification 9523/2000 and ISI marked - 100 to 300mm dia.	kg	123.10
31.123.1B	Providing and fixing in position S&S standard D.I. specials such as tees, bends, collors, tapers, caps etc.conforming to IS specification 9523/2000 and ISI marked - 350 to 450mm dia.	kg	154.39
31.123.1C	Providing and fixing in position S&S standard D.I. specials such as tees, bends, collors, tapers, caps etc.conforming to IS specification 9523/2000 and ISI marked - 500 to 600mm dia.	kg	164.36

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.123.1D	Providing and fixing in position S&S standard D.I. specials such as tees, bends, collors, tapers, caps etc.conforming to IS specification 9523/2000 and ISI marked - 700 to 800mm dia.	kg	191.39
31.123.1E	Providing and fixing in position S&S standard D.I. specials such as tees, bends, collors, tapers, caps etc.conforming to IS specification 9523/2000 and ISI marked - 900mm dia.	kg	191.39
31.123.1F	Providing and fixing in position S&S standard D.I. specials such as tees, bends, collors, tapers, caps etc.conforming to IS specification 9523/2000 and ISI marked -1000mm dia.	kg	199.92
31.124.1A	Providing and fixing in position flanged standard D.I. specials such as tees, bends, collors, tapers, caps etc.conforming to IS specification 9523/2000 and ISI marked - 100 to 300mm dia.	kg	154.39
31.124.1B	Providing and fixing in position flanged standard D.I. specials such as tees, bends, collors, tapers, caps etc.conforming to IS specification 9523/2000 and ISI marked - 350 to 450mm dia.	kg	188.54
31.124.1C	Providing and fixing in position flanged standard D.I. specials such as tees, bends, collors, tapers, caps etc.conforming to IS specification 9523/2000 and ISI marked - 500 to 600mm dia.	kg	202.77
31.124.1D	Providing and fixing in position flanged standard D.I. specials such as tees, bends, collors, tapers, caps etc.conforming to IS specification 9523/2000 and ISI marked - 700 to 800mm dia.	kg	225.53
31.124.1E	Providing and fixing in position flanged standard D.I. specials such as tees, bends, collors, tapers, caps etc.conforming to IS specification 9523/2000 and ISI marked - 900mm dia.	kg	228.37
31.124.1F	Providing and fixing in position flanged standard D.I. specials such as tees, bends, collors, tapers, caps etc.conforming to IS specification 9523/2000 and ISI marked - 1000mm dia.	kg	228.37
31.124.2A	Providing and fixing D.I. MJ collar coupling, with bolts, nuts, rubber insertion etc.,complete - 80 mm dia.	each	6802.05
31.124.2B	Providing and fixing D.I. MJ collar coupling , with bolts, nuts, rubber insertion etc.,complete - 100 mm dia.	Each	7759.77

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.124.2C	Providing and fixing D.I. MJ collar coupling, with bolts, nuts, rubber insertion etc.,complete - 150 mm dia.	Each	12867.18
31.124.2D	Providing and fixing D.I. MJ collar coupling, with bolts, nuts, rubber insertion etc.,complete - 200 mm dia.	Each	16096.56
31.124.2E	Providing and fixing D.I. MJ collar coupling, with bolts, nuts, rubber insertion etc.,complete - 250 mm dia.	Each	23219.99
31.124.2F	Providing and fixing D.I. MJ collar coupling , with bolts, nuts, rubber insertion etc.,complete - 300 mm dia.	Each	28472.36
31.124.2G	Providing and fixing D.I. MJ collar coupling , with bolts, nuts, rubber insertion etc.,complete - 350 mm dia.	Each	45564.20
31.124.2H	Providing and fixing D.I. MJ collar coupling , with bolts, nuts, rubber insertion etc.,complete - 400 mm dia.	Each	48684.05
31.124.2I	Providing and fixing D.I. MJ collar coupling, with bolts, nuts, rubber insertion etc.,complete - 450 mm dia.	Each	56451.50
31.124.2J	Providing and fixing D.I. MJ collar coupling, with bolts, nuts, rubber insertion etc.,complete - 500 mm dia.	Each	68649.75
31.124.2K	Providing and fixing D.I. MJ collar coupling, with bolts, nuts, rubber insertion etc.,complete -600 mm dia.	Each	83900.70
31.124.2L	Providing and fixing D.I. MJ collar coupling, with bolts, nuts, rubber insertion etc.,complete -700 mm dia.	Each	147815.58
31.124.2M	Providing and fixing D.I.	Each	167137.75

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	MJ collar coupling, with bolts, nuts, rubber insertion etc.,complete -750 mm dia.		
31.124.2N	Providing and fixing D.I. MJ collar coupling ISI marked, with bolts, nuts, rubber insertion etc.,complete -800 mm dia.	Each	190004.75
31.124.2O	Providing and fixing D.I. MJ collar coupling, with bolts, nuts, rubber insertion etc.,complete -900 mm dia.	Each	220639.38
31.124.2P	Providing and fixing D.I. MJ collar coupling ISI marked, with bolts, nuts, rubber insertion etc.,complete -1000 mm dia.	Each	247968.26
31.124.3A	Providing and fixing D.I. flange adaptor ISI marked, with bolts, nuts, rubber insertion etc.,complete -80 mm dia.	Each	4192.01
31.124.3B	Providing and fixing D.I. flange adaptor ISI marked, with bolts, nuts, rubber insertion etc.,complete -100 mm dia.	Each	5547.93
31.124.3C	Providing and fixing D.I. flange adaptor ISI marked, with bolts, nuts, rubber insertion etc.,complete -150 mm dia.	Each	8030.43
31.124.3D	Providing and fixing D.I. flange adaptor ISI marked, with bolts, nuts, rubber insertion etc.,complete -200 mm dia.	Each	10594.09
31.124.3E	Providing and fixing D.I. flange adaptor ISI marked, with bolts, nuts, rubber insertion etc.,complete -250 mm dia.	Each	14355.68
31.124.3F	Providing and fixing D.I. flange adaptor ISI marked, with bolts, nuts, rubber insertion etc.,complete -300 mm dia.	Each	17236.52

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.124.3G	Providing and fixing D.I. flange adaptor ISI marked, with bolts, nuts, rubber insertion etc.,complete -350 mm dia.	Each	27077.04
31.124.3H	Providing and fixing D.I. flange adaptor ISI marked, with bolts, nuts, rubber insertion etc.,complete -400 mm dia.	Each	30751.71
31.124.3I	Providing and fixing D.I. flange adaptor ISI marked, with bolts, nuts, rubber insertion etc.,complete -450 mm dia.	Each	37033.29
31.124.3J	Providing and fixing D.I. flange adaptor ISI marked, with bolts, nuts, rubber insertion etc.,complete -500 mm dia.	Each	46208.87
31.124.3K	Providing and fixing D.I. flange adaptor ISI marked, with bolts, nuts, rubber insertion etc.,complete -600 mm dia.	Each	59362.71
31.124.4A	Providing and fixing D.I. dismantling joint ISI marked, with bolts, nuts, rubber insertion etc.,complete -80 mm dia.	Each	8405.36
31.124.4B	Providing and fixing D.I. dismantling joint ISI marked, with bolts, nuts, rubber insertion etc.,complete -100 mm dia.	Each	10249.39
31.124.4C	Providing and fixing D.I. dismantling joint ISI marked, with bolts, nuts, rubber insertion etc.,complete -150 mm dia.	Each	15043.81
31.124.4D	Providing and fixing D.I. dismantling joint ISI marked, with bolts, nuts, rubber insertion etc.,complete -200 mm dia.	Each	20286.23
31.124.4E	Providing and fixing D.I. dismantling joint ISI marked, with bolts, nuts, rubber insertion etc.,complete -250 mm dia.	Each	27802.30
31.124.4F	Providing and fixing D.I. dismantling joint ISI marked, with bolts, nuts, rubber insertion etc.,complete -300 mm dia.	Each	33033.34

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.124.4G	Providing and fixing D.I. dismantling joint ISI marked, with bolts, nuts, rubber insertion etc.,complete -350 mm dia.	Each	48477.76
31.124.4H	Providing and fixing D.I. dismantling joint ISI marked, with bolts, nuts, rubber insertion etc.,complete -400 mm dia.	Each	60268.58
31.124.4I	Providing and fixing D.I. dismantling joint ISI marked, with bolts, nuts, rubber insertion etc.,complete -450 mm dia.	Each	72594.16
31.124.4J	Providing and fixing D.I. dismantling joint ISI marked, with bolts, nuts, rubber insertion etc.,complete -500 mm dia.	Each	90696.35
31.124.4K	Providing and fixing D.I. dismantling joint ISI marked, with bolts, nuts, rubber insertion etc.,complete -600 mm dia.	Each	122206.62
31.124.4L	Providing and fixing D.I. dismantling joint ISI marked, with bolts, nuts, rubber insertion etc.,complete -700 mm dia.	Each	181352.82
31.124.4M	Providing and fixing D.I. dismantling joint ISI marked, with bolts, nuts, rubber insertion etc.,complete -750 mm dia.	Each	206893.32
31.124.4N	Providing and fixing D.I. dismantling joint ISI marked, with bolts, nuts, rubber insertion etc.,complete -800 mm dia.	Each	238717.25
31.124.4O	Providing and fixing D.I. dismantling joint ISI marked, with bolts, nuts, rubber insertion etc.,complete -900 mm dia.	Each	279115.43
31.124.4P	Providing and fixing D.I. dismantling joint ISI marked, with bolts, nuts, rubber insertion etc.,complete - 1000 mm dia.	Each	360210.01
31.125.1A	Providing and laying S&S Centrifugally (spun) Cast iron pipe	metre	1429.06

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	class LA conforming to IS specification 1536 and ISI marked suitable for tyton /push on joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS 3114 and CPWD specification . (earth work and jointing of pipes with rubber gasket will be paid separately) -80mm dia.		
31.125.1B	Providing and laying S&S Centrifugally (spun) Cast iron pipe class LA conforming to IS specification 1536 and ISI marked suitable for tyton /push on joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS 3114 and CPWD specification . (earth work and jointing of pipes with rubber gasket will be paid separately) -100mm dia.	metre	1731.43
31.125.1C	Providing and laying S&S Centrifugally (spun) Cast iron pipe class LA conforming to IS specification 1536 and ISI marked suitable for tyton /push on joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS 3114 and CPWD specification . (earth work and jointing of pipes with rubber gasket will be paid separately) -125mm dia.	metre	2242.44
31.125.1D	Providing and laying S&S Centrifugally (spun) Cast iron pipe class LA conforming to IS specification 1536 and ISI marked suitable for tyton /push on joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS 3114 and CPWD specification . (earth work and jointing of pipes with rubber gasket will be paid separately) -150mm dia.	metre	2745.04
31.125.1E	Providing and laying S&S Centrifugally (spun) Cast iron pipe class LA conforming to IS specification 1536 and ISI marked suitable for tyton /push on joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS 3114 and CPWD	metre	4017.39

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	specification . (earth work and jointing of pipes with rubber gasket will be paid separately) -200mm dia.		
31.125.1F	Providing and laying S&S Centrifugally (spun) Cast iron pipe class LA conforming to IS specification 1536 and ISI marked suitable for tyton /push on joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS 3114 and CPWD specification . (earth work and jointing of pipes with rubber gasket will be paid separately) -250mm dia.	metre	5414.08
31.125.1G	Providing and laying S&S Centrifugally (spun) Cast iron pipe class LA conforming to IS specification 1536 and ISI marked suitable for tyton /push on joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS 3114 and CPWD specification . (earth work and jointing of pipes with rubber gasket will be paid separately) -300mm dia.	metre	6981.34
31.125.1H	Providing and laying S&S Centrifugally (spun) Cast iron pipe class LA conforming to IS specification 1536 and ISI marked suitable for tyton /push on joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS 3114 and CPWD specification . (earth work and jointing of pipes with rubber gasket will be paid separately) -350mm dia.	metre	8795.68
31.125.1I	Providing and laying S&S Centrifugally (spun) Cast iron pipe class LA conforming to IS specification 1536 and ISI marked suitable for tyton /push on joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS 3114 and CPWD specification . (earth work and jointing of pipes with rubber gasket will be paid separately) -400mm dia.	metre	10703.74
31.125.1J	Providing and laying S&S Centrifugally (spun) Cast iron pipe class LA conforming to IS specification 1536 and ISI marked	metre	12908.39

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	suitable for tyton /push on joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS 3114 and CPWD specification . (earth work and jointing of pipes with rubber gasket will be paid separately) -450mm dia.		
31.125.1K	Providing and laying S&S Centrifugally (spun) Cast iron pipe class LA conforming to IS specification 1536 and ISI marked suitable for tyton /push on joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS 3114 and CPWD specification . (earth work and jointing of pipes with rubber gasket will be paid separately) -500mm dia.	metre	15109.79
31.125.1L	Providing and laying S&S Centrifugally (spun) Cast iron pipe class LA conforming to IS specification 1536 and ISI marked suitable for tyton /push on joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS 3114 and CPWD specification . (earth work and jointing of pipes with rubber gasket will be paid separately) -600mm dia.	metre	19886.27
31.125.1M	Providing and laying S&S Centrifugally (spun) Cast iron pipe class LA conforming to IS specification 1536 and ISI marked suitable for tyton /push on joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS 3114 and CPWD specification . (earth work and jointing of pipes with rubber gasket will be paid separately) -700mm dia.	metre	25975.44
31.125.1N	Providing and laying S&S Centrifugally (spun) Cast iron pipe class LA conforming to IS specification 1536 and ISI marked suitable for tyton /push on joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS 3114 and CPWD specification . (earth work and jointing of pipes with rubber	metre	29171.49

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	gasket will be paid separately) -750mm dia.		
31.125.1O	Providing and laying S&S Centrifugally (spun) Cast iron pipe class LA conforming to IS specification 1536 and ISI marked suitable for tyton /push on joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS 3114 and CPWD specification . (earth work and jointing of pipes with rubber gasket will be paid separately) -800mm dia.	metre	33210.54
31.125.1P	Providing and laying S&S Centrifugally (spun) Cast iron pipe class LA conforming to IS specification 1536 and ISI marked suitable for tyton /push on joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS 3114 and CPWD specification . (earth work and jointing of pipes with rubber gasket will be paid separately) -900mm dia.	metre	40068.62
31.125.1Q	Providing and laying S&S Centrifugally (spun) Cast iron pipe class LA conforming to IS specification 1536 and ISI marked suitable for tyton /push on joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS 3114 and CPWD specification . (earth work and jointing of pipes with rubber gasket will be paid separately) -1000mm dia.	metre	47389.19
31.126.1A	Providing and laying non standard S&S Centrifugally (spun) Cast iron pipe suitable for tyton /push on joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete. (earth work and jointing of pipes will be paid separately) -80 to 200mm dia.	kg	101.00
31.126.1B	Providing and laying non standard S&S Centrifugally (spun) Cast iron pipe suitable for tyton /push on joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to	kg	116.67

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	the trenches, laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete . (earth work and jointing of pipes will be paid separately)-250 to 400mm dia.		
31.126.1C	Providing and laying non standard S&S Centrifugally (spun) Cast iron pipe suitable for tyton /push on joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete . (earth work and jointing of pipes will be paid separately)- 450 to 750mm dia.	kg	128.03
31.126.1D	Providing and laying non standard S&S Centrifugally (spun) Cast iron pipe suitable for tyton /push on joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete . (earth work and jointing of pipes will be paid separately)- 800 to 1000mm dia.	kg	129.46
31.127.1C	Providing and fixing in position S&S standard C.I. specials such as tees, bends, collors, tapers, caps etc.conforming to IS specification 1538 and ISI marked - 450 to 750mm dia.	kg	126.61
31.127.1D	Providing and fixing in position S&S standard C.I. specials such as tees, bends, collors, tapers, caps etc.conforming to IS specification 1538 and ISI marked - 800 to 1000mm dia.	kg	129.46
31.128.1A	Providing and laying Cast Iron Double flanged pipe conforming to IS specification 1537&7181 and ISI marked suitable for flanged joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches(or fixing in over head tanks above ground level) laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS 3114 and CPWD specification . (earth work and jointing of pipes with rubber insertion will be paid separately) -80mm dia.	metre	2804.01
31.128.1B	Providing and laying Cast Iron Double flanged pipe conforming to IS specification 1537&7181 and ISI marked suitable for flanged joints in good condition including	metre	3485.59

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches(or fixing in over head tanks above ground level) laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS 3114 and CPWD specification . (earth work and jointing of pipes with rubber insertion will be paid separately) -100mm dia.		
31.128.1C	Providing and laying Cast Iron Double flanged pipe conforming to IS specification 1537&7181 and ISI marked suitable for flanged joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches(or fixing in over head tanks above ground level) laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS 3114 and CPWD specification . (earth work and jointing of pipes with rubber insertion will be paid separately) -150mm dia.	metre	5672.60
31.128.1D	Providing and laying Cast Iron Double flanged pipe conforming to IS specification 1537&7181 and ISI marked suitable for flanged joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches(or fixing in over head tanks above ground level) laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS 3114 and CPWD specification . (earth work and jointing of pipes with rubber insertion will be paid separately) -200mm dia.	metre	8117.87
31.128.1E	Providing and laying Cast Iron Double flanged pipe conforming to IS specification 1537&7181 and ISI marked suitable for flanged joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches(or fixing in over head tanks above ground level) laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS 3114 and CPWD specification . (earth work and jointing of pipes with rubber insertion will be paid separately) -250mm dia.	metre	10915.76
31.128.1F	Providing and laying Cast Iron Double flanged pipe conforming to IS specification 1537&7181 and ISI marked suitable for flanged joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches(or fixing	metre	14005.03

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	in over head tanks above ground level) laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS 3114 and CPWD specification . (earth work and jointing of pipes with rubber insertion will be paid separately) -300mm dia.		
31.128.1G	Providing and laying Cast Iron Double flanged pipe conforming to IS specification 1537&7181 and ISI marked suitable for flanged joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches(or fixing in over head tanks above ground level) laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS 3114 and CPWD specification . (earth work and jointing of pipes with rubber insertion will be paid separately) -350mm dia.	metre	19988.35
31.128.1H	Providing and laying Cast Iron Double flanged pipe conforming to IS specification 1537&7181 and ISI marked suitable for flanged joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches(or fixing in over head tanks above ground level) laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS 3114 and CPWD specification . (earth work and jointing of pipes with rubber insertion will be paid separately) -400mm dia.	metre	24407.13
31.128.1I	Providing and laying Cast Iron Double flanged pipe conforming to IS specification 1537&7181 and ISI marked suitable for flanged joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches(or fixing in over head tanks above ground level) laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS 3114 and CPWD specification . (earth work and jointing of pipes with rubber insertion will be paid separately) -450mm dia.	metre	29770.76
31.128.1J	Providing and laying Cast Iron Double flanged pipe conforming to IS specification 1537&7181 and ISI marked suitable for flanged joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches(or fixing in over head tanks above ground level) laying to proper grade and alignment, testing of joints with required testing equipment	metre	36896.83

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	etc.,complete all as per IS 3114 and CPWD specification . (earth work and jointing of pipes with rubber insertion will be paid separately) -500mm dia.		
31.128.1K	Providing and laying Cast Iron Double flanged pipe conforming to IS specification 1537&7181 and ISI marked suitable for flanged joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches(or fixing in over head tanks above ground level) laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS 3114 and CPWD specification . (earth work and jointing of pipes with rubber insertion will be paid separately) -600mm dia.	metre	49590.92
31.128.1L	Providing and laying Cast Iron Double flanged pipe conforming to IS specification 1537&7181 and ISI marked suitable for flanged joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches(or fixing in over head tanks above ground level) laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS 3114 and CPWD specification . (earth work and jointing of pipes with rubber insertion will be paid separately) -700mm dia.	metre	64895.86
31.128.1M	Providing and laying Cast Iron Double flanged pipe conforming to IS specification 1537&7181 and ISI marked suitable for flanged joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches(or fixing in over head tanks above ground level) laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete all as per IS 3114 and CPWD specification . (earth work and jointing of pipes with rubber insertion will be paid separately) -750mm dia.	metre	73603.27
31.129.1A	Providing and laying non standard Cast Iron Double flanged pipes suitable for flanged joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches(or fixing in over head tanks above ground level) laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete (earth work and jointing of pipes with rubber insertion will be paid separately) -80 to 200mm dia.	kg	160.76

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.129.1B	Providing and laying non standard Cast Iron Double flanged pipes suitable for flanged joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches(or fixing in over head tanks above ground level) laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete(earth work and jointing of pipes with rubber insertion will be paid separately) -250 to 400mm dia.	kg	170.72
31.129.1C	Providing and laying non standard Cast Iron Double flanged pipes suitable for flanged joints in good condition including transportation of C.I.pipe from production centre/company to the site at UT of Puducherry, lowering to the trenches(or fixing in over head tanks above ground level) laying to proper grade and alignment, testing of joints with required testing equipment etc.,complete (earth work and jointing of pipes with rubber insertion will be paid separately) -450 to 750mm dia.	kg	182.10
31.131.1A	Providing and fixing Cast iron flanges conforming to IS specification 1538 and ISI marked. - 80 mm dia.	each	603.76
31.131.1B	Providing and fixing Cast iron flanges conforming to IS specification 1538 and ISI marked. - 100 mm dia.	each	718.99
31.131.1C	Providing and fixing Cast iron flanges conforming to IS specification 1538 and ISI marked. - 150 mm dia.	each	882.17
31.131.1D	Providing and fixing Cast iron flanges conforming to IS specification 1538 and ISI marked. - 200 mm dia.	each	1100.42
31.131.1E	Providing and fixing Cast iron flanges conforming to IS specification 1538 and ISI marked. - 250 mm dia.	each	1491.78
31.131.1F	Providing and fixing Cast iron flanges conforming to IS specification 1538 and ISI marked. - 300 mm dia.	each	1869.34
31.131.1G	Providing and fixing Cast iron flanges conforming to IS specification 1538 and ISI marked. - 350 mm dia.	each	2402.97
31.131.1H	Providing and fixing Cast iron flanges conforming to IS specification 1538 and ISI marked. - 400 mm dia.	each	3017.70
31.131.1I	Providing and fixing Cast iron flanges conforming to IS	each	3670.82

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	specification 1538 and ISI marked. - 450 mm dia.		
31.131.1J	Providing and fixing Cast iron flanges conforming to IS specification 1538 and ISI marked. - 500 mm dia.	each	4108.99
31.131.1K	Providing and fixing Cast iron flanges conforming to IS specification 1538 and ISI marked. - 600 mm dia.	each	5150.09
31.131.1L	Providing and fixing Cast iron flanges conforming to IS specification 1538 and ISI marked. - 700 mm dia.	each	6781.85
31.131.1M	Providing and fixing Cast iron flanges conforming to IS specification 1538 and ISI marked. - 750 mm dia.	each	9141.30
31.131.1N	Providing and fixing Cast iron flanges conforming to IS specification 1538 and ISI marked. - 800 mm dia.	each	10509.88
31.131.2A	Threading of CI / DI pipes suitable for fixing flanges including transportation,labour charges etc.,complete - 80 mm dia.	no	278.84
31.131.2B	Threading of CI / DI pipes suitable for fixing flanges including transportation,labour charges etc.,complete - 100 mm dia.	no	349.98
31.131.2C	Threading of CI / DI pipes suitable for fixing flanges including transportation,labour charges etc.,complete - 150 mm dia.	no	697.10
31.131.2D	Threading of CI / DI pipes suitable for fixing flanges including transportation,labour charges etc.,complete - 200 mm dia.	no	813.75
31.131.2E	Threading of CI / DI pipes suitable for fixing flanges including transportation,labour charges etc.,complete - 250 mm dia.	no	1047.06
31.131.2F	Threading of CI / DI pipes suitable for fixing flanges including transportation,labour charges etc.,complete - 300 mm dia.	no	1397.03
31.131.2G	Threading of CI / DI pipes suitable for fixing flanges including transportation,labour charges etc.,complete - 350 mm dia.	no	1513.69
31.131.2H	Threading of CI / DI pipes suitable for fixing flanges including transportation,labour charges etc.,complete - 400 mm dia.	no	1744.16

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.131.2I	Threading of CI / DI pipes suitable for fixing flanges including transportation,labour charges etc.,complete - 450 mm dia.	no	1977.47
31.131.2J	Threading of CI / DI pipes suitable for fixing flanges including transportation,labour charges etc.,complete - 500 mm dia.	no	2421.33
31.131.2K	Threading of CI / DI pipes suitable for fixing flanges including transportation,labour charges etc.,complete - 600 mm dia.	no	2683.09
31.131.2L	Threading of CI / DI pipes suitable for fixing flanges including transportation,labour charges etc.,complete - 700 mm dia.	no	3024.53
31.131.2M	Threading of CI / DI pipes suitable for fixing flanges including transportation,labour charges etc.,complete - 750 mm dia.	no	3101.35
31.131.2N	Threading of CI / DI pipes suitable for fixing flanges including transportation,labour charges etc.,complete - 800 mm dia.	no	3257.84
31.134.1A	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS 5382 & 12820 of SBR quality including the cost of fixing,testing the joints etc.,complete -80mm dia.	no	85.36
31.134.1B	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS 5382 & 12820 of SBR quality including the cost of fixing,testing the joints etc.,complete -100mm dia.	no	98.16
31.134.1C	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS 5382 & 12820 of SBR quality including the cost of fixing,testing the joints etc.,complete -150mm dia.	no	128.03
31.134.1D	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS 5382 & 12820 of SBR quality including the cost of fixing,testing the joints etc.,complete -200mm dia.	no	184.94
31.134.1E	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS 5382 & 12820 of SBR quality including the cost of fixing,testing the joints etc.,complete -250mm dia.	no	241.84

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.134.1F	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS 5382 & 12820 of SBR quality including the cost of fixing,testing the joints etc.,complete -300mm dia.	no	298.75
31.134.1G	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS 5382 & 12820 of SBR quality including the cost of fixing,testing the joints etc.,complete -350mm dia.	no	362.77
31.134.1H	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS 5382 & 12820 of SBR quality including the cost of fixing,testing the joints etc.,complete -400mm dia.	no	463.77
31.134.1I	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS 5382 & 12820 of SBR quality including the cost of fixing,testing the joints etc.,complete -450mm dia.	no	542.03
31.134.1J	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS 5382 & 12820 of SBR quality including the cost of fixing,testing the joints etc.,complete -500mm dia.	no	643.03
31.134.1K	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS 5382 & 12820 of SBR quality including the cost of fixing,testing the joints etc.,complete -600mm dia.	no	796.68
31.134.1L	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS 5382 & 12820 of SBR quality including the cost of fixing,testing the joints etc.,complete -700mm dia.	no	968.82
31.134.1M	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS 5382 & 12820 of SBR quality including the cost of fixing,testing the joints etc.,complete -750mm dia.	no	1175.10
31.134.1N	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS 5382 & 12820 of SBR quality including the cost of fixing,testing the joints etc.,complete -800mm dia.	no	1333.01

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.134.1O	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS 5382 & 12820 of SBR quality including the cost of fixing,testing the joints etc.,complete -900mm dia.	no	1458.21
31.134.1P	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS 5382 & 12820 of SBR quality including the cost of fixing,testing the joints etc.,complete -1000mm dia.	no	1822.39
31.135.1A	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS No. 5382 and 12820 of EPDM quality including the cost of fixing,testing the joints etc.,complete -80mm dia.	no	92.47
31.135.1B	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS No. 5382 and 12820 of EPDM quality including the cost of fixing,testing the joints etc.,complete -100mm dia.	no	112.38
31.135.1C	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS No. 5382 and 12820 of EPDM quality including the cost of fixing,testing the joints etc.,complete -150mm dia.	no	145.11
31.135.1D	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS No. 5382 and 12820 of EPDM quality including the cost of fixing,testing the joints etc.,complete -200mm dia.	no	211.98
31.135.1E	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS No. 5382 and 12820 of EPDM quality including the cost of fixing,testing the joints etc.,complete -250mm dia.	no	287.38
31.135.1F	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS No. 5382 and 12820 of EPDM quality including the cost of fixing,testing the joints etc.,complete -300mm dia.	no	374.15
31.135.1G	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS No. 5382 and 12820 of EPDM quality including the cost of fixing,testing the	no	426.80

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	joints etc.,complete -350mm dia.		
31.135.1H	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS No. 5382 and 12820 of EPDM quality including the cost of fixing,testing the joints etc.,complete -400mm dia.	no	569.05
31.135.1I	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS No. 5382 and 12820 of EPDM quality including the cost of fixing,testing the joints etc.,complete -450mm dia.	no	628.81
31.135.1J	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS No. 5382 and 12820 of EPDM quality including the cost of fixing,testing the joints etc.,complete -500mm dia.	no	768.23
31.135.1K	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS No. 5382 and 12820 of EPDM quality including the cost of fixing,testing the joints etc.,complete -600mm dia.	no	1037.11
31.135.1L	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS No. 5382 and 12820 of EPDM quality including the cost of fixing,testing the joints etc.,complete -700mm dia.	no	1488.08
31.135.1M	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS No. 5382 and 12820 of EPDM quality including the cost of fixing,testing the joints etc.,complete -750mm dia.	no	1704.31
31.135.1N	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS No. 5382 and 12820 of EPDM quality including the cost of fixing,testing the joints etc.,complete -800mm dia.	no	1859.39
31.135.1O	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS No. 5382 and 12820 of EPDM quality including the cost of fixing,testing the joints etc.,complete -900mm dia.	no	2044.33
31.135.1P	Providing and jointing cast iron / D.I. (S&S) pipe joints with rubber gasket (Tyton joints) conforming to IS No. 5382 and	no	2623.34

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	12820 of EPDM quality including the cost of fixing,testing the joints etc.,complete -1000mm dia.		
31.136.1I	Providing, laying and jointing G.I pipes of medium class (blue)) conforming to IS specification 1239 part I and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,excluding GI specials such as bends,tees, elbow,coupling,reducer etc.,complete all as per IS and CPWD specification. -100mm dia	metre	1691.66
31.136.1J	Providing, laying and jointing G.I pipes of medium class (blue)) conforming to IS specification 1239 part I and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,excluding GI specials such as bends,tees, elbow,coupling,reducer etc.,complete all as per IS and CPWD specification. -125mm dia	metre	2488.48
31.136.1K	Providing, laying and jointing G.I pipes of medium class (blue)) conforming to IS specification 1239 part I and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,excluding GI specials such as bends,tees, elbow,coupling,reducer etc.,complete all as per IS and CPWD specification. -150mm dia	metre	2798.61
31.137.1A	Providing and fixing in position G.I. equal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete- 15mm dia.	no	134.88
31.137.1B	Providing and fixing in position G.I. equal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete- 20mm dia.	no	151.93
31.137.1C	Providing and fixing in position G.I. equal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete- 25mm dia.	no	170.44
31.137.1D	Providing and fixing in position G.I. equal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete- 32mm dia.	no	255.51
31.137.1E	Providing and fixing in position G.I. equal Teeconforming to	no	322.37

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete- 40mm dia.		
31.137.1F	Providing and fixing in position G.I. equal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete- 50mm dia.	no	357.94
31.137.1G	Providing and fixing in position G.I. equal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete- 65mm dia.	no	597.22
31.137.1H	Providing and fixing in position G.I. equal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete- 80mm dia.	no	1082.35
31.137.1I	Providing and fixing in position G.I. equal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete- 100mm dia.	no	1333.43
31.137.1J	Providing and fixing in position G.I. equal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete- 125mm dia.	no	2730.46
31.137.1K	Providing and fixing in position G.I. equal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete- 150mm dia.	no	3088.96
31.138.1A	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 25 x 20 mm dia.	no	173.29
31.138.1B	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 32x 20 mm dia.	no	271.16
31.138.1C	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 32x 25 mm dia.	no	278.28
31.138.1D	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 40 x 20 mm dia.	no	309.58

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.138.1D1	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 40 x 25 mm dia.	no	309.58
31.138.1E	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 40 x 32 mm dia.	no	309.58
31.138.1F	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 50 x 20 mm dia.	no	396.35
31.138.1F1	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 50 x 25 mm dia.	no	400.63
31.138.1G	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 50 x 32 mm dia.	no	400.63
31.138.1H	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 50 x 40 mm dia.	no	400.63
31.138.1I	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 65 x 20 mm dia.	no	641.32
31.138.1I1	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 65 x 25 mm dia.	no	641.32
31.138.1J	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 65 x 32 mm dia.	no	641.32
31.138.1K	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 65 x 40 mm dia.	no	641.32
31.138.1L	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 65 x 50 mm dia.	no	641.32

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.138.1M	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 80 x 32 mm dia.	no	874.64
31.138.1N	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 80 x 40 mm dia.	no	874.64
31.138.1O	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 80 x 50 mm dia.	no	874.64
31.138.1P	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 80 x 65 mm dia.	no	874.64
31.138.1Q	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 100 x 40 mm dia.	no	1357.62
31.138.1R	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 100 x 50 mm dia.	no	1363.31
31.138.1S	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 100 x 65 mm dia.	no	1369.00
31.138.1T	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 100 x 80 mm dia.	no	1381.80
31.138.1U	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 125 x 40 mm dia.	no	3996.61
31.138.1V	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 125 x 50 mm dia.	no	3996.61
31.138.1W	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for	no	3996.61

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	jointing, jointing materials etc,complete - 125 x 65 mm dia.		
31.138.1X	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 125 x 80 mm dia.	no	3996.61
31.138.1Y	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 125 x 100 mm dia.	no	3996.61
31.138.1Z	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 150 x 50 mm dia.	no	4552.86
31.138.2A	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 150 x 65 mm dia.	no	4552.86
31.138.2B	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 150 x 80 mm dia.	no	4552.86
31.138.2C	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 150 x 100 mm dia.	no	4555.71
31.138.2D	Providing and fixing in position G.I. unequal Teeconforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 150 x 125 mm dia.	no	4555.71
31.139.1I	Providing and fixing in position G.I. union conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete- 100 mm dia.	no	1413.83
31.139.1J	Providing and fixing in position G.I. union conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete- 125 mm dia.	no	2906.87
31.139.1K	Providing and fixing in position G.I. union conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete- 150 mm dia.	no	4649.61

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.140.1A	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 25 x 20 mm dia.	no	129.60
31.140.1B	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 32 x 20 mm dia.	no	190.92
31.140.1C	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 32 x 25 mm dia.	no	195.18
31.140.1D	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 40 x 20 mm dia.	no	209.40
31.140.1D1	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 40 x 25 mm dia.	no	216.52
31.140.1E	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 40 x 32 mm dia.	no	216.52
31.140.1F	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 50 x 20 mm dia.	no	249.25
31.140.1F1	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 50 x 25 mm dia.	no	252.10
31.140.1G	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 50 x 32 mm dia.	no	254.93
31.140.1H	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 50 x 40 mm dia.	no	254.93
31.140.1I	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 65 x 20 mm dia.	no	376.43

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.140.1J	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 65 x 32 mm dia.	no	376.43
31.140.1K	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 65 x 40 mm dia.	no	376.43
31.140.1L	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 65 x 50 mm dia.	no	376.43
31.140.1M	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 80 x 32 mm dia.	no	484.56
31.140.1N	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 80 x 40 mm dia.	no	484.56
31.140.1O	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 80 x 50 mm dia.	no	484.56
31.140.1P	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 80 x 65 mm dia.	no	484.56
31.140.1Q	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 100 x 40 mm dia.	no	756.57
31.140.1R	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 100 x 50 mm dia.	no	756.57
31.140.1S	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 100 x 65 mm dia.	no	756.57
31.140.1T	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for	no	762.25

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	jointing, jointing materials etc,complete- 100 x 80 mm dia.		
31.140.1U	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 125 x 50 mm dia.	no	2243.93
31.140.1V	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 125 x 65 mm dia.	no	2243.93
31.140.1W	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 125 x 80 mm dia.	no	2268.11
31.140.1X	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 125 x 100 mm dia.	no	2268.11
31.140.1Y	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 150 x 50 mm dia.	no	2979.42
31.140.1Z	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 150 x 65 mm dia.	no	2979.42
31.140.2A	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 150 x 80 mm dia.	no	2986.54
31.140.2B	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 150 x 100 mm dia.	no	2990.80
31.140.2C	Providing and fixing in position G.I. reducer conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete- 150 x 125 mm dia.	no	2990.80
31.141.1	Providing and fixing in position G.I. elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 15 mm dia.	no	111.11

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.141.1A	Providing and fixing in position G.I. elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 20 mm dia.	no	123.91
31.141.1B	Providing and fixing in position G.I. elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 25 mm dia.	no	140.99
31.141.1C	Providing and fixing in position G.I. elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 32 mm dia.	no	216.52
31.141.1D	Providing and fixing in position G.I. elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 40 mm dia.	no	250.66
31.141.1E	Providing and fixing in position G.I. elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 50 mm dia.	no	299.04
31.141.1F	Providing and fixing in position G.I. elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 65 mm dia.	no	493.09
31.141.1G	Providing and fixing in position G.I. elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 80 mm dia.	no	602.64
31.141.1H	Providing and fixing in position G.I. elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 100 mm dia.	no	1078.08
31.141.1I	Providing and fixing in position G.I. elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 125 mm dia.	no	3137.34
31.141.1J	Providing and fixing in position G.I. elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 150 mm dia.	no	4396.37
31.142.1A	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 25 x 20	no	140.99

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	mm dia.		
31.142.1B	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 32 x 20 mm dia.	no	213.69
31.142.1C	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 32 x 25 mm dia.	no	213.69
31.142.1D	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 40 x 20 mm dia.	no	246.40
31.142.1D1	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 40 x 25 mm dia.	no	252.10
31.142.1E	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 40 x 32 mm dia.	no	253.51
31.142.1F	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 50 x 20 mm dia.	no	299.04
31.142.1F1	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 50 x 25 mm dia.	no	303.30
31.142.1G	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 50 x 32 mm dia.	no	308.99
31.142.1H	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour	no	308.99

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	charges for jointing,jointing materials etc,complete - 50 x 40 mm dia.		
31.142.1I	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 65 x 20 mm dia.	no	498.78
31.142.1II	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 65 x 25 mm dia.	no	507.32
31.142.1J	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 65 x 32 mm dia.	no	507.32
31.142.1K	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 65 x 40 mm dia.	no	507.32
31.142.1L	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 65 x 50 mm dia.	no	507.32
31.142.1M	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 80 x 32 mm dia.	no	608.32
31.142.1N	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 80 x 40 mm dia.	no	608.32
31.142.1O	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 80 x 50 mm dia.	no	622.55

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.142.1P	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 80 x 65 mm dia.	no	622.55
31.142.1Q	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 100 x 40 mm dia.	no	1102.26
31.142.1R	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 100 x 50 mm dia.	no	1102.26
31.142.1S	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 100 x 65 mm dia.	no	1102.26
31.142.1T	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 100 x 80 mm dia.	no	1102.26
31.142.1U	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 125 x 50 mm dia.	no	3081.85
31.142.1V	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 125 x 65 mm dia.	no	3081.85
31.142.1W	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 125 x 80 mm dia.	no	3087.55
31.142.1X	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 125 x 100 mm dia.	no	3087.55

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.142.1Y	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 150 x 50 mm dia.	no	3841.55
31.142.1Z	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 150 x 65 mm dia.	no	3854.34
31.142.2A	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 150 x 80 mm dia.	no	3854.34
31.142.2B	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 150 x 100 mm dia.	no	3872.84
31.142.2C	Providing and fixing in position G.I. reducer elbow conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 150 x 125 mm dia.	no	3878.53
31.143.1A	Providing and fixing in position G.I. Hex nipple conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 15 mm dia.	no	112.52
31.143.1B	Providing and fixing in position G.I. Hex nipple conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 20 mm dia.	no	126.76
31.143.1C	Providing and fixing in position G.I. Hex nipple conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 25 mm dia.	no	148.10
31.143.1D	Providing and fixing in position G.I. Hex nipple conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 32 mm dia.	no	215.10
31.143.1E	Providing and fixing in position G.I. Hex nipple conforming to IS 1239 part II and ISI marked,including labour charges for	no	233.59

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	jointing,jointing materials etc,complete - 40 mm dia.		
31.143.1F	Providing and fixing in position G.I. Hex nipple conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 50 mm dia.	no	287.66
31.143.1G	Providing and fixing in position G.I. Hex nipple conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 65 mm dia.	no	471.75
31.143.1H	Providing and fixing in position G.I. Hex nipple conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 80 mm dia.	no	670.91
31.143.1I	Providing and fixing in position G.I. Hex nipple conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 100 mm dia.	no	1122.18
31.144.1A	Providing and fixing in position G.I. bend conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 15 mm dia.	no	121.06
31.144.1B	Providing and fixing in position G.I. bend conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 20 mm dia.	no	150.93
31.144.1C	Providing and fixing in position G.I. bend conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 25 mm dia.	no	177.96
31.144.1D	Providing and fixing in position G.I. bend conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 32 mm dia.	no	243.55
31.144.1E	Providing and fixing in position G.I. bend conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 40 mm dia.	no	306.15
31.144.1F	Providing and fixing in position G.I. bend conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 50 mm dia.	no	381.56

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.144.1G	Providing and fixing in position G.I. bend conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 65 mm dia.	no	520.12
31.144.1H	Providing and fixing in position G.I. bend conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 80 mm dia.	no	729.25
31.144.1I	Providing and fixing in position G.I. bend conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 100 mm dia.	no	1267.29
31.144.1J	Providing and fixing in position G.I. bend conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 125 mm dia.	no	1966.50
31.144.1K	Providing and fixing in position G.I. bend conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 150 mm dia.	no	2720.50
31.145.1A	Providing and fixing in position G.I. coupling conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 15 mm dia.	no	109.68
31.145.1B	Providing and fixing in position G.I. coupling conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 20 mm dia.	no	122.49
31.145.1C	Providing and fixing in position G.I. coupling conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 25 mm dia.	no	133.88
31.145.1D	Providing and fixing in position G.I. coupling conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 32 mm dia.	no	189.49
31.145.1E	Providing and fixing in position G.I. coupling conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 40 mm dia.	no	203.72
31.145.1F	Providing and fixing in position G.I. coupling conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 50 mm dia.	no	259.20

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.145.1G	Providing and fixing in position G.I. coupling conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 65 mm dia.	no	369.33
31.145.1H	Providing and fixing in position G.I. coupling conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 80 mm dia.	no	484.56
31.145.1I	Providing and fixing in position G.I. coupling conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 100 mm dia.	no	779.32
31.145.1J	Providing and fixing in position G.I. coupling conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 125 mm dia.	no	1290.75
31.145.1K	Providing and fixing in position G.I. coupling conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 150 mm dia.	no	1442.98
31.146.1A	Providing and fixing in position G.I. plug conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 15 mm dia.	no	53.64
31.146.1B	Providing and fixing in position G.I. plug conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 20 mm dia.	no	59.33
31.146.1C	Providing and fixing in position G.I. plug conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 25 mm dia.	no	70.71
31.146.1D	Providing and fixing in position G.I. plug conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 32 mm dia.	no	140.56
31.146.1E	Providing and fixing in position G.I. plug conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 40 mm dia.	no	149.09
31.146.1F	Providing and fixing in position G.I. plug conforming to IS 1239 part II and ISI marked,including labour charges for	no	173.29

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	jointing, jointing materials etc,complete - 50 mm dia.		
31.146.1G	Providing and fixing in position G.I. plug conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 65 mm dia.	no	225.07
31.146.1H	Providing and fixing in position G.I. plug conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 80 mm dia.	no	269.16
31.146.1I	Providing and fixing in position G.I. plug conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 100 mm dia.	no	329.48
31.146.1J	Providing and fixing in position G.I. plug conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 125 mm dia.	no	509.73
31.146.1K	Providing and fixing in position G.I. plug conforming to IS 1239 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 150 mm dia.	no	786.44
31.147.1A	Providing and fixing in position G.I. cap conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 15 mm dia.	no	55.06
31.147.1B	Providing and fixing in position G.I. cap conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 20 mm dia.	no	62.18
31.147.1C	Providing and fixing in position G.I. cap conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 25 mm dia.	no	72.13
31.147.1D	Providing and fixing in position G.I. cap conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 32 mm dia.	no	137.72
31.147.1E	Providing and fixing in position G.I. cap conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 40 mm dia.	no	157.63

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.147.1F	Providing and fixing in position G.I. cap conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 50 mm dia.	no	176.13
31.147.1G	Providing and fixing in position G.I. cap conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 65 mm dia.	no	233.59
31.147.1H	Providing and fixing in position G.I. cap conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 80 mm dia.	no	257.78
31.147.1I	Providing and fixing in position G.I. cap conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 100 mm dia.	no	332.33
31.147.1J	Providing and fixing in position G.I. cap conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 125 mm dia.	no	531.06
31.147.1K	Providing and fixing in position G.I. cap conforming to IS 1239 part II and ISI marked,including labour charges for jointing,jointing materials etc,complete - 150 mm dia.	no	796.40
31.148.1A	Providing and fixing in position G.I. pipe nipple 10cm long, including labour charges for jointing,jointing materials etc,complete -15 mm dia.	no	111.11
31.148.1B	Providing and fixing in position G.I. pipe nipple 10cm long, including labour charges for jointing,jointing materials etc,complete -20 mm dia.	no	122.49
31.148.1B1	Providing and fixing in position G.I. pipe nipple 10cm long, including labour charges for jointing,jointing materials etc,complete -25 mm dia.	no	136.71
31.148.1C	Providing and fixing in position G.I. pipe nipple 10cm long, including labour charges for jointing,jointing materials etc,complete -32 mm dia.	no	185.22
31.148.1D	Providing and fixing in position G.I. pipe nipple 10cm long, including labour charges for jointing,jointing materials etc,complete -40 mm dia.	no	196.61

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.148.1E	Providing and fixing in position G.I. pipe nipple 10cm long, including labour charges for jointing,jointing materials etc,complete -50 mm dia.	no	215.10
31.148.1F	Providing and fixing in position G.I. pipe nipple 10cm long, including labour charges for jointing,jointing materials etc,complete -65 mm dia.	no	279.70
31.148.1G	Providing and fixing in position G.I. pipe nipple 10cm long, including labour charges for jointing,jointing materials etc,complete -80 mm dia.	no	326.64
31.148.1H	Providing and fixing in position G.I. pipe nipple 10cm long, including labour charges for jointing,jointing materials etc,complete -100 mm dia.	no	486.26
31.148.1I	Providing and fixing in position G.I. pipe nipple 10cm long, including labour charges for jointing,jointing materials etc,complete -125 mm dia.	no	706.05
31.148.1J	Providing and fixing in position G.I. pipe nipple 10cm long, including labour charges for jointing,jointing materials etc,complete -150 mm dia.	no	791.42
31.149.1A	Providing and fixing in position G.I. pipe nipple 15cm long, including labour charges for jointing, jointing materials etc,complete -15 mm dia.	no	121.06
31.149.1B	Providing and fixing in position G.I. pipe nipple 15cm long, including labour charges for jointing, jointing materials etc,complete -20 mm dia.	no	138.14
31.149.1B1	Providing and fixing in position G.I. pipe nipple 15cm long, including labour charges for jointing, jointing materials etc,complete -25 mm dia.	no	156.63
31.149.1C	Providing and fixing in position G.I. pipe nipple 15cm long, including labour charges for jointing, jointing materials etc,complete -32 mm dia.	no	203.72
31.149.1D	Providing and fixing in position G.I. pipe nipple 15cm long, including labour charges for jointing, jointing materials	no	222.22

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	etc,complete -40 mm dia.		
31.149.1E	Providing and fixing in position G.I. pipe nipple 15cm long, including labour charges for jointing, jointing materials etc,complete -50 mm dia.	no	249.25
31.149.1F	Providing and fixing in position G.I. pipe nipple 15cm long, including labour charges for jointing, jointing materials etc,complete -65 mm dia.	no	333.75
31.149.1G	Providing and fixing in position G.I. pipe nipple 15cm long, including labour charges for jointing, jointing materials etc,complete -80 mm dia.	no	403.47
31.149.1H	Providing and fixing in position G.I. pipe nipple 15cm long, including labour charges for jointing, jointing materials etc,complete -100 mm dia.	no	610.03
31.149.1I	Providing and fixing in position G.I. pipe nipple 15cm long, including labour charges for jointing, jointing materials etc,complete -125 mm dia.	no	762.95
31.149.1J	Providing and fixing in position G.I. pipe nipple 15cm long, including labour charges for jointing, jointing materials etc,complete -150 mm dia.	no	947.91
31.150.1A	Providing and fixing in position G.I. pipe nipple 23cm long, including labour charges for jointing, jointing materials etc,complete -15 mm dia.	no	122.49
31.150.1B	Providing and fixing in position G.I. pipe nipple 23cm long, including labour charges for jointing, jointing materials etc,complete -20 mm dia.	no	159.48
31.150.1B1	Providing and fixing in position G.I. pipe nipple 23cm long, including labour charges for jointing, jointing materials etc,complete -25 mm dia.	no	193.63
31.150.1C	Providing and fixing in position G.I. pipe nipple 23cm long, including labour charges for jointing, jointing materials etc,complete -32 mm dia.	no	243.55

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.150.1D	Providing and fixing in position G.I. pipe nipple 23cm long, including labour charges for jointing, jointing materials etc,complete -40 mm dia.	no	257.78
31.150.1E	Providing and fixing in position G.I. pipe nipple 23cm long, including labour charges for jointing, jointing materials etc,complete -50 mm dia.	no	306.15
31.150.1F	Providing and fixing in position G.I. pipe nipple 23cm long, including labour charges for jointing, jointing materials etc,complete -65 mm dia.	no	412.00
31.150.1G	Providing and fixing in position G.I. pipe nipple 23cm long, including labour charges for jointing, jointing materials etc,complete -80 mm dia.	no	510.16
31.150.1H	Providing and fixing in position G.I. pipe nipple 23cm long, including labour charges for jointing, jointing materials etc,complete -100 mm dia.	no	681.16
31.150.1I	Providing and fixing in position G.I. pipe nipple 23cm long, including labour charges for jointing, jointing materials etc,complete -125 mm dia.	no	862.54
31.150.1J	Providing and fixing in position G.I. pipe nipple 23cm long, including labour charges for jointing, jointing materials etc,complete -150 mm dia.	no	1020.44
31.151.1A	Providing and fixing in position G.I. pipe nipple 30cm long, including labour charges for jointing, jointing materials etc,complete -15 mm dia.	no	156.63
31.151.1B	Providing and fixing in position G.I. pipe nipple 30cm long, including labour charges for jointing, jointing materials etc,complete -20 mm dia.	no	182.24
31.151.1B1	Providing and fixing in position G.I. pipe nipple 30cm long, including labour charges for jointing, jointing materials etc,complete -25 mm dia.	no	223.49
31.151.1C	Providing and fixing in position G.I. pipe nipple 30cm long, including labour charges for jointing, jointing materials etc,complete -32 mm dia.	no	267.74

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.151.1D	Providing and fixing in position G.I. pipe nipple 30cm long, including labour charges for jointing, jointing materials etc,complete -40 mm dia.	no	303.30
31.151.1E	Providing and fixing in position G.I. pipe nipple 30cm long, including labour charges for jointing, jointing materials etc,complete -50 mm dia.	no	381.56
31.151.1F	Providing and fixing in position G.I. pipe nipple 30cm long, including labour charges for jointing, jointing materials etc,complete -65 mm dia.	no	508.74
31.151.1G	Providing and fixing in position G.I. pipe nipple 30cm long, including labour charges for jointing, jointing materials etc,complete -80 mm dia.	no	612.60
31.151.1H	Providing and fixing in position G.I. pipe nipple 30cm long, including labour charges for jointing, jointing materials etc,complete -100 mm dia.	no	975.65
31.151.1I	Providing and fixing in position G.I. pipe nipple 30cm long, including labour charges for jointing, jointing materials etc,complete -125 mm dia.	no	1137.11
31.151.1J	Providing and fixing in position G.I. pipe nipple 30cm long, including labour charges for jointing, jointing materials etc,complete -150 mm dia.	no	1415.95
31.151.2A	Proviing and fixing ferrule coforming to IS 2692 and ISI marked along with test cetificate,including labour charges for drilling,cutting,threading,fixing in distribution pipes etc.,complete -15mm dia	no	1024.30
31.151.2B	Proviing and fixing ferrule coforming to IS 2692 and ISI marked along with test cetificate,including labour charges for drilling,cutting,threading,fixing in distribution pipes etc.,complete -20mm dia	no	1081.20
31.151.2C	Proviing and fixing ferrule coforming to IS 2692 and ISI marked along with test cetificate,including labour charges for drilling,cutting,threading,fixing in distribution pipes etc.,complete -25mm dia	no	1212.09

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.152.1A	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-40 x 20mm dia	no	638.34
31.152.1B	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-50 x 20mm dia	no	651.15
31.152.1C	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-65 x 20mm dia	no	715.73
31.152.1D	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion,labour charges etc,complete-65 x 40mm dia	no	729.96
31.152.1E	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-65 x 50mm dia	no	889.30
31.152.1F	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-80 x 20mm dia	no	998.97
31.152.1G	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-80 x 40mm dia	no	1003.24
31.152.1H	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-80 x 50mm dia	no	891.86
31.152.1I	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-80 x 65mm dia	no	1088.74
31.152.1J	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-100 x 20mm dia	no	1115.77
31.152.1K	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-100 x 40mm dia	no	1160.46

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.152.1L	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-100 x 50mm dia	no	1160.46
31.152.1M	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-100 x 65mm dia	no	1214.65
31.152.1N	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-100 x 80mm dia	no	1214.65
31.152.1O	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-125 x 20mm dia	no	1336.99
31.152.1P	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-125 x40mm dia	no	1423.92
31.152.1Q	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-125 x 50mm dia	no	1423.92
31.152.1R	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-125 x 65mm dia	no	1535.58
31.152.1S	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-125 x 80mm dia	no	1535.58
31.152.1T	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-125 x 100mm dia	no	1630.06
31.152.1U	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-150 x 65mm dia	no	1751.26
31.152.1V	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-150 x	no	1751.26

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	80mm dia		
31.152.1W	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-150 x 100mm dia	no	2056.42
31.152.1X	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-150 x 125mm dia	no	2116.18
31.152.1Y	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-200 x 65mm dia	no	2167.39
31.152.1Z	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-200 x 80mm dia	no	2167.39
31.152.2A	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-200 x 100mm dia	no	2392.16
31.152.2B	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-200 x 125mm dia	no	2392.16
31.152.2C	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-250 x 65mm dia	no	2577.12
31.152.2D	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-250 x 80mm dia	no	2577.12
31.152.2E	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-250 x 100mm dia	no	2789.93
31.152.2F	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-250 x 125mm dia	no	2789.93

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.152.2G	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-250 x 150mm dia	no	3026.67
31.152.2H	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-300 x 65mm dia	no	3304.08
31.152.2I	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-300 x 80mm dia	no	3304.08
31.152.2J	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-300 x 100mm dia	no	3395.14
31.152.2K	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-300 x 125mm dia	no	3395.14
31.152.2L	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-150 x 20mm dia.	No	1060.86
31.152.2M	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-150 x 40mm dia	No	1060.86
31.152.2N	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-150 x 50mm dia	No	2509.10
31.152.2O	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-200 x 20mm dia	No	2027.98
31.152.2P	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-200 x 40mm dia	No	2027.98
31.152.2Q	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-200 x 50mm dia	No	2027.98

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.152.2R	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-250 x 20mm dia	No	2396.44
31.152.2S	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-250 x 40mm dia	No	2396.44
31.152.2T	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-250 x 50mm dia	No	2396.44
31.152.2U	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-300 x 20mm dia	No	2912.86
31.152.2V	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-300 x 40mm dia	No	2912.86
31.152.2W	Providing and fixing mild steel bracket including bolts,nuts,rubber insertion, labour charges etc,complete-300 x 50mm dia	No	2912.86
31.153.1A	Providing and fixing mild steel flange including bolts,nuts,rubber insertion, labour charges etc,complete-40mm dia	no	516.27
31.153.1B	Providing and fixing mild steel flange including bolts,nuts,rubber insertion, labour charges etc,complete-50mm dia	no	536.20
31.153.1C	Providing and fixing mild steel flange including bolts,nuts,rubber insertion, labour charges etc,complete-65mm dia	no	675.33
31.153.1D	Providing and fixing mild steel flange including bolts,nuts,rubber insertion, labour charges etc,complete-80mm dia	no	786.86
31.153.1E	Providing and fixing mild steel flange including bolts,nuts,rubber insertion, labour charges etc,complete-	no	1036.97

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	100mm dia		
31.153.1F	Providing and fixing mild steel flange including bolts,nuts,rubber insertion, labour charges etc,complete-125mm dia	no	1790.81
31.153.1G	Providing and fixing mild steel flange including bolts,nuts,rubber insertion, labour charges etc,complete-150mm dia	no	2165.12
31.154.1A	Providing and fixing reducing mild steel flange including necessary bolts,nuts,rubber insertion, labour charges etc,complete-100 x 80mm dia	no	1283.07
31.154.1B	Providing and fixing reducing mild steel flange including necessary bolts,nuts,rubber insertion, labour charges etc,complete-125 x 80mm dia	no	1766.63
31.154.1C	Providing and fixing reducing mild steel flange including necessary bolts,nuts,rubber insertion, labour charges etc,complete-125 x 100mm dia	no	1766.63
31.154.1D	Providing and fixing reducing mild steel flange including necessary bolts,nuts,rubber insertion, labour charges etc,complete-150 x 80mm dia	no	2177.91
31.154.1E	Providing and fixing reducing mild steel flange including necessary bolts,nuts,rubber insertion, labour charges etc,complete-150 x 100mm dia	no	2177.91
31.154.1F	Providing and fixing reducing mild steel flange including necessary bolts,nuts,rubber insertion, labour charges etc,complete-150 x 125mm dia	no	2177.91
31.160.1A	Providing, laying and jointing UPVC pipes (1 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,UPVC specials such as bends,tees, threaded pieces,couplers,reducer,endcaps etc.,complete all as per IS and CPWD specification. - 20mm dia.	metre	55.74

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.160.1B	Providing, laying and jointing UPVC pipes (1 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,UPVC specials such as bends,tees, threaded pieces,couplers,reducer,endcaps etc.,complete all as per IS and CPWD specification. - 25mm dia.	metre	74.42
31.160.1C	Providing, laying and jointing UPVC pipes (1 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,UPVC specials such as bends,tees, threaded pieces,couplers,reducer,endcaps etc.,complete all as per IS and CPWD specification. - 32mm dia.	metre	114.53
31.160.1D	Providing, laying and jointing UPVC pipes (1 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,UPVC specials such as bends,tees, threaded pieces,couplers,reducer,endcaps etc.,complete all as per IS and CPWD specification. - 40mm dia.	metre	163.08
31.160.1E	Providing, laying and jointing UPVC pipes (1 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,UPVC specials such as bends,tees, threaded pieces,couplers,reducer,endcaps etc.,complete all as per IS and CPWD specification. - 50mm dia.	metre	251.80
31.160.1F	Providing, laying and jointing UPVC pipes (1 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,UPVC specials such as bends,tees, threaded pieces,couplers,reducer,endcaps etc.,complete all as per IS and CPWD specification. - 63mm dia.	metre	374.59

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.160.1G	Providing, laying and jointing UPVC pipes (1 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,UPVC specials such as bends,tees, threaded pieces,couplers,reducer,endcaps etc.,complete all as per IS and CPWD specification. - 75mm dia.	metre	523.97
31.160.1H	Providing, laying and jointing UPVC pipes (1 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,excludingUPVC specials such as bends,tees, threaded pieces,couplers,reducer,endcaps etc.,complete all as per IS and CPWD specification. - 90mm dia.	metre	735.62
31.160.1I	Providing, laying and jointing UPVC pipes (1 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,excluding UPVC specials such as bends,tees, threaded pieces,couplers,reducer,endcaps etc.,complete all as per IS and CPWD specification. - 110mm dia.	metre	1031.26
31.160.1J	Providing, laying and jointing UPVC pipes (1 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,excluding UPVC specials such as bends,tees, threaded pieces,couplers,reducer,endcaps etc.,complete all as per IS and CPWD specification. - 140mm dia.	metre	1647.66
31.160.1K	Providing, laying and jointing UPVC pipes (1 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,excluding UPVC specials such as bends,tees, threaded pieces,couplers,reducer,endcaps etc.,complete all as per IS and CPWD specification. - 160mm dia.	metre	2127.80

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.160.1L	Providing, laying and jointing UPVC pipes (1 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,excluding UPVC specials such as bends,tees, threaded pieces,couplers,reducer,endcaps etc.,complete all as per IS and CPWD specification. - 180mm dia.	metre	2744.01
31.160.1M	Providing, laying and jointing UPVC pipes (1 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,excluding UPVC specials such as bends,tees, threaded pieces,couplers,reducer,endcaps etc.,complete all as per IS and CPWD specification. - 200mm dia.	metre	3472.05
31.161.1A	Providing, laying and jointing UPVC pipes (0.6 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,UPVC specials such as bends,tees, threaded pieces,couplers,reducer,endcaps etc.,complete all as per IS and CPWD specification. - 40mm dia.	metre	114.53
31.161.1B	Providing, laying and jointing UPVC pipes (0.6 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,UPVC specials such as bends,tees, threaded pieces,couplers,reducer,endcaps etc.,complete all as per IS and CPWD specification. - 50mm dia.	metre	162.18
31.161.1C	Providing, laying and jointing UPVC pipes (0.6 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,UPVC specials such as bends,tees, threaded pieces,couplers,reducer,endcaps etc.,complete all as per IS and CPWD specification. - 63mm dia.	metre	234.55

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.161.1D	Providing, laying and jointing UPVC pipes (0.6 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,UPVC specials such as bends,tees, threaded pieces,couplers, reducer,endcaps etc.,complete all as per IS and CPWD specification. - 75mm dia.	metre	320.44
31.161.1E	Providing, laying and jointing UPVC pipes (0.6 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,excluding UPVC specials such as bends,tees, threaded pieces,couplers, reducer,endcaps etc.,complete all as per IS and CPWD specification. - 90mm dia.	metre	437.31
31.161.1F	Providing, laying and jointing UPVC pipes (0.6 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,excluding UPVC specials such as bends,tees, threaded pieces,couplers, reducer,endcaps etc.,complete all as per IS and CPWD specification. - 110mm dia.	metre	622.25
31.161.1G	Providing, laying and jointing UPVC pipes (0.6 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,excluding UPVC specials such as bends,tees, threaded pieces,couplers, reducer,endcaps etc.,complete all as per IS and CPWD specification. - 140mm dia.	metre	1016.36
31.161.1H	Providing, laying and jointing UPVC pipes (0.6 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,excluding UPVC specials such as bends,tees, threaded pieces,couplers, reducer,endcaps etc.,complete all as per IS and CPWD specification. - 160mm dia.	metre	1300.89

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.161.1I	Providing, laying and jointing UPVC pipes (0.6 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,excluding UPVC specials such as bends,tees, threaded pieces,couplers, reducer,endcaps etc.,complete all as per IS and CPWD specification. - 180mm dia.	metre	1659.25
31.161.1J	Providing, laying and jointing UPVC pipes (0.6 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,excluding UPVC specials such as bends,tees, threaded pieces,couplers, reducer,endcaps etc.,complete all as per IS and CPWD specification. - 200mm dia.	metre	1852.02
31.161.1K	Providing, laying and jointing UPVC pipes (0.6 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement, excluding UPVC specials such as bends,tees, threaded pieces,couplers, reducer,endcaps etc.,complete all as per IS and CPWD specification. - 250mm dia.	metre	2985.86
31.162.1A	Providing, laying and jointing UPVC pipes (0.4 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,UPVC specials such as bends,tees, threaded pieces,couplers, reducer,endcaps etc.,complete all as per IS and CPWD specification. - 63mm dia.	metre	172.93
31.162.1B	Providing, laying and jointing UPVC pipes (0.4 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,UPVC specials such as bends,tees, threaded pieces,couplers, reducer,endcaps etc.,complete all as per IS and CPWD specification. - 75mm dia.	metre	234.55

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.162.1C	Providing, laying and jointing UPVC pipes (0.4 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,excluding UPVC specials such as bends,tees, threaded pieces,couplers, reducer,endcaps etc.,complete all as per IS and CPWD specification. - 90mm dia.	metre	307.49
31.162.1D	Providing, laying and jointing UPVC pipes (0.4 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,excluding UPVC specials such as bends,tees, threaded pieces,couplers, reducer,endcaps etc.,complete all as per IS and CPWD specification. - 110mm dia.	metre	430.19
31.162.1E	Providing, laying and jointing UPVC pipes (0.4 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,excluding UPVC specials such as bends,tees, threaded pieces,couplers, reducer,endcaps etc.,complete all as per IS and CPWD specification. - 140mm dia.	metre	696.27
31.162.1F	Providing, laying and jointing UPVC pipes (0.4 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,excluding UPVC specials such as bends,tees, threaded pieces,couplers, reducer,endcaps etc.,complete all as per IS and CPWD specification. - 160mm dia.	metre	900.78
31.162.1G	Providing, laying and jointing UPVC pipes (0.4 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,excluding UPVC specials such as bends,tees, threaded pieces,couplers, reducer,endcaps etc.,complete all as per IS and CPWD specification. - 180mm dia.	metre	1179.11

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.162.1H	Providing, laying and jointing UPVC pipes (0.4 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment,including cost of solvent cement,excluding UPVC specials such as bends,tees, threaded pieces,couplers,reducer,endcaps etc.,complete all as per IS and CPWD specification. - 200mm dia.	metre	1435.90
31.164.1A	Providing and fixing in position UPVC moulded equal Tee (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 20mm dia	no	81.92
31.164.1B	Providing and fixing in position UPVC moulded equal Tee (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 25mm dia	no	85.89
31.164.1C	Providing and fixing in position UPVC moulded equal Tee (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 32mm dia	no	146.01
31.164.1D	Providing and fixing in position UPVC moulded equal Tee (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 40mm dia	no	175.10
31.164.1E	Providing and fixing in position UPVC moulded equal Tee (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 50mm dia	no	217.32
31.164.1F	Providing and fixing in position UPVC moulded equal Tee (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 63mm dia	no	314.78
31.164.1G	Providing and fixing in position UPVC moulded equal Tee (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 75mm dia	no	514.70

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.164.1H	Providing and fixing in position UPVC moulded equal Tee (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 90mm dia	no	722.68
31.164.1I	Providing and fixing in position UPVC moulded equal Tee (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 110mm dia	no	849.26
31.164.1J	Providing and fixing in position UPVC moulded equal Tee (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 75mm dia	no	323.81
31.164.1K	Providing and fixing in position UPVC moulded equal Tee (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 90mm dia	no	390.09
31.164.1L	Providing and fixing in position UPVC moulded equal Tee (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 110mm dia	no	603.07
31.164.1M	Providing and fixing in position UPVC moulded equal Tee (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 140mm dia	no	878.55
31.164.1N	Providing and fixing in position UPVC moulded equal Tee (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 160mm dia	no	1181.93
31.165.1A	Providing and fixing in position UPVC moulded unequal Tee (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 63 x 50mm dia	no	181.18
31.165.1B	Providing and fixing in position UPVC moulded unequal Tee (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 75 x 50mm dia	no	266.06

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.165.1C	Providing and fixing in position UPVC moulded unequal Tee (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 90 x 50mm dia	no	313.01
31.165.1D	Providing and fixing in position UPVC moulded unequal Tee (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 90 x 63mm dia	no	320.12
31.165.1E	Providing and fixing in position UPVC moulded unequal Tee (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 90 x 75mm dia	no	350.00
31.165.1F	Providing and fixing in position UPVC moulded unequal Tee (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 110 x 50mm dia	no	404.06
31.165.1G	Providing and fixing in position UPVC moulded unequal Tee (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 110 x 63mm dia	no	394.10
31.165.1H	Providing and fixing in position UPVC moulded unequal Tee (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 110 x 90mm dia	no	357.12
31.165.1I	Providing and fixing in position UPVC moulded unequal Tee (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 140 x 50mm dia	no	578.12
31.165.1J	Providing and fixing in position UPVC moulded unequal Tee (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 140 x 63mm dia	no	703.32
31.165.1K	Providing and fixing in position UPVC moulded unequal Tee (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials	no	593.77

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	etc,complete - 140 x 90mm dia		
31.165.1L	Providing and fixing in position UPVC moulded unequal Tee (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 140 x 110mm dia	no	615.12
31.165.1M	Providing and fixing in position UPVC moulded unequal Tee (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 160 x 50mm dia	no	763.08
31.165.1N	Providing and fixing in position UPVC moulded unequal Tee (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 160 x 63mm dia	no	852.69
31.165.1O	Providing and fixing in position UPVC moulded unequal Tee (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 160 x 90mm dia	no	684.82
31.165.1P	Providing and fixing in position UPVC moulded unequal Tee (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 160 x 110mm dia	no	714.70
31.165.1Q	Providing and fixing in position UPVC moulded unequal Tee (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 160 x 140mm dia	no	1132.95
31.166.1A	Providing and fixing in position UPVC moulded plain coupler (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 20mm dia	no	42.17
31.166.1B	Providing and fixing in position UPVC moulded plain coupler (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 25mm dia	no	46.43
31.166.1C	Providing and fixing in position UPVC moulded plain coupler (1 Mpa) conforming to IS 7834 part II and ISI	no	78.19

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	marked,including labour charges for jointing, jointing materials etc,complete - 32mm dia		
31.166.1D	Providing and fixing in position UPVC moulded plain coupler (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 40mm dia	no	89.58
31.166.1E	Providing and fixing in position UPVC moulded plain coupler (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 50mm dia	no	106.64
31.166.1F	Providing and fixing in position UPVC moulded plain coupler (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 63mm dia	no	146.48
31.166.1G	Providing and fixing in position UPVC moulded plain coupler (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 75mm dia	no	219.39
31.166.1H	Providing and fixing in position UPVC moulded plain coupler (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 90mm dia	no	281.99
31.166.1I	Providing and fixing in position UPVC moulded plain coupler (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 110mm dia	no	316.14
31.166.1J	Providing and fixing in position UPVC moulded plain coupler (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 140mm dia	no	419.51
31.166.1K	Providing and fixing in position UPVC moulded plain coupler (0.4 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 160mm dia	no	452.23

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.167.1A	Providing and fixing in position UPVC moulded reducer coupler (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 25 x 20mm dia	no	36.47
31.167.1B	Providing and fixing in position UPVC moulded reducer coupler (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 32 x 25mm dia	no	71.07
31.167.1C	Providing and fixing in position UPVC moulded reducer coupler (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 40 x 32mm dia	no	73.92
31.167.1D	Providing and fixing in position UPVC moulded reducer coupler (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 50 x 40mm dia	no	88.14
31.167.1E	Providing and fixing in position UPVC moulded reducer coupler (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 63 x 40mm dia	no	95.26
31.167.1F	Providing and fixing in position UPVC moulded reducer coupler (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 63 x 50mm dia	no	103.79
31.167.1G	Providing and fixing in position UPVC moulded reducer coupler (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 75 x 63mm dia	no	185.24
31.167.1H	Providing and fixing in position UPVC moulded reducer coupler (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 90 x 63mm dia	no	195.21
31.167.1I	Providing and fixing in position UPVC moulded reducer coupler (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 90 x 75mm dia	no	200.91

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.167.1J	Providing and fixing in position UPVC moulded reducer coupler (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 110 x 75mm dia	no	242.16
31.167.1K	Providing and fixing in position UPVC moulded reducer coupler (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 110 x 90mm dia	no	212.29
31.167.1L	Providing and fixing in position UPVC moulded reducer coupler (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 160 x 110mm dia	no	440.84
31.167.1M	Providing and fixing in position UPVC moulded reducer coupler (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 160 x 140mm dia	no	447.97
31.168.1A	Providing and fixing in position UPVC moulded elbow (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 20mm dia	no	37.89
31.168.1B	Providing and fixing in position UPVC moulded elbow (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 25mm dia	no	39.32
31.168.1C	Providing and fixing in position UPVC moulded elbow (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 32mm dia	no	72.50
31.168.1D	Providing and fixing in position UPVC moulded elbow (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 40mm dia	no	83.88
31.168.1E	Providing and fixing in position UPVC moulded elbow (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete -	no	99.53

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	50mm dia		
31.168.1F	Providing and fixing in position UPVC moulded elbow (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 63mm dia	no	122.29
31.168.1G	Providing and fixing in position UPVC moulded elbow (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 75mm dia	no	189.53
31.168.1H	Providing and fixing in position UPVC moulded elbow (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 90mm dia	no	252.12
31.168.1I	Providing and fixing in position UPVC moulded elbow (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 110mm dia	no	391.53
31.168.1J	Providing and fixing in position UPVC moulded elbow (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 63mm dia	no	86.73
31.168.1K	Providing and fixing in position UPVC moulded elbow (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 75mm dia	no	151.12
31.168.1L	Providing and fixing in position UPVC moulded elbow (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 90mm dia	no	172.45
31.168.1M	Providing and fixing in position UPVC moulded elbow (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 110mm dia	no	215.13
31.168.1N	Providing and fixing in position UPVC moulded elbow (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including	no	381.10

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	labour charges for jointing, jointing materials etc,complete - 140mm dia		
31.168.1O	Providing and fixing in position UPVC moulded elbow (0.4 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 160mm dia	no	470.72
31.169.1A	Providing and fixing in position UPVC moulded male threaded adopter (1 Mpa)conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete -20 x 15mm dia	no	64.05
31.169.1B	Providing and fixing in position UPVC moulded male threaded adopter (1 Mpa)conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete -25 x 20mm dia	no	68.33
31.169.1C	Providing and fixing in position UPVC moulded male threaded adopter (1 Mpa)conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete -32 x 25mm dia	no	122.65
31.169.1D	Providing and fixing in position UPVC moulded male threaded adopter (1 Mpa)conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete -40 x 32mm dia	no	128.35
31.169.1E	Providing and fixing in position UPVC moulded male threaded adopter (0.6 Mpa)conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete -50 x 40mm dia	no	134.04
31.169.1F	Providing and fixing in position UPVC moulded male threaded adopter (0.6 Mpa)conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete -63 x 50mm dia	no	141.15
31.169.1G	Providing and fixing in position UPVC moulded male threaded adopter (0.6 Mpa)conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete -75 x 63mm dia	no	243.11

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.169.1H	Providing and fixing in position UPVC moulded male threaded adopter (0.6 Mpa)conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete -90 x 75mm dia	no	267.29
31.169.1I	Providing and fixing in position UPVC moulded male threaded adopter (0.6 Mpa)conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete -110 x 90mm dia	no	294.31
31.170.1A	Providing and fixing in position UPVC moulded female threaded adopter (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete -20 x 15mm dia	no	71.07
31.170.1B	Providing and fixing in position UPVC moulded female threaded adopter (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete -25x 20mm dia	no	73.92
31.170.1C	Providing and fixing in position UPVC moulded female threaded adopter (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete -32 x 25mm dia	no	126.93
31.170.1D	Providing and fixing in position UPVC moulded female threaded adopter (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete -75 x 63mm dia	no	254.49
31.170.1E	Providing and fixing in position UPVC moulded female threaded adopter (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete -90 x 63mm dia	no	274.41
31.170.1F	Providing and fixing in position UPVC moulded female threaded adopter (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete -90 x 75mm dia	no	281.52
31.171.1A	Providing and fixing in position UPVC moulded endcap (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete -20mm dia	no	35.05

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.171.1B	Providing and fixing in position UPVC moulded endcap (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 25mm dia	no	36.47
31.171.1C	Providing and fixing in position UPVC moulded endcap (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 32mm dia	no	68.23
31.171.1D	Providing and fixing in position UPVC moulded endcap (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 40mm dia	no	76.76
31.171.1E	Providing and fixing in position UPVC moulded endcap (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 50mm dia	no	81.04
31.171.1F	Providing and fixing in position UPVC moulded endcap (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 63mm dia	no	85.30
31.171.1G	Providing and fixing in position UPVC moulded endcap (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 75mm dia	no	145.42
31.171.1H	Providing and fixing in position UPVC moulded endcap (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 90mm dia	no	168.19
31.171.1I	Providing and fixing in position UPVC moulded endcap (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 110mm dia	no	173.88
31.171.1J	Providing and fixing in position UPVC moulded endcap (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete -	no	295.74

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	140mm dia		
31.171.1K	Providing and fixing in position UPVC moulded endcap (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 160mm dia	no	335.57
31.171.1L	Providing and fixing in position UPVC moulded endcap (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 180mm dia	no	488.00
31.171.1M	Providing and fixing in position UPVC moulded endcap (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 200mm dia	no	534.96
31.172.1A	Providing and fixing in position UPVC moulded tail piece without flange (0.6 Mpa)conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 63mm dia	no	100.95
31.172.1B	Providing and fixing in position UPVC moulded tail piece without flange (0.6 Mpa)conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 75mm dia	no	148.27
31.172.1C	Providing and fixing in position UPVC moulded tail piece without flange (0.6 Mpa)conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 90mm dia	no	153.95
31.172.1D	Providing and fixing in position UPVC moulded tail piece without flange (0.6 Mpa)conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 110mm dia	no	166.76
31.172.1E	Providing and fixing in position UPVC moulded tail piece without flange (0.6 Mpa)conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 140mm dia	no	312.82
31.172.1F	Providing and fixing in position UPVC moulded tail piece without flange (0.6 Mpa)conforming to IS 7834 part II and ISI	no	361.18

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	marked,including labour charges for jointing, jointing materials etc,complete - 160mm dia		
31.172.1G	Providing and fixing in position UPVC moulded tail piece without flange (0.6 Mpa)conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 180mm dia	no	554.87
31.172.1H	Providing and fixing in position UPVC moulded tail piece without flange (0.6 Mpa)conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 200mm dia	no	654.46
31.173.1A	Providing and fixing in position UPVC moulded saddle set (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 63 x 20mm dia	no	129.40
31.173.1B	Providing and fixing in position UPVC moulded saddle set (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 75 x 20mm dia	no	182.41
31.173.1C	Providing and fixing in position UPVC moulded saddle set (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 90 x 20mm dia	no	189.53
31.173.1D	Providing and fixing in position UPVC moulded saddle set (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 110 x 20mm dia	no	208.01
31.173.1E	Providing and fixing in position UPVC moulded saddle set (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 140 x 20mm dia	no	386.79
31.173.1F	Providing and fixing in position UPVC moulded saddle set (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 160 x 20mm dia	no	436.58

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.174.1A	Providing and fixing in position UPVC fabricated coupler (0.4 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 63 mm dia	no	95.26
31.174.1B	Providing and fixing in position UPVC fabricated coupler (0.4 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 75 mm dia	no	161.06
31.174.1C	Providing and fixing in position UPVC fabricated coupler (0.4 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 90 mm dia	no	190.94
31.174.1D	Providing and fixing in position UPVC fabricated coupler (0.4 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 110 mm dia	no	226.50
31.174.1E	Providing and fixing in position UPVC fabricated coupler (0.4 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 140 mm dia	no	393.90
31.174.1F	Providing and fixing in position UPVC fabricated coupler (0.4 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 160 mm dia	no	432.31
31.174.1G	Providing and fixing in position UPVC fabricated coupler (0.4 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 180 mm dia	no	614.62
31.174.1H	Providing and fixing in position UPVC fabricated coupler (0.4 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 200 mm dia	no	667.26
31.175.1A	Providing and fixing in position UPVC fabricated coupler (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 63 mm dia	no	108.07

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.175.1B	Providing and fixing in position UPVC fabricated coupler (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 75 mm dia	no	175.30
31.175.1C	Providing and fixing in position UPVC fabricated coupler (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 90 mm dia	no	202.32
31.175.1D	Providing and fixing in position UPVC fabricated coupler (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 110 mm dia	no	247.85
31.175.1E	Providing and fixing in position UPVC fabricated coupler (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 140 mm dia	no	432.31
31.175.1F	Providing and fixing in position UPVC fabricated coupler (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 160 mm dia	no	492.06
31.175.1G	Providing and fixing in position UPVC fabricated coupler (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 180 mm dia	no	667.26
31.175.1H	Providing and fixing in position UPVC fabricated coupler (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 200 mm dia	no	712.78
31.176.1A	Providing and fixing in position UPVC fabricated coupler (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 63 mm dia	no	147.89
31.176.1B	Providing and fixing in position UPVC fabricated coupler (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 75	no	223.65

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	mm dia		
31.176.1C	Providing and fixing in position UPVC fabricated coupler (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 90 mm dia	no	287.68
31.176.1D	Providing and fixing in position UPVC fabricated coupler (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 110 mm dia	no	333.21
31.176.1E	Providing and fixing in position UPVC fabricated coupler (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 140 mm dia	no	483.54
31.176.1F	Providing and fixing in position UPVC fabricated coupler (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 160 mm dia	no	539.01
31.176.1G	Providing and fixing in position UPVC fabricated coupler (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 180 mm dia	no	698.56
31.176.1H	Providing and fixing in position UPVC fabricated coupler (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 200 mm dia	no	758.31
31.177.1A	Providing and fixing in position UPVC fabricated bend (0.4 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 63 mm dia	no	109.48
31.177.1B	Providing and fixing in position UPVC fabricated bend (0.4 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 75 mm dia	no	180.98
31.177.1C	Providing and fixing in position UPVC fabricated bend (0.4 Mpa) conforming to IS 7834 part II and ISI marked,including	no	226.50

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	labour charges for jointing, jointing materials etc,complete - 90 mm dia		
31.177.1D	Providing and fixing in position UPVC fabricated bend (0.4 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 110 mm dia	no	257.80
31.177.1E	Providing and fixing in position UPVC fabricated bend (0.4 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 140 mm dia	no	486.38
31.177.1F	Providing and fixing in position UPVC fabricated bend (0.4 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 160 mm dia	no	691.23
31.177.1G	Providing and fixing in position UPVC fabricated bend (0.4 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 180 mm dia	no	880.65
31.177.1H	Providing and fixing in position UPVC fabricated bend (0.4 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 200 mm dia	no	960.32
31.178.1A	Providing and fixing in position UPVC fabricated bend (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 63 mm dia	no	123.72
31.178.1B	Providing and fixing in position UPVC fabricated bend (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 75 mm dia	no	202.32
31.178.1C	Providing and fixing in position UPVC fabricated bend (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 90 mm dia	no	257.80

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.178.1D	Providing and fixing in position UPVC fabricated bend (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 110 mm dia	no	310.44
31.178.1E	Providing and fixing in position UPVC fabricated bend (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 140 mm dia	no	615.83
31.178.1F	Providing and fixing in position UPVC fabricated bend (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 160 mm dia	no	836.34
31.178.1G	Providing and fixing in position UPVC fabricated bend (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 180 mm dia	no	1079.82
31.178.1H	Providing and fixing in position UPVC fabricated bend (0.6 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 200 mm dia	no	1261.92
31.179.1A	Providing and fixing in position UPVC fabricated bend (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 63 mm dia	no	169.25
31.179.1B	Providing and fixing in position UPVC fabricated bend (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 75 mm dia	no	263.50
31.179.1C	Providing and fixing in position UPVC fabricated bend (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 90 mm dia	no	326.09
31.179.1D	Providing and fixing in position UPVC fabricated bend (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 110 mm dia	no	384.43

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.179.1E	Providing and fixing in position UPVC fabricated bend (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 140 mm dia	no	723.95
31.179.1F	Providing and fixing in position UPVC fabricated bend (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 160 mm dia	no	910.31
31.179.1G	Providing and fixing in position UPVC fabricated bend (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 180 mm dia	no	1149.54
31.179.1H	Providing and fixing in position UPVC fabricated bend (1 Mpa) conforming to IS 7834 part II and ISI marked,including labour charges for jointing, jointing materials etc,complete - 200 mm dia	no	1325.95
31.250.1A	Supplying of electrically operated wet type submersible motor and pumpset , AC 3 phase, 415 volts, 50 Hz, 2900-3000 RPM. The pump shall have brass impeller, high grade steel shaft with sufficient stages having outlet size of 2"/2.5"/3" dia. to suit the borewell (150 / 200mm dia.), complete.The rate includes, all taxes, freight, etc., FOR at site in UT of Puducherry. The pumpset shall be guaranteed for a period of one year from the date of commissioning.(5 HP Submersible motor and pumpset).	no	54482.71
31.250.1B	Supplying of electrically operated wet type submersible motor and pumpset , AC 3 phase, 415 volts, 50 Hz, 2900-3000 RPM. The pump shall have brass impeller, high grade steel shaft with sufficient stages with suitable suction and delivery sizes, complete. The rate includes, all taxes, freight, etc., FOR at site in UT of Puducherry. The pumpset shall be guaranteed for a period of one year from the date of commissioning.(5 HP Submersible motor and pumpset open well)	no	38096.79
31.250.1C	Supplying of electrically operated wet type submersible motor and pumpset , AC 3 phase, 415 volts, 50 Hz, 2900-3000 RPM. The pump shall have brass impeller, high grade steel shaft with sufficient stages having outlet size of 2"/2.5"/3" dia. to suit the borewell (150 / 200mm dia.), complete. The rate	no	57483.05

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	includes, all taxes, freight, etc., FOR at site in UT of Puducherry. The pumpset shall be guaranteed for a period of one year from the date of commissioning.(7.5 HP Submersible motor and pumpset).		
31.250.1D	Supplying of electrically operated wet type submersible motor and pumpset , AC 3 phase, 415 volts, 50 Hz, 2900-3000 RPM. The pump shall have brass impeller, high grade steel shaft with sufficient stages with suitable suction and delivery sizes, complete. The rate includes, all taxes, freight, etc., FOR at site in UT of Puducherry. The pumpset shall be guaranteed for a period of one year from the date of commissioning.(7.5 HP Submersible motor and pumpset open well).	no	44406.18
31.250.1E	Supplying of electrically operated wet type submersible motor and pumpset , AC 3 phase, 415 volts, 50 Hz, 2900-3000 RPM. The pump shall have brass impeller, high grade steel shaft with sufficient stages having outlet size of 2"/2.5"/3" dia. to suit the borewell (150 / 200mm dia.), complete.The rate includes, all taxes, freight, etc., FOR at site in UT of Puducherry. The pumpset shall be guaranteed for a period of one year from the date of commissioning.(10 HP Submersible motor and pumpset).	no	68966.57
31.250.1F	Supplying of electrically operated wet type submersible motor and pumpset , AC 3 phase, 415 volts, 50 Hz, 2900-3000 RPM. The pump shall have brass impeller, high grade steel shaft with sufficient stages with suitable suction and delivery sizes, complete. The rate includes, all taxes, freight, etc., FOR at site in UT of Puducherry. The pumpset shall be guaranteed for a period of one year from the date of commissioning.(10 HP Submersible motor and pumpset open Well).	no	65485.38
31.250.1G	Supplying of electrically operated wet type submersible motor and pumpset , AC 3 phase, 415 volts, 50 Hz, 2900-3000 RPM. The pump shall have brass impeller, high grade steel shaft with sufficient stages having outlet size of 2"/2.5"/3" dia. to suit the borewell (150 / 200mm dia.), complete.The rate includes, all taxes, freight, etc., FOR at site in UT of Puducherry. The pumpset shall be guaranteed for a period of one year from the date of commissioning.(12.5 HP Submersible motor and pumpset).	no	79797.11
31.250.1H	Supplying of electrically operated wet type submersible motor and pumpset , AC 3 phase, 415 volts, 50 Hz, 2900-3000	no	90666.05

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	RPM. The pump shall have brass impeller, high grade steel shaft with sufficient stages having outlet size of 2"/2.5"/3" dia. to suit the borewell (150 / 200mm dia.), complete. The rate includes, all taxes, freight, etc., FOR at site in UT of Puducherry. The pumpset shall be guaranteed for a period of one year from the date of commissioning.(15 HP Submersible motor and pumpset).		
31.250.1I	Supplying of electrically operated wet type submersible motor and pumpset , AC 3 phase, 415 volts, 50 Hz, 2900-3000 RPM. The pump shall have brass impeller, high grade steel shaft with sufficient stages having outlet size of 2"/2.5"/3"/4" dia. to suit the borewell (150 / 200mm dia.), complete.The rate includes, all taxes, freight, etc., FOR at site in UT of Puducherry. The pumpset shall be guaranteed for a period of one year from the date of commissioning.(17.5 HP Submersible motor and pumpset).	no	99216.10
31.250.1J	Supplying of electrically operated wet type submersible motor and pumpset , AC 3 phase, 415 volts, 50 Hz, 2900-3000 RPM. The pump shall have brass impeller, high grade steel shaft with sufficient stages having outlet size of 2"/2.5"/3"/4" dia. to suit the borewell (150 / 200mm dia.), complete. The rate includes, all taxes, freight, etc., FOR at site in UT of Puducherry. The pumpset shall be guaranteed for a period of one year from the date of commissioning.(20 HP Submersible motor and pumpset).	no	114832.38
31.250.1K	Supplying of electrically operated wet type submersible motor and pumpset , AC 3 phase, 415 volts, 50 Hz, 2900-3000 RPM. The pump shall have brass impeller, high grade steel shaft with sufficient stages having outlet size of 2"/2.5"/3"/4" dia. to suit the borewell (150 / 200mm dia.), complete.The rate includes, all taxes, freight, etc., FOR at site in UT of Puducherry. The pumpset shall be guaranteed for a period of one year from the date of commissioning.(25 HP Submersible motor and pumpset).	no	118727.55
31.250.1L	Supplying of electrically operated wet type submersible motor and pumpset , AC 3 phase, 415 volts, 50 Hz, 2900-3000 RPM. The pump shall have brass impeller, high grade steel shaft with sufficient stages having outlet size of 2"/2.5"/3"/4" dia. to suit the borewell (150 / 200mm dia.), complete.The rate includes, all taxes, freight, etc., FOR at site in UT of Puducherry. The pumpset shall be guaranteed for a period of one year from the date of commissioning.(30 HP Submersible	no	122221.55

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	motor and pumpset).		
31.250.1M	Supplying of electrically operated wet type submersible motor and pumpset , AC 3 phase, 415 volts, 50 Hz, 2900-3000 RPM. The pump shall have brass impeller, high grade steel shaft with sufficient stages having outlet size of 2"/2.5"/3"/4" dia. to suit the borewell (150 / 200mm dia.), complete. The rate includes, all taxes, freight, etc., FOR at site in UT of Puducherry. The pumpset shall be guaranteed for a period of one year from the date of commissioning.(35 HP Submersible motor and pumpset).	no	128464.08
31.250.1N	Supplying of electrically operated wet type submersible motor and pumpset , AC 3 phase, 415 volts, 50 Hz, 2900-3000 RPM. The pump shall have brass impeller, high grade steel shaft with sufficient stages having outlet size of 2"/2.5"/3"/4" dia. to suit the borewell (150 / 200mm dia.), complete. The rate includes, all taxes, freight, etc., FOR at site in UT of Puducherry. The pumpset shall be guaranteed for a period of one year from the date of commissioning.(40 HP Submersible motor and pumpset).	no	133104.72
31.250.1O	Supplying of electrically operated wet type submersible motor and pumpset , AC 3 phase, 415 volts, 50 Hz, 2900-3000 RPM. The pump shall have stainless steel impeller, high grade steel shaft with sufficient stages having outlet size of 2"/2.5"/3" dia. to suit the borewell (150 / 200mm dia.), complete. The rate includes, all taxes, freight, etc., FOR at site in UT of Puducherry. The pumpset shall be guaranteed for a period of one year from the date of commissioning.(7.5 HP Submersible motor and pumpset).	no	45299.59
31.250.1P	Supplying of electrically operated wet type submersible motor and pumpset , AC 3 phase, 415 volts, 50 Hz, 2900-3000 RPM. The pump shall have stainless steel impeller, high grade steel shaft with sufficient stages having outlet size of 2"/2.5"/3" dia. to suit the borewell (150 / 200mm dia.), complete. The rate includes, all taxes, freight, etc., FOR at site in UT of Puducherry. The pumpset shall be guaranteed for a period of one year from the date of commissioning.(10 HP Submersible motor and pumpset).	no	55376.13
31.250.1Q	Supplying of electrically operated wet type submersible motor and pumpset , AC 3 phase, 415 volts, 50 Hz, 2900-3000 RPM. The pump shall have stainless steel impeller,high grade	no	63347.17

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	steel shaft with sufficient stages having outlet size of 2"/2.5"/3" dia. to suit the borewell (150 / 200mm dia.), complete. The rate includes, all taxes, freight, etc., FOR at site in UT of Puducherry. The pumpset shall be guaranteed for a period of one year from the date of commissioning.(12.5 HP Submersible motor and pumpset).		
31.250.1R	Supplying of electrically operated wet type submersible motor and pumpset , AC 3 phase, 415 volts, 50 Hz, 2900-3000 RPM. The pump shall have stainless steel impeller, high grade steel shaft with sufficient stages having outlet size of 2"/2.5"/3" dia. to suit the borewell (150 / 200mm dia.), complete. The rate includes, all taxes, freight, etc., FOR at site in UT of Puducherry. The pumpset shall be guaranteed for a period of one year from the date of commissioning.(15 HP Submersible motor and pumpset).	no	73437.92
31.250.1S	Supplying of electrically operated wet type submersible motor and pumpset , AC 3 phase, 415 volts, 50 Hz, 2900-3000 RPM. The pump shall have stainless steel impeller, high grade steel shaft with sufficient stages having outlet size of 2"/2.5"/3" dia. to suit the borewell (150 / 200mm dia.), complete. The rate includes, all taxes, freight, etc., FOR at site in UT of Puducherry. The pumpset shall be guaranteed for a period of one year from the date of commissioning.(20 HP Submersible motor and pumpset).	no	93875.52
31.250.1T	Supplying of electrically operated wet type submersible motor and pumpset , AC 3 phase, 415 volts, 50 Hz, 2900-3000 RPM. The pump shall have stainless steel impeller, high grade steel shaft with sufficient stages having outlet size of 2"/2.5"/3" dia. to suit the borewell (150 / 200mm dia.), complete. The rate includes, all taxes, freight, etc., FOR at site in UT of Puducherry. The pumpset shall be guaranteed for a period of one year from the date of commissioning.(25 HP Submersible motor and pumpset).	no	95882.86
31.251.1A	Supplying of electrically operated, single stage high speed, centrifugal monoblock with volute type delivery pumpset make, AC 3 phase, 415V, 50 HZ, 2900 – 3000 RPM. The pump shell have C.I. impeller, high grade steel shaft having (100mm x 100mm) suction and delivery respectively including stainer / foot valve to pump the water from UGR to OHT. The rate includes, all taxes, freight, etc., FOR at site in UT of Puducherry. The pumpset shall be guaranteed for a period of one year from the date of commissioning.(5 HP Monoblock	no	41964.93

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	centrifugal motor and pumpset).		
31.251.1B	Supplying of electrically operated, single stage high speed, centrifugal monoblock with volute type delivery pumpset make, AC 3 phase, 415V, 50 HZ, 2900 – 3000 RPM. The pump shell have C.I. impeller, high grade steel shaft having (100mm x 100mm) suction and delivery respectively including stainer / foot valve to pump the water from UGR to OHT. The rate includes, all taxes, freight, etc., FOR at site in UT of Puducherry. The pumpset shall be guaranteed for a period of one year from the date of commissioning(7.5 HP Monoblock centrifugal motor and pumpset).	no	44805.94
31.251.1C	Supplying of electrically operated, single stage high speed, centrifugal monoblock with volute type delivery pumpset make, AC 3 phase, 415V, 50 HZ, 2900 – 3000 RPM. The pump shell have C.I. impeller, high grade steel shaft having (100mm x 100mm) suction and delivery respectively including stainer / foot valve to pump the water from UGR to OHT. The rate includes, all taxes, freight, etc., FOR at site in UT of Puducherry. The pumpset shall be guaranteed for a period of one year from the date of commissioning(10 HP Monoblock centrifugal motor and pumpset).	no	60790.68
31.252.1A	Supplying and fixing of 63 Amps capacity wall mounting panel board of size 1200mmx750mmx225 mm made of 16 gauge CR M.S. sheet painted with two coats of enamel paint, over zinc chromate primer, suitable for fixing switch disconnector, fuse switches etc. The panel board shall include power mat, copper busbar, 3mm thick hylan sheet, square voltmeter (96 mm-IMP/AE/L&T/Siemens), voltmeter selector switch, square ammeter (96 mm-IMP/AE/L&T/Siemens), 3 Nos of C.T. coil, 3 Nos. of indicator, 3 Nos. of toggle switches and 3 Nos. of side lock fuses, with 2 A fuse link complete. The board shall be mounted on an angle frame of 30mm x 30mm x 6mm with legs. The rate is inclusive of internal wiring and with copper earth flat linked with shutters and doors. Supplying and fixing of 2 Nos. of TPN 63 Amps, 415 V disconnector switch/cubical switch/fuse switch with fuse links complete . (1 No. for E.D. supply and 1 No. for Diesel Generator supply). Supplying and fixing of 2 Nos of 63 Amps, 415 V disconnector fuse switch/TPN Cubical switch with fuse links capacitor motor control (1 number of power capacitor and 1 number of motor control), complete.- upto 12.5HP	no	35140.55
31.252.1B	Supplying and fixing of 100/125 Amps capacity cubical wall	no	53149.70

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	mounting panel board of size 1300mm x 750mm x 225mm made of 16 gauge CR M.S. sheet painted with two coats of enamel paint, over zinc chromate primer, suitable arrangements for fixing switch disconnector, fuse switches, Voltmeter, Voltmeter Selector switch, Ammeter, Ammeter Selector switch, 3 Nos. of Indicator, 3 Nos. of Toggle switch, 3 Nos. of side lock fuses, 3 Nos. of C.T. Coil etc. The panel board shall include power mat, copper busbar, 3mm thick hylan sheet including internal wiring with provision for interlocking arrangements, copper flat for earthing arrangement linked with shutters and doors. The board shall be mounted on an angle frame of 30mm x 30mm x 6mm with legs. Supplying and fixing of 2 Nos. of TPN 100/125 Amps, 415 V disconnector switch/cubical switch/fuse switch with fuse links complete. (1 No. for E.D. supply and 1 No. for Diesel Generator supply). Supplying and fixing of 2 Nos of 100 Amps, 415 V disconnector fuse switch/TPN Cubical switch with fuse links capacitor motor control complete. (1 number of power capacitor and 1 number of motor control), complete - 15HP to 30HP.		
31.252.1C	Supplying and fixing of 200 Amps capacity cubical wall mounting panel board of size 1400mm x 900mm x 250mm made of 16 gauge CR M.S. sheet painted with two coats of enamel paint, over zinc chromate primer, suitable arrangements for fixing switch disconnector, fuse switches, Voltmeter, Voltmeter Selector switch, Ammeter, Ammeter Selector switch, 3 Nos. of Indicator, 3 Nos. of Toggle switch, 3 Nos. of side lock fuses, 3 Nos. of C.T. Coil etc. The panel board shall include power mat, copper busbar, 3mm thick hylan sheet including internal wiring with provision for interlocking arrangements, copper flat for earthing arrangement linked with shutters and doors. The board shall be mounted on an angle frame of 30mm x 30mm x 6mm with legs. Supplying and fixing of 2 Nos. of TPN 200 Amps, 415 V disconnector switch/cubical switch/fuse switch with fuse links complete. (1 No. for E.D. supply and 1 No. for Diesel Generator supply). Supplying and fixing of 2 Nos of 125 Amps, 415 V disconnector fuse switch/TPN Cubical switch with fuse links capacitor motor control (1 number of power capacitor and 1 number of motor control), complete. -above 30HP	no	61509.11
31.253.1A	Supplying and fixing one set wall mounting / standing type panel board of size 900mm x 300mm x 150mm of M.S. angle (30mm x 30mm x 6mm). The panel should have suitable arrangements for fixing Voltmeter, Voltmeter selector switch, Ammeter, Ammeter selector switch, 3 Nos of Indicator, 3 Nos	no	16533.88

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	of flush type switch, 3 Nos of flush type fuses, 3 Nos of incandescent bulbs, 3 Nos of C.T. Coil etc. including wiring with 4 sqmm and 1.50 sqmm copper wire - 63 Amps TPN main switch.-upto 12.5HP		
31.253.1B	Supplying and fixing one set wall mounting / standing type panel board of size 900mm x 300mm x 150mm of M.S. angle (30mm x 30mm x 6mm). The panel should have suitable arrangements for fixing Voltmeter, Voltmeter selector switch, Ammeter, Ammeter selector switch, 3 Nos of Indicator, 3 Nos of flush type switch, 3 Nos of flush type fuses, 3 Nos of incandescent bulbs, 3 Nos of C.T. Coil etc. including wiring with 4 sqmm and 1.50 sqmm copper wire - 100 Amps TPN main switch.-15HP to 20HP	no	18980.82
31.253.1C	Supplying and fixing one set wall mounting / standing type panel board of size 900mm x 300mm x 150mm of M.S. angle (30mm x 30mm x 6mm). The panel should have suitable arrangements for fixing Voltmeter, Voltmeter selector switch, Ammeter, Ammeter selector switch, 3 Nos of Indicator, 3 Nos of flush type switch, 3 Nos of flush type fuses, 3 Nos of incandescent bulbs, 3 Nos of C.T. Coil etc. including wiring with 4 sqmm and 1.50 sqmm copper wire - 200 Amps TPN main switch.-25HP to 40HP	no	22459.16
31.254.1	Supplying and fixing C.T. metering panel board as per Electricity Department Specification (Drawing enclosed). Panel board of size 1800mm x 900mm x 300mm made of 18 gauge CRMS sheet painted with two coats of enamel paint over Zinc chromate primer with necessary MS base channel. The panel board shall include power mat, copper busbar, 8mm thick Hylan sheet of size 84 x 54cm.	no	27247.76
31.254.2A	Supply and fixing of 200mm dia strainer	Each	8619.75
31.254.2B	Supply and fixing of 300mm dia strainer	Each	9548.74
31.254.2C	Supply and fixing of 400mm dia strainer	Each	10610.02
31.254.3A	Providing and fixing of pressure gauge 0-5 KG/CM2 with necessary valve arrangements	Each	3316.16
31.255.1A	Supplying and fixing of 4KVAR power capacitor for 10 HP	no	1698.63

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	motor complete.		
31.255.1B	Supplying and fixing of 6KVAR power capacitor for 12.5 HP motor complete.	no	2283.34
31.255.1C	Supplying and fixing of 7.5KVAR power capacitor for 15 HP motor complete.	no	2788.37
31.255.1D	Supplying and fixing of 10KVAR power capacitor for 17.5/20 HP motor complete.	no	3629.14
31.255.1E	Supplying and fixing of 12.5KVAR power capacitor for 25 HP motor complete.	no	4441.48
31.255.1F	Supplying and fixing of 15KVAR power capacitor for 30 HP motor complete.	no	5309.28
31.255.1G	Supplying and fixing of 20KVAR power capacitor for 35/40 HP motor complete.	no	6999.37
31.255.1H	Supplying and fixing of 25KVAR power capacitor for 50 HP motor complete.	no	8675.24
31.256.1A	Supplying and fixing of fully automatic air break star-delta starter range for 5A to 13A F.A.S.D. with suitable M.S. angle frame etc., complete.- 5HP to 12.5 HP pumpsets	no	6825.81
31.256.1B	Supplying and fixing of fully automatic air break star-delta starter range for 10A to 23A F.A.S.D. with suitable M.S. angle frame etc., complete.- 15HP to 17.5 HP pumpsets	no	7939.73
31.256.1C	Supplying and fixing of fully automatic air break star-delta starter range for 13A to 25A F.A.S.D. with suitable M.S. angle frame etc., complete.- 20HP to 25HP pumpsets -(ML-1.5)	no	11416.67
31.256.1D	Supplying and fixing of fully automatic air break star-delta starter range for 20A to 33A F.A.S.D. with suitable M.S. angle frame etc., complete.-30 HP pumpsets	no	14431.23
31.256.1E	Supplying and fixing of fully automatic air break star-delta starter range for 23A to 33A F.A.S.D. with suitable M.S. angle frame etc.,complete.- 35 HP pumpsets-(ML2)	no	17444.37

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.256.1F	Supplying and fixing of fully automatic air break star-delta starter range for 28A to 42A F.A.S.D. with suitable M.S. angle frame etc.,complete.- 40 HP to 50 HP pumpsets	no	25884.88
31.256.2A	Supplying and fixing Fully Automatic Auto Transformer Starter (Pedestal Type)) with oil immersed contactors and auto transformer having 50%,65% and 80% tapping with built in start stop push botton and thermal timer adjustable between 3-12 seconds(Relay range in Amps 48-80) - 40 HP pumpsets	Each	95020.75
31.256.2B	Supplying and fixing Fully Automatic Auto Transformer Starter (Pedestal Type)) with oil immersed contactors and auto transformer having 50%,65% and 80% tapping with built in start stop push botton and thermal timer adjustable between 3-12 seconds(Relay range in Amps 48-80) - 50 HP pumpsets	Each	132201.35
31.256.2C	Supplying and fixing Fully Automatic Auto Transformer Starter (Pedestal Type)) with oil immersed contactors and auto transformer having 50%,65% and 80% tapping with built in start stop push botton and thermal timer adjustable between 3-12 seconds(Relay range in Amps 60-100) - 60 HP pumpsets	Each	145429.02
31.256.2D	Supplying and fixing Fully Automatic Auto Transformer Starter (Pedestal Type)) with oil immersed contactors and auto transformer having 50%,65% and 80% tapping with built in start stop push botton and thermal timer adjustable between 3-12 seconds(Relay range in Amps 90-150) - 75 HP pumpsets	Each	187079.55
31.256.2E	Supplying and fixing Fully Automatic Auto Transformer Starter (Pedestal Type)) with oil immersed contactors and auto transformer having 50%,65% and 80% tapping with built in start stop push botton and thermal timer adjustable between 3-12 seconds(Relay range in Amps 90-150) - 100 HP pumpsets	Each	228190.91
31.256.2F	Supplying and fixing Fully Automatic Auto Transformer Starter (Pedestal Type)) with oil immersed contactors and auto transformer having 50%,65% and 80% tapping with built in start stop push botton and thermal timer adjustable between 3-12 seconds(Relay range in Amps 120-200) also included panel mounted with Ammeter and ON-OFF Trip indicating lamps. - 125 HP pumpsets	Each	244901.19
31.256.2G	Supplying and fixing Fully Automatic Auto Transformer Starter (Pedestal Type)) with oil immersed contactors and auto	Each	263294.47

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	transformer having 50%,65% and 80% tapping with built in start stop push button and thermal timer adjustable between 3-12 seconds(Relay range in Amps120-200) also included panel mounted with Ammeter and ON-OFF Trip indicating lamps. - 150 HP pumpsets		
31.257.1	Supplying and fixing of DOL starters 0.5 HP to 5 HP with relay range 0.63 A to 13 A with suitable M.S. angle frame complete.	no	2355.89
31.258.1A	Supplying and fixing of 1x3x4 sqmm (single run) PVC insulated copper submersible flat flexible cable complete.-upto 10HP pumpset.	metre	130.88
31.258.1B	Supplying and fixing of 1x3x6 sqmm (single run) PVC insulated copper submersible flat flexible cable complete.- 12.5HP to 20HP pumpset	metre	179.25
31.258.1C	Supplying and fixing of 1x3x10 sqmm (single run) PVC insulated copper submersible flat flexible cable complete.- above 20HP pumpset	metre	287.38
31.259.1A	Supplying of 3.5/ 4x25 sqmm underground cable complete.- upto 25HP pumpset.	metre	257.49
31.259.1B	Supplying of 3.5/4x50 sqmm underground cable complete.- suitable for (30HP to 40HP pumpset)/(upto 40KVA Genset).	metre	406.88
31.259.1C	Supplying of 3.5x70 sqmm underground cable complete.- 50HP pumpset.	metre	389.80
31.259.1D	Supplying of 3.5x95 sqmm underground cable complete.- suitable for (60HP to 75HP pumpset)/(above 40KVA to 75KVA Genset).	metre	617.43
31.259.1E	Supplying of 3.5x120 sqmm underground cable complete.	metre	654.41
31.259.1F	Supplying of 3.5x150 sqmm underground cable complete.(above 82.5KVA to 125KVA Genset).	metre	890.57
31.259.1G	Supplying of 3.5x185 sqmm underground cable complete.	metre	980.21

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.259.1H	Supplying of 3.5x240 sqmm underground cable complete.- (above 160KVA to 200KVA Genset).	metre	1387.07
31.259.1I	Supplying of 3.5x300 sqmm underground cable complete.(above 250KVA Genset).	metre	1695.78
31.260.1A	Laying of UG cable and providing termination of cable joint with suitable cable gland,cable socket etc., complete - 3.5/4 x 25 sqmm cable.	joint	209.13
31.260.1B	Laying of UG cable and providing termination of cable joint with suitable cable gland,cable socket etc., complete - 3.5/4 x 50 / 3.5/4 x 70 sqmm cable.	joint	274.57
31.260.1C	Laying of UG cable and providing termination of cable joint with suitable cable gland,cable socket etc., complete - 3.5 x 95 sqmm cable.	joint	311.56
31.260.1D	Laying of UG cable and providing termination of cable joint with suitable cable gland,cable socket etc., complete - 3.5 x 120 sqmm cable.	joint	341.43
31.260.1E	Laying of UG cable and providing termination of cable joint with suitable cable gland,cable socket etc. complete - 3.5 x 150 sqmm cable.	joint	406.88
31.260.1F	Laying of UG cable and providing termination of cable joint with suitable cable gland,cable socket etc. complete - 3.5 x 185 sqmm cable.	joint	549.14
31.260.1G	Laying of UG cable and providing termination of cable joint with suitable cable gland,cable socket etc. complete - 3.5 x 240 sqmm cable.	joint	608.89
31.260.1H	Laying of UG cable and providing termination of cable joint with suitable cable gland,cable socket etc. complete - 3.5 x 300 sqmm cable.	joint	816.60
31.261.1	Supplying and fixing of meter board of size 600mmx900mmx150mm on suitable angle frame with suitable water proof plywood 12mm thick for receiving ED supply. The board frame shall be painted and covered on all sides by 16 gauge M.S. sheet and fixed with 3 Nos. of 100 Amps fuse	no	2779.83

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	carrier (Havells/Standard/Anchor make) with screws etc., complete.		
31.262.1	Supplying and fixing of teak wood aerial board with 100 Amps HRC fuse base and fuse link and suitable post clamp to hold the G.I. Pipe with electric post including bolts and nuts etc., complete.	no	3230.81
31.263.1	Making earth pit of G.I. pipe for earthing in earth pit with 40mm dia. G.I. pipe medium class of length 3.05m perforated with 46 Nos of 12mm dia. holes, pipe lowered in bore holes of 150mm dia. and filled in with charcoal and salt in alternative layer of 300mm, the top of G.I. pipe shall be clamped. Earth pit shall be provided with 60cm dia precast ring with 60cm depth alround,covered with R.C.C. precast slab etc. as per I.E. standards.	no	4701.39
31.264.1A	Supplying and fixing of copper wire 8 SWG (4 mm dia) for earthing arrangements including bolt and nuts etc., complete.	metre	83.22
31.264.1B	Supplying and fixing of G.I. wire 8 SWG (4 mm dia) for earthing arrangements including bolt and nuts etc.,	metre	12.24
31.265.1	Providing and fixing 50 mm dia GI pipe (Class B) conforming to IS 1239 (Part 1:1990) with GI fittings including trenching, refilling etc., complete for UG cable duct.	metre	650.62
31.266.1	Supplying and fixing of pole clamp to hold the G.I. Pipe with electric post.	set	320.10
31.267.1A	Supplying and fixing of copper flat (25 x 3mm) for earthing arrangements including bolts and nuts etc.	metre	876.34
31.267.1B	Supplying and fixing of G.I. flat (25 x 6mm) for earthing arrangements including bolts and nuts etc.	metre	132.31
31.268.1A	Supplying,fixing and lowering into the borewell high tensile threaded PVC column pipes which are to be connected to the submersible pump,including labour charges,jointing materials etc.,complete.-50 mm dia	metre	536.33
31.268.1B	Supplying,fixing and lowering into the borewell high tensile threaded PVC column pipes which are to be connected to the	metre	607.46

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	submersible pump,including labour charges,jointing materials etc.,complete.-65 mm dia		
31.268.1C	Supplying,fixing and lowering into the borewell high tensile threaded PVC column pipes which are to be connected to the submersible pump,including labour charges,jointing materials etc.,complete.-75/80 mm dia	metre	827.98
31.268.1D	Supplying,fixing and lowering into the borewell high tensile threaded PVC column pipes which are to be connected to the submersible pump,including labour charges,jointing materials etc.,complete.-100 mm dia	metre	1156.60
31.269.1A	Supplying and fixing of C.I. adopter which is to be connected to submersible pump delivery pipe.-50 mm dia	no	1285.23
31.269.1B	Supplying and fixing of C.I. adopter which is to be connected to submersible pump delivery pipe.-65 mm dia	no	1646.91
31.269.1C	Supplying and fixing of C.I. adopter which is to be connected to submersible pump delivery pipe.-75/80 mm dia	no	2225.60
31.269.1D	Supplying and fixing of C.I. adopter which is to be connected to submersible pump delivery pipe.-100 mm dia	no	3190.11
31.270.1	Supplying and laying of 16mm dia nylon rope for holding of motors.	metre	133.72
31.271.1	Supplying and laying of 40mm dia. PVC pipe (Class 3 - PN 0.6 Mpa) conforming to IS 4985 : 2000 for inserting submersible cable from borewell to starter.	metre	368.46
31.272.1	Supply and fixing of 80/100mm dia. M.S. erection clamps of size 80mmx12mm with bolts, nuts, washer etc., complete.	no	869.24
31.275.1A	Laying of under ground cable direct in ground including metal road cutting, excavation of earth upto a depth of 45 cm, fine aggregate cushion of 10cm thick, brick protection, back filling etc, complete - upto 50 sqmm	metre	534.47
31.275.1A	Laying of under ground cable direct in ground including metal road cutting,excavation of earth, sand cushion, brick protection, back filling etc., complete. - upto 50 sqmm	metre	98.00

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.275.1B	Laying of under ground cable direct in ground including metal road cutting, excavation of earth upto a depth of 60 cm, fine aggregate cushion of 10cm thick, brick protection, back filling etc, coplete - above 50 sqmm	metre	569.62
31.275.1B	Laying of under ground cable direct in ground including metal road cutting, excavation of earth, sand cushion, brick protection, back filling etc., complete. - above 50 sqmm	metre	100.00
31.275.1C	Laying of under ground cable direct in ground including mud road cutting, excavation of earth upto a depth of 45 cm, fine aggregate cushion of 10cm thick, brick protection, back filling etc, coplete - upto 50 sqmm	metre	307.86
31.275.1C	Laying of under ground cable direct in ground including mud road cutting,excavation of earth, sand cushion, brick protection, back filling etc., complete. - upto 50 sqmm	metre	62.00
31.275.1D	Laying of under ground cable direct in ground including mud road cutting, excavation of earth above depth of 50 cm, fine aggregate cushion of 10cm thick, brick protection, back filling etc, coplete - above 50 sqmm	metre	317.82
31.275.1D	Laying of under ground cable direct in ground including metal road cutting,excavation of earth, sand cushion, brick protection, back filling etc., complete. - above 50 sqmm	metre	64.00
31.276.1A	Supplying of electricallly operated horizontal split casing pump and motor make AC 3 phase,415 volts,50 HZ,1500 RPM,squirrel cage motor.The pump shall have bronze impeller,high grade steel shaft,flexible coupling set,including the cost of common,M.S. Base plate,foundation bolts,etc.complete with suitable suction and delivery sizes.(15 HP centrifugal motor and pumpset).	no	231633.68
31.276.1B	Supplying of electricallly operated horizontal split casing pump and motor make AC 3 phase,415 volts,50 HZ,1500 RPM,squirrel cage motor.The pump shall have bronze impeller,high grade steel shaft,flexible coupling set,including the cost of common,M.S. Base plate,foundation bolts,etc.complete with suitable suction and delivery sizes.(20 HP centrifugal motor and pumpset).	no	255727.46

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.276.1C	Supplying of electricallly operated horizontal split casing pump and motor make AC 3 phase,415 volts,50 HZ,1500 RPM,squirrel cage motor.The pump shall have bronze impeller,high grade steel shaft,flexible coupling set,including the cost of common,M.S. Base plate,foundation bolts,etc.complete with suitable suction and delivery sizes.(25 HP centrifugal motor and pumpset).	no	294165.67
31.276.1D	Supplying of electricallly operated horizontal split casing pump and motor make AC 3 phase,415 volts,50 HZ,1500 RPM,squirrel cage motor.The pump shall have bronze impeller,high grade steel shaft,flexible coupling set,including the cost of common,M.S. Base plate,foundation bolts,etc.complete with suitable suction and delivery sizes.(30 HP centrifugal motor and pumpset).	no	354683.22
31.276.1E	Supplying of electricallly operated horizontal split casing pump and motor make AC 3 phase,415 volts,50 HZ,1500 RPM,squirrel cage motor.The pump shall have bronze impeller,high grade steel shaft,flexible coupling set,including the cost of common,M.S. Base plate,foundation bolts,etc.complete with suitable suction and delivery sizes.(40 HP centrifugal motor and pumpset).	no	438254.57
31.276.1F	Supplying of electricallly operated horizontal split casing pump and motor make AC 3 phase,415 volts,50 HZ,1500 RPM,squirrel cage motor.The pump shall have bronze impeller,high grade steel shaft,flexible coupling set,including the cost of common,M.S. Base plate,foundation bolts,etc.complete with suitable suction and delivery sizes.(50 HP centrifugal motor and pumpset).	no	487822.08
31.276.1G	Supplying of electricallly operated horizontal split casing pump and motor make AC 3 phase,415 volts,50 HZ,1500 RPM,squirrel cage motor.The pump shall have bronze impeller,high grade steel shaft,flexible coupling set,including the cost of common,M.S. Base plate,foundation bolts,etc.complete with suitable suction and delivery sizes.(60 HP centrifugal motor and pumpset).	no	508081.84
31.276.1H	Supplying of electricallly operated horizontal split casing pump and motor make AC 3 phase,415 volts,50 HZ,1500 RPM,squirrel cage motor.The pump shall have bronze impeller,high grade steel shaft,flexible coupling set,including the cost of common,M.S. Base plate,foundation	no	634010.79

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	bolts,etc.complete with suitable suction and delivery sizes.(75 HP centrifugal motor and pumpset).		
31.276.1I	Supplying of electricallly operated horizontal split casing pump and motor make AC 3 phase,415 volts,50 HZ,1500 RPM,squirrel cage motor.The pump shall have bronze impeller,high grade steel shaft,flexible coupling set,including the cost of common,M.S. Base plate,foundation bolts,etc.complete with suitable suction and delivery sizes.(100 HP centrifugal motor and pumpset).	no	762126.33
31.277.1A	Supplying and fixing of 20 X 20 mm size vaccum pump) make 3 phase monoblock motor and pumpset complete.-0.75 KW/1 HP	no	35002.55
31.277.1B	Supplying and fixing of 25 X 25 mm size vaccum pump) make 3 phase monoblock motor and pumpset complete.-2.2 KW/3 HP	no	69485.84
31.277.1C	Supplying and fixing of 40 X 40 mm size vaccum pump) make 3 phase monoblock motor and pumpset complete.-3.7 KW/5 HP	no	181992.20
31.277.2A	Providing and erecting lightning arrestor with required earthing which includes the cost of 25mmX6mm thick copper plate copper spike to earth pits fitted over non conductor of electric current with an interval of 90 cm from ground level to top the structure,copper spike of standard size-2 nos of earth pit of 0.3m dia borehole lowered with 40mm dia G.I class B pipe 3.05 m deep (perforated and jointed with G.I funnel) with charcoal and salt covered with 0.45 m dia circular precast ring of 0.6m deep with circular precast cover slab etc.	Each	23418.88
31.277.2B	Providing and fixing 140 mm dia uPVC pipe of length 60 cm including uPVC cowl 140 mm dia etc, complete.	Each	248.68
31.277.2C	Providing chemical injection treatment in the form of pressure grouting to side walls of OHT/sump CM 1:3 curing etc,complete.	Each	165.02
31.278.1A	Erection,testing and commissioning of the centrifugal motor pumpset with pipe fittings,etc.complete.- 15 HP to 25 HP motor.	no	8415.83

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.278.1B	Erection,testing and commissioning of the centrifugal motor pumpset with pipe fittings,etc.complete.- 30 HP to 50 HP motor.	no	11221.10
31.278.1C	Erection, testing and commissioning of the centrifugal motor pumpset with pipe fittings, etc complete- 60HP to 75 HP motor	no	15396.33
31.278.1C	Erection,testing and commissioning of the centrifugal motor pumpset with pipe fittings,etc.complete.- 60 HP to 75 HP motor.	no	16831.65
31.278.1D	Erection, testing and commissioning of the centrifugal motor pumpset with pipe fittings, etc complete- 100 HP motor	no	15396.33
31.278.1D	Erection,testing and commissioning of the centrifugal motor pumpset with pipe fittings,etc.complete.- 100 HP motor.	no	28052.75
31.279.1A	Erection, testing and commissioning of motor and pumpset complete.The rate includes obtaining electricity service connection from Electricity Department also.	job	5000.00
31.279.1B	Testing including transporation of standby submersible motor and pumpset.	job	400.00
31.280.1E	Supplying of 3 phase, 415 volts, 50 cycles, 0.8 power factor for electric starting diesel generator comprising the following units:- water cooled and shall be of multi stroke, multi cylinders, cold starting, developing not less than 105 BHP under normal temperature and pressure. The engine shall conform to I.S. 10002 with latest amendments. It shall be capable of taking 10% over load for one hour in every 12 hours of continous operation including 6 Nos. of anti vibration pads.The engine shall be complete with the following accessories:Electrical starting provision, engine cooling fan, fuel and lubricating oil filters, oil bath, air filter, lub oil pressure gauge 200 litres capacity fuel tank mounted with engine, hour meter with exhaust manifold, flexible pipe, 12 /24 volts electric starting equipment complete with starter, alternator and one 12 volts with 21 plates battery of make (with Guarantee cards) of adequate capacity and low lubricating oil pressure/high temperature varying engine shut down devices.The Acoustic enclosure shall have the following: Acoustic enclosure shall be powder coated and fabricated out of 16 SWG CRCA MS sheet. The silent canopy shall be of nut	no	722786.15

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	bolt type construction. Powder coating is done after seven tank surface preparation process of sheet metal. Canopy panel and doors shall have inside lining of FIRE-RETARDANT foam/Rock Wool as acoustic material. Four hinged doors shall be provided to canopy, one door shall have glass window for control panel. Base frame is fabricated either in ISMC channel or in sheet metal. The base frame is rugged in construction and designed for mounting engine and alternator, with cross members mounted on AVM. The base frame shall have provision for mounting of acoustic enclosure and it is having provision of lifting hook for convenient lifting of complete set, i.e. along with canopy, engine and alternator. Fuel tank shall be fabricated out of 14 SWG CRCA MS sheet and is part of base frame. It is duly painted and fitted with inlet and outlet connections of suitable capacity. The Acoustic enclosure shall be Type test approved as per CPCB norms. The average sound level, when measure in green field condition (ISO m3744 OR 8528 PT 10) at 1-meter distance from all four sides shall be less than 75-dBA average or as per CPCB norms. The average stabilized hot air temperature rise with in the canopy is maintained with in 10 C over and above ambient temperature. Acoustic enclosure is suitable for Outdoor / Indoor installation. Lockable doors shall be provided. Lockable fuel filling arrangement to be provided external to the canopy. Residential Silencer is housed in the canopy. The exhaust gasses shall be taken out through a suitable flexible pipe to prevent any back pressure on the engine. Base frame sturdy, fabricated welded construction, channel iron / sheet metal base frame for mounting the above engine and alternator. Standard Tools and Spares: Double ended spanners complete set (small and big size sets) - 12 Nos. Screw driver (30cm long) .Screw driver (45cm long) .Cutting plyer. Diesel filter with elements - 2 Nos. Oil filter with elements - 1 No. All the above accessories with complete set. Alternator The alternator shall be of self excited, self regulated, screen protected, drip proof alternator with static excitation system capable of developing 75 KVA at 0.8 power factor 415 volts, 3 phase, 50 cycles, generally conforming to I.S.4722 under normal condition, the voltage regulation will be plus or minus 5% of rated voltage. It shall be with end shield/ball roller bearings complete. Control Panel A wall/pedestal mounting (cubical type) fabricated sheet steel construction suitable for manual operation, rated for system output incorporating the following devices/instruments. The panel is made of 1.6mm sheet with one/two hinged front door, bolted back totally enclosed and vermine proof. It shall be with all electrical connections and internal copper wiring with proper color codings for internal wiring. All control equipments and indicating instruments shall be mounted on the		

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	control panel. The control panel shall have the following equipments:1 No. Amps/Volt/Frequency meter (96mm x 96 mm) 3 Nos. of suitable current transformers2 Nos. of suitable selector switches for voltmeter and ammeter main switch rotary type on/off pilot lamp .1 No. input terminal board.1 No. out put terminal board1 No. Kilowatt hour meter (62.5 KVA and above)1 No. MCCB of suitable capacity -75 KVA / 60 KW Generator set (Water cooled)		
31.280.1F	Supplying of 3 phase, 415 volts, 50 cycles, 0.8 power factor for electric starting diesel generator comprising the following units water cooled and shall be of multi stroke, multi cylinders, cold starting, developing not less than105BHP under normal temperature and pressure. The engine shall conform to I.S. 10002 with latest amendments. It shall be capable of taking 10% over load for one hour in every 12 hours of continous operation including 6 Nos. of anti vibration pads.The engine shall be complete with the following accessories:Electrical starting provision, engine cooling fan, fuel and lubricating oil filters, oil bath, air filter, lub oil pressure gauge 200 litres capacity fuel tank mounted with engine, hour meter with exhaust manifold, flexible pipe, 12 /24 volts electric starting equipment complete with starter, alternator and one 12 volts with 21 plates battery of make (with Guarantee cards) of adequate capacity and low lubricating oil pressure/high temperature varying engine shut down devices.The Acoustic enclosure shall have the following: Acoustic enclosure shall be powder coated and fabricated out of 16 SWG CRCA MS sheet. The silent canopy shall be of nut bolt type construction. Powder coating is done after seven tank surface preparation process of sheet metal. Canopy panel and doors shall have inside lining of FIRE-RETARDANT foam/Rock Wool as acoustic material. Four hinged doors shall be provided to canopy, one door shall have glass window for control panel.Base frame is fabricated either in ISMC channel or in sheet metal. The base frame is rugged in construction and designed for mounting engine and alternator, with cross members mounted on AVM. The base frame shall have provision for mounting of acoustic enclosure and it is having provision of lifting hook for convenient lifting of complete set, i.e. along with canopy, engine and alternator.Fuel tank shall be fabricated out of 14 SWG CRCA MS sheet and is part of base frame. It is duly painted and fitted with inlet and outlet connections of suitable capacity.The Acoustic enclosure shall be Type test approved as per CPCB norms. The average sound level, when measure in green field condition (ISO m3744 OR 8528 PT 10) at 1-meter distance from all four sides shall be	no	735003.76

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	less than 75-dBA average or as per CPCB norms. The average stabilized hot air temperature rise with in the canopy is maintained with in 10 C over and above ambient temperature. Acoustic enclosure is suitable for Outdoor / Indoor installation. Lockable doors shall be provided. Lockable fuel filling arrangement to be provided external to the canopy. Residential Silencer is housed in the canopy. The exhaust gasses shall be taken out through a suitable flexible pipe to prevent any back pressure on the engine. Base frame sturdy, fabricated welded construction, channel iron / sheet metal base frame for mounting the above engine and alternator. Standard Tools and Spares: Double ended spanners complete set (small and big size sets) - 12 Nos. Screw driver (30cm long) .Screw driver (45cm long) .Cutting plyer. Diesel filter with elements - 2 Nos. Oil filter with elements - 1 No. All the above accessories with complete set. Alternator The alternator shall be of self excited, self regulated, screen protected, drip proof alternator with static excitation system capable of developing 82.5KVA at 0.8 power factor 415 volts, 3 phase, 50 cycles, generally conforming to I.S.4722 under normal condition, the voltage regulation will be plus or minus 5% of rated voltage. It shall be with end shield/ball roller bearings complete. Control Panel A wall/pedestal mounting (cubical type) fabricated sheet steel construction suitable for manual operation, rated for system output incorporating the following devices/instruments. The panel is made of 1.6mm sheet with one/two hinged front door, bolted back totally enclosed and vermine proof. It shall be with all electrical connections and internal copper wiring with proper color codings for internal wiring. All control equipments and indicating instruments shall be mounted on the control panel. The control panel shall have the following equipments: 1 No. Amps/Volt/Frequency meter (96mm x 96 mm) 3 Nos. of suitable current transformers 2 Nos. of suitable selector switches for voltmeter and ammeter main switch rotary type on/off pilot lamp .1 No. input terminal board. 1 No. out put terminal board 1 No. Kilowatt hour meter (62.5 KVA and above) 1 No. MCCB of suitable capacity -82.5 KVA / 66 KW Generator set (Water cooled)		
31.280.1G	Supplying of 3 phase, 415 volts, 50 cycles, 0.8 power factor for electric starting diesel generator comprising the following units:- water cooled and shall be of multi stroke, multi cylinders, cold starting, developing not less than 127BHP under normal temperature and pressure. The engine shall conform to I.S. 10002 with latest amendments. It shall be capable of taking 10% over load for one hour in every 12 hours of continous operation including 6 Nos. of anti vibration pads. The	no	853431.14

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	engine shall be complete with the following accessories:Electrical starting provision, engine cooling fan, fuel and lubricating oil filters, oil bath, air filter, lub oil pressure gauge 250 litres capacity fuel tank mounted with engine, hour meter with exhaust manifold, flexible pipe, 12 /24 volts electric starting equipment complete with starter, alternator and two numbers of 12 volts with 21plates battery of make (with Guarantee cards) of adequate capacity and low lubricating oil pressure/high temperature varying engine shut down devices.The Acoustic enclosure shall have the following: Acoustic enclosure shall be powder coated and fabricated out of 16 SWG CRCA MS sheet. The silent canopy shall be of nut bolt type construction. Powder coating is done after seven tank surface preparation process of sheet metal. Canopy panel and doors shall have inside lining of FIRE-RETARDANT foam/Rock Wool as acoustic material. Four hinged doors shall be provided to canopy, one door shall have glass window for control panel.Base frame is fabricated either in ISMC channel or in sheet metal. The base frame is rugged in construction and designed for mounting engine and alternator, with cross members mounted on AVM. The base frame shall have provision for mounting of acoustic enclosure and it is having provision of lifting hook for convenient lifting of complete set, i.e. along with canopy, engine and alternator.Fuel tank shall be fabricated out of 14 SWG CRCA MS sheet and is part of base frame. It is duly painted and fitted with inlet and outlet connections of suitable capacity.The Acoustic enclosure shall be Type test approved as per CPCB norms. The average sound level, when measure in green field condition (ISO m3744 OR 8528 PT 10) at 1-meter distance from all four sides shall be less than 75-dBA average or as per CPCB norms. The average stabilized hot air temperature rise with in the canopy is maintained with in 10 C over and above ambient temperature.Acoustic enclosure is suitable for Outdoor / Indoor installation. Lockable doors shall be provided. Lockable fuel filling arrangement to be provided external to the canopy. Residential Silencer is housed in the canopy. The exhaust gasses shall be taken out through a suitable flexible pipe to prevent any back pressure on the engine.Base frame sturdy, fabricated welded construction, channel iron / sheet metal base frame for mounting the above engine and alternator.Standard Tools and Spares:Double ended spanners complete set (small and big size sets) - 12 Nos. Screw driver (30cm long) .Screw driver (45cm long) .Cutting plyer.Diesel filter with elements - 2 Nos.Oil filter with elements - 1 No.All the above accessories with complete set.AlternatorThe alternator shall be of self excited, self regulated, screen protected, drip proof alternator with static excitation system capable of developing 100 KVA		

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	at 0.8 power factor 415 volts, 3 phase, 50 cycles, generally conforming to I.S.4722 under normal condition, the voltage regulation will be plus or minus 5% of rated voltage. It shall be with end shield/ball roller bearings complete. Control PanelA wall/pedestal mounting (cubical type) fabricated sheet steel construction suitable for manual operation, rated for system output incorporating the following devices/instruments. The panel is made of 1.6mm sheet with one/two hinged front door, bolted back totally enclosed and vermine proof. It shall be with all electrical connections and internal copper wiring with proper color codings for internal wiring. All control equipments and indicating instruments shall be mounted on the control panel. The control panel shall have the following equipments:1 No. Amps/Volt/Frequency meter (96mm x 96 mm) 3 Nos. of suitable current transformers2 Nos. of suitable selector switches for voltmeter and ammeter main switch rotary type on/off pilot lamp .1 No. input terminal board.1 No. out put terminal board1 No. Kilowatt hour meter (62.5 KVA and above)1 No. MCCB of suitable capacity -100 KVA / 80 KW Generator set (Water cooled)		
31.280.1H	Supplying of 3 phase, 415 volts, 50 cycles, 0.8 power factor for electric starting diesel generator comprising the following units:- water cooled and shall be of multi stroke, multi cylinders, cold starting, developing not less than154 BHP under normal temperature and pressure. The engine shall conform to I.S. 10002 with latest amendments. It shall be capable of taking 10% over load for one hour in every 12 hours of continous operation including 6 Nos. of anti vibration pads.The engine shall be complete with the following accessories:Electrical starting provision, engine cooling fan, fuel and lubricating oil filters, oil bath, air filter, lub oil pressure gauge 250 litres capacity fuel tank mounted with engine, hour meter with exhaust manifold, flexible pipe, 12 /24 volts electric starting equipment complete with starter, alternator and two numbers of 12 volts with 21 plates battery of make (with Guarantee cards) of adequate capacity and low lubricating oil pressure/high temperature varying engine shut down devices.The Acoustic enclosure shall have the following: Acoustic enclosure shall be powder coated and fabricated out of 16 SWG CRCA MS sheet. The silent canopy shall be of nut bolt type construction. Powder coating is done after seven tank surface preparation process of sheet metal. Canopy panel and doors shall have inside lining of FIRE-RETARDANT foam/Rock Wool as acoustic material. Four hinged doors shall be provided to canopy, one door shall have glass window for control panel.Base frame is fabricated either in ISMC channel	no	897562.75

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	or in sheet metal. The base frame is rugged in construction and designed for mounting engine and alternator, with cross members mounted on AVM. The base frame shall have provision for mounting of acoustic enclosure and it is having provision of lifting hook for convenient lifting of complete set, i.e. along with canopy, engine and alternator. Fuel tank shall be fabricated out of 14 SWG CRCA MS sheet and is part of base frame. It is duly painted and fitted with inlet and outlet connections of suitable capacity. The Acoustic enclosure shall be Type test approved as per CPCB norms. The average sound level, when measure in green field condition (ISO m3744 OR 8528 PT 10) at 1-meter distance from all four sides shall be less than 75-dBA average or as per CPCB norms. The average stabilized hot air temperature rise with in the canopy is maintained with in 10 C over and above ambient temperature. Acoustic enclosure is suitable for Outdoor / Indoor installation. Lockable doors shall be provided. Lockable fuel filling arrangement to be provided external to the canopy. Residential Silencer is housed in the canopy. The exhaust gasses shall be taken out through a suitable flexible pipe to prevent any back pressure on the engine. Base frame sturdy, fabricated welded construction, channel iron / sheet metal base frame for mounting the above engine and alternator. Standard Tools and Spares: Double ended spanners complete set (small and big size sets) - 12 Nos. Screw driver (30cm long) .Screw driver (45cm long) .Cutting plyer. Diesel filter with elements - 2 Nos. Oil filter with elements - 1 No. All the above accessories with complete set. Alternator The alternator shall be of self excited, self regulated, screen protected, drip proof alternator with static excitation system capable of developing 125KVA at 0.8 power factor 415 volts, 3 phase, 50 cycles, generally conforming to I.S.4722 under normal condition, the voltage regulation will be plus or minus 5% of rated voltage. It shall be with end shield/ball roller bearings complete. Control Panel A wall/pedestal mounting (cubical type) fabricated sheet steel construction suitable for manual operation, rated for system output incorporating the following devices/instruments. The panel is made of 1.6mm sheet with one/two hinged front door, bolted back totally enclosed and vermine proof. It shall be with all electrical connections and internal copper wiring with proper color codings for internal wiring. All control equipments and indicating instruments shall be mounted on the control panel. The control panel shall have the following equipments: 1 No. Amps/Volt/Frequency meter (96mm x 96 mm) 3 Nos. of suitable current transformers 2 Nos. of suitable selector switches for voltmeter and ammeter main switch rotary type on/off pilot lamp .1 No. input terminal board. 1 No. out put terminal board 1 No. Kilowatt hour meter (62.5 KVA		

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	and above)1 No. MCCB of suitable capacity -125 KVA / 100 KW Generator set (Water cooled)		
31.280.1I	Supplying of 3 phase, 415 volts, 50 cycles, 0.8 power factor for electric starting diesel generator comprising the following units:- water cooled and shall be of multi stroke, multi cylinders, cold starting, developing not less than 198BHP under normal temperature and pressure. The engine shall conform to I.S. 10002 with latest amendments. It shall be capable of taking 10% over load for one hour in every 12 hours of continuous operation including 6 Nos. of anti vibration pads. The engine shall be complete with the following accessories: Electrical starting provision, engine cooling fan, fuel and lubricating oil filters, oil bath, air filter, lub oil pressure gauge 350 litres capacity fuel tank mounted with engine, hour meter with exhaust manifold, flexible pipe, 12 /24 volts electric starting equipment complete with starter, alternator and two numbers of 12 volts with 25 plates battery of make (with Guarantee cards) of adequate capacity and low lubricating oil pressure/high temperature varying engine shut down devices. The Acoustic enclosure shall have the following: Acoustic enclosure shall be powder coated and fabricated out of 16 SWG CRCA MS sheet. The silent canopy shall be of nut bolt type construction. Powder coating is done after seven tank surface preparation process of sheet metal. Canopy panel and doors shall have inside lining of FIRE-RETARDANT foam/Rock Wool as acoustic material. Four hinged doors shall be provided to canopy, one door shall have glass window for control panel. Base frame is fabricated either in ISMC channel or in sheet metal. The base frame is rugged in construction and designed for mounting engine and alternator, with cross members mounted on AVM. The base frame shall have provision for mounting of acoustic enclosure and it is having provision of lifting hook for convenient lifting of complete set, i.e. along with canopy, engine and alternator. Fuel tank shall be fabricated out of 14 SWG CRCA MS sheet and is part of base frame. It is duly painted and fitted with inlet and outlet connections of suitable capacity. The Acoustic enclosure shall be Type test approved as per CPCB norms. The average sound level, when measure in green field condition (ISO m3744 OR 8528 PT 10) at 1-meter distance from all four sides shall be less than 75-dBA average or as per CPCB norms. The average stabilized hot air temperature rise with in the canopy is maintained with in 10 C over and above ambient temperature. Acoustic enclosure is suitable for Outdoor / Indoor installation. Lockable doors shall be provided. Lockable fuel filling arrangement to be provided external to the canopy.	no	1160598.29

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	Residential Silencer is housed in the canopy. The exhaust gasses shall be taken out through a suitable flexible pipe to prevent any back pressure on the engine. Base frame sturdy, fabricated welded construction, channel iron / sheet metal base frame for mounting the above engine and alternator. Standard Tools and Spares: Double ended spanners complete set (small and big size sets) - 12 Nos. Screw driver (30cm long) .Screw driver (45cm long) .Cutting plyer. Diesel filter with elements - 2 Nos. Oil filter with elements - 1 No. All the above accessories with complete set. Alternator The alternator shall be of self excited, self regulated, screen protected, drip proof alternator with static excitation system capable of developing 160 KVA at 0.8 power factor 415 volts, 3 phase, 50 cycles, generally conforming to I.S. 4722 under normal condition, the voltage regulation will be plus or minus 5% of rated voltage. It shall be with end shield/ball roller bearings complete. Control Panel A wall/pedestal mounting (cubical type) fabricated sheet steel construction suitable for manual operation, rated for system output incorporating the following devices/instruments. The panel is made of 1.6mm sheet with one/two hinged front door, bolted back totally enclosed and vermin proof. It shall be with all electrical connections and internal copper wiring with proper color codings for internal wiring. All control equipments and indicating instruments shall be mounted on the control panel. The control panel shall have the following equipments: 1 No. Amps/Volt/Frequency meter (96mm x 96 mm) 3 Nos. of suitable current transformers 2 Nos. of suitable selector switches for voltmeter and ammeter main switch rotary type on/off pilot lamp .1 No. input terminal board. 1 No. output terminal board 1 No. Kilowatt hour meter (62.5 KVA and above) 1 No. MCCB of suitable capacity -160 KVA / 128KW Generator set (Water cooled)		
31.280.1J	Supplying of 3 phase, 415 volts, 50 cycles, 0.8 power factor for electric starting diesel generator comprising the following units:- water cooled and shall be of multi stroke, multi cylinders, cold starting, developing not less than 254 BHP under normal temperature and pressure. The engine shall conform to I.S. 10002 with latest amendments. It shall be capable of taking 10% over load for one hour in every 12 hours of continuous operation including 6 Nos. of anti vibration pads. The engine shall be complete with the following accessories: Electrical starting provision, engine cooling fan, fuel and lubricating oil filters, oil bath, air filter, lub oil pressure gauge 350 litres capacity fuel tank mounted with engine, hour meter with exhaust manifold, flexible pipe, 12 /24 volts electric starting equipment complete with starter,	no	1406449.8 1

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	alternator and two numbers of 12 volts with 25 plates battery of make (with Guarantee cards) of adequate capacity and low lubricating oil pressure/high temperature varying engine shut down devices. The Acoustic enclosure shall have the following: Acoustic enclosure shall be powder coated and fabricated out of 16 SWG CRCA MS sheet. The silent canopy shall be of nut bolt type construction. Powder coating is done after seven tank surface preparation process of sheet metal. Canopy panel and doors shall have inside lining of FIRE-RETARDANT foam/Rock Wool as acoustic material. Four hinged doors shall be provided to canopy, one door shall have glass window for control panel. Base frame is fabricated either in ISMC channel or in sheet metal. The base frame is rugged in construction and designed for mounting engine and alternator, with cross members mounted on AVM. The base frame shall have provision for mounting of acoustic enclosure and it is having provision of lifting hook for convenient lifting of complete set, i.e. along with canopy, engine and alternator. Fuel tank shall be fabricated out of 14 SWG CRCA MS sheet and is part of base frame. It is duly painted and fitted with inlet and outlet connections of suitable capacity. The Acoustic enclosure shall be Type test approved as per CPCB norms. The average sound level, when measure in green field condition (ISO m3744 OR 8528 PT 10) at 1-meter distance from all four sides shall be less than 75-dBA average or as per CPCB norms. The average stabilized hot air temperature rise with in the canopy is maintained with in 10 C over and above ambient temperature. Acoustic enclosure is suitable for Outdoor / Indoor installation. Lockable doors shall be provided. Lockable fuel filling arrangement to be provided external to the canopy. Residential Silencer is housed in the canopy. The exhaust gasses shall be taken out through a suitable flexible pipe to prevent any back pressure on the engine. Base frame sturdy, fabricated welded construction, channel iron / sheet metal base frame for mounting the above engine and alternator. Standard Tools and Spares: Double ended spanners complete set (small and big size sets) - 12 Nos. Screw driver (30cm long) .Screw driver (45cm long) .Cutting plyer. Diesel filter with elements - 2 Nos. Oil filter with elements - 1 No. All the above accessories with complete set. Alternator The alternator shall be of self excited, self regulated, screen protected, drip proof alternator with static excitation system capable of developing 200 KVA at 0.8 power factor 415 volts, 3 phase, 50 cycles, generally conforming to I.S.4722 under normal condition, the voltage regulation will be plus or minus 5% of rated voltage. It shall be with end shield/ball roller bearings complete. Control Panel A wall/pedestal mounting (cubical type) fabricated sheet steel construction suitable for manual operation, rated for		

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	system output incorporating the following devices/instruments. The panel is made of 1.6mm sheet with one/two hinged front door, bolted back totally enclosed and vermine proof. It shall be with all electrical connections and internal copper wiring with proper color codings for internal wiring. All control equipments and indicating instruments shall be mounted on the control panel. The control panel shall have the following equipments:1 No. Amps/Volt/Frequency meter (96mm x 96 mm) 3 Nos. of suitable current transformers2 Nos. of suitable selector switches for voltmeter and ammeter main switch rotary type on/off pilot lamp .1 No. input terminal board.1 No. out put terminal board1 No. Kilowatt hour meter (62.5 KVA and above)1 No. MCCB of suitable capacity -200 KVA / 160 KW Generator set (Water cooled)		
31.280.1K	Supplying of 3 phase, 415 volts, 50 cycles, 0.8 power factor for electric starting diesel generator comprising the following units:- water cooled and shall be of multi stroke, multi cylinders, cold starting, developing not less than 309 BHP under normal temperature and pressure. The engine shall conform to I.S. 10002 with latest amendments. It shall be capable of taking 10% over load for one hour in every 12 hours of continous operation including 6 Nos. of anti vibration pads.The engine shall be complete with the following accessories:Electrical starting provision, engine cooling fan, fuel and lubricating oil filters, oil bath, air filter, lub oil pressure gauge 400 litres capacity fuel tank mounted with engine, hour meter with exhaust manifold, flexible pipe, 12 /24 volts electric starting equipment complete with starter, alternator and two numbers of 12 volts with 25 plates battery of make (with Guarantee cards) of adequate capacity and low lubricating oil pressure/high temperature varying engine shut down devices.The Acoustic enclosure shall have the following: Acoustic enclosure shall be powder coated and fabricated out of 16 SWG CRCA MS sheet. The silent canopy shall be of nut bolt type construction. Powder coating is done after seven tank surface preparation process of sheet metal. Canopy panel and doors shall have inside lining of FIRE-RETARDANT foam/Rock Wool as acoustic material. Four hinged doors shall be provided to canopy, one door shall have glass window for control panel.Base frame is fabricated either in ISMC channel or in sheet metal. The base frame is rugged in construction and designed for mounting engine and alternator, with cross members mounted on AVM. The base frame shall have provision for mounting of acoustic enclosure and it is having provision of lifting hook for convenient lifting of complete set, i.e. along with canopy, engine and alternator.Fuel tank shall be	no	1689564.4 4

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	fabricated out of 14 SWG CRCA MS sheet and is part of base frame. It is duly painted and fitted with inlet and outlet connections of suitable capacity. The Acoustic enclosure shall be Type test approved as per CPCB norms. The average sound level, when measure in green field condition (ISO m3744 OR 8528 PT 10) at 1-meter distance from all four sides shall be less than 75-dBA average or as per CPCB norms. The average stabilized hot air temperature rise with in the canopy is maintained with in 10 C over and above ambient temperature. Acoustic enclosure is suitable for Outdoor / Indoor installation. Lockable doors shall be provided. Lockable fuel filling arrangement to be provided external to the canopy. Residential Silencer is housed in the canopy. The exhaust gasses shall be taken out through a suitable flexible pipe to prevent any back pressure on the engine. Base frame sturdy, fabricated welded construction, channel iron / sheet metal base frame for mounting the above engine and alternator. Standard Tools and Spares: Double ended spanners complete set (small and big size sets) - 12 Nos. Screw driver (30cm long) .Screw driver (45cm long) .Cutting plyer. Diesel filter with elements - 2 Nos. Oil filter with elements - 1 No. All the above accessories with complete set. Alternator The alternator shall be of self excited, self regulated, screen protected, drip proof alternator with static excitation system capable of developing 250 KVA at 0.8 power factor 415 volts, 3 phase, 50 cycles, generally conforming to I.S.4722 under normal condition, the voltage regulation will be plus or minus 5% of rated voltage. It shall be with end shield/ball roller bearings complete. Control Panel A wall/pedestal mounting (cubical type) fabricated sheet steel construction suitable for manual operation, rated for system output incorporating the following devices/instruments. The panel is made of 1.6mm sheet with one/two hinged front door, bolted back totally enclosed and vermine proof. It shall be with all electrical connections and internal copper wiring with proper color codings for internal wiring. All control equipments and indicating instruments shall be mounted on the control panel. The control panel shall have the following equipments: 1 No. Amps/Volt/Frequency meter (96mm x 96 mm) 3 Nos. of suitable current transformers 2 Nos. of suitable selector switches for voltmeter and ammeter main switch rotary type on/off pilot lamp .1 No. input terminal board. 1 No. out put terminal board 1 No. Kilowatt hour meter (62.5 KVA and above) 1 No. MCCB of suitable capacity -250 KVA / 200 KW Generator set (Water cooled)		
31.281.1A	Providing and fixing of suitable M.S. exhaust pipe including 2 Nos. of M.S. bends (long), 7 Nos. of M.S. flanges, M.S. pipe	no	6498.60

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	Class B - 5 Rm as flexible exhaust pipe. The rate is inclusive of transportation charges for shifting of welding machine and gas cutting set to site, consumption of welding rod 10 SWG and cutting gas, providing fasteners of 10mm bolts / nuts / washers and flange gaskets including labour charges etc. as per IE standard.-65 mm dia exhaust pipe (upto 40 KVA)		
31.281.1B	Providing and fixing of suitable M.S.exhaust pipe including 2 Nos. of M.S. bends (long), 7 Nos. of M.S. flanges, M.S. pipe Class B - 5 Rm as flexible exhaust pipe. The rate is inclusive of transportation charges for shifting of welding machine and gas cutting set to site, consumption of welding rod 10 SWG and cutting gas, providing fasteners of 10mm bolts / nuts / washers and flange gaskets including labour charges etc. as per IE standard.-80 mm dia exhaust pipe (From 50 KVA to 100 KVA)	job	8089.12
31.281.1C	Providing and fixing of suitable M.S.exhaust pipe including 2 Nos. of M.S. bends (long), 7 Nos. of M.S. flanges, M.S. pipe Class B - 5 Rm as flexible exhaust pipe. The rate is inclusive of transportation charges for shifting of welding machine and gas cutting set to site, consumption of welding rod 10 SWG and cutting gas, providing fasteners of 10mm bolts / nuts / washers and flange gaskets including labour charges etc. as per IE standard.100 mm dia exhaust pipe (From 125 KVA to 160 KVA)	job	11006.94
31.281.1D	Providing and fixing of suitable M.S.exhaust pipe including 2 Nos. of M.S. bends (long), 7 Nos. of M.S. flanges, M.S. pipe Class B - 5 Rm as flexible exhaust pipe. The rate is inclusive of transportation charges for shifting of welding machine and gas cutting set to site, consumption of welding rod 10 SWG and cutting gas, providing fasteners of 10mm bolts / nuts / washers and flange gaskets including labour charges etc. as per IE standard.125 mm dia exhaust pipe (From 200 KVA to 250 KVA)	job	13526.44
31.282.1	Providing and laying of aluminium cladding with 50 mm thick glass wool slab with chicken mesh and covered with 24 SWG aluminium sheet (the rate includes double calculation for flanges & bends) as per I.E. standards.	sqm	1591.93
31.283.1	Providing and fixing of fire safety equipments comprising 1 No. of 4.5 kg of CO ₂ fire extinguisher 1m x 2m x6mm thick rubber mat shock proof of superior quality with two numbers	set	6339.27

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	of 10 litres capacity fire buckets (red colour) with M.S. stand arrangements etc.		
31.284.1A	Providing and fixing of 4 pole change over switch of make including M.S. frame as per I.E. standard.-100 Amps (upto 50 KVA)	no	9453.43
31.284.1B	Providing and fixing of 4 pole change over switch of make including M.S. frame as per I.E. standard.-200 Amps(from 62.5/63 KVA to 100 KVA)	no	12657.20
31.284.1C	Providing and fixing of 4 pole change over switch of make including M.S. frame as per I.E. standard.-400 Amps(Above 100 KVA)	no	20386.39
31.285.1A	Charges for transporting, erection, testing and commissioning of generator set excluding foundation,but including mechanical and other unskilled wages for installation of equipment, wiring from generator set to panel board and change over switches, handling charges, purchase of spares if any required for the installation and commissioning, the cost of fuel and other materials for a trial run of 6 hours. - From 30 KVA to 50 KVA	job	23473.51
31.285.1B	Charges for transporting, erection, testing and commissioning of generator set excluding foundation,but including mechanical and other unskilled wages for installation of equipment, wiring from generator set to panel board and change over switches, handling charges, purchase of spares if any required for the installation and commissioning, the cost of fuel and other materials for a trial run of 6 hours. - From 62.5 / 63 KVA to 100 KVA	job	27385.76
31.285.1C	Charges for transporting, erection, testing and commissioning of generator set excluding foundation,but including mechanical and other unskilled wages for installation of equipment, wiring from generator set to panel board and change over switches, handling charges, purchase of spares if any required for the installation and commissioning, the cost of fuel and other materials for a trial run of 6 hours. - from 125 KVA to 200 KVA	job	37557.60
31.285.1D	Charges for transporting, erection, testing and commissioning of generator set excluding foundation,but including mechanical and other unskilled wages for installation of equipment, wiring	job	46947.00

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	from generator set to panel board and change over switches, handling charges, purchase of spares if any required for the installation and commissioning, the cost of fuel and other materials for a trial run of 6 hours. - Above 200 KVA		
31.300.1A	Supply and installation of DI D/F Gate Valves (Soft seated) Resilient seated soft sealing gate valves (Sluice valves) with body bonnet of ductile iron of grade GGG 40, wedge fully rubber lined EPDM of good quality W720 , replaceable spindle nut, without gland packing and with 3 O-ring protection on the shaft and seals of NBR and the valves should be vacuum tight and 100% leak proof with face to face dimensions as per BSS 163-89/ISI 4846 - 2000/DIN3202 F4. All the valves should be Electrostatic powder coated both inside outside with pocket less straight thro body passage. All the valves shall be compatible for burried application without chambers, with pressure rating PN 10/16 - dia 150mm	each	25003.69
31.300.1B	Supply and installation of DI D/F Gate Valves (Soft seated) Resilient seated soft sealing gate valves (Sluice valves) with body bonnet of ductile iron of grade GGG 40, wedge fully rubber lined EPDM of good quality W720 , replaceable spindle nut, without gland packing and with 3 O-ring protection on the shaft and seals of NBR and the valves should be vacuum tight and 100% leak proof with face to face dimensions as per BSS 163-89/ISI 4846 - 2000/DIN3202 F4. All the valves should be Electrostatic powder coated both inside outside with pocket less straight thro body passage. All the valves shall be compatible for burried application without chambers, with pressure rating PN 10/16 - dia 200mm	each	41548.08
31.300.1C	Supply and installation of DI D/F Gate Valves (Soft seated) Resilient seated soft sealing gate valves (Sluice valves) with body bonnet of ductile iron of grade GGG 40, wedge fully rubber lined EPDM of good quality W720 , replaceable spindle nut, without gland packing and with 3 O-ring protection on the shaft and seals of NBR and the valves should be vacuum tight and 100% leak proof with face to face dimensions as per BSS 163-89/ISI 4846 - 2000/DIN3202 F4. All the valves should be Electrostatic powder coated both inside outside with pocket less straight thro body passage. All the valves shall be compatible for burried application without chambers, with pressure rating PN 10/16 - dia 300 mm	each	87446.15
31.300.1D	Supply and installation of DI D/F Gate Valves (Soft seated) Resilient seated soft sealing gate valves (Sluice valves) with	each	240341.17

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	body bonnet of ductile iron of grade GGG 40, wedge fully rubber lined EPDM of good quality W720 , replaceable spindle nut, without gland packing and with 3 O-ring protection on the shaft and seals of NBR and the valves should be vacuum tight and 100% leak proof with face to face dimensions as per BSS 163-89/ISI 4846 - 2000/DIN3202 F4. All the valves should be Electrostatic powder coated both inside outside with pocket less straight thro body passage. All the valves shall be compatible for burried application without chambers, with pressure rating PN 10/16 - dia 400mm		
31.300.1E	Supply and installation of DI D/F Swing check valves / non return valves with body and disk of ductile iron GGG 40/SG 400-12 or equivalent grade as per IS 3896 PART 2-1985 and subsequent revision and disc encapsulated with minimum thickness of 250 microns powder or liquid epoxy coating applied on both body and disc inside and outside, with pressure PN 16 - dia 150mm	each	52509.25
31.300.2A	Supply and installation of Electromagnetic bulk flow meters with make which satisfies the specification as under - Electromagnetic flow sensor- type : Microprocessor based/pulsed DC - flow tube : SS304 - Coil housing: Fully welded sheet steel,- Liner : Teflon - Electrodes :SS316 - Grounding type : Rings - Grounding ring material :SS316 - Process connection : Flanged to ANSI 150# - Flange :CS,SORF- Area classification :safe - Protection class : IP 67 - IP 68 (underground) - Accuracy : + 0.5% of measured value - Outputs : 4-20ma, HART + Pulse - Status - Display : Digital - Parameters : Actual flow rate,totalized flow (8 digit) - Local indication : Programmable , front fascia programming - Power supply : 230 VAC -100 mm dia	each	159166.00
31.300.2B	Supply and installation of Electromagnetic bulk flow meters with make which satisfies the specification as under - Electromagnetic flow sensor- type : Microprocessor based/pulsed DC, - flow tube : SS304, - Coil housing: Fully welded sheet steel,- Liner : Teflon ,- Electrodes :SS316, - Grounding type : Rings ,- Grounding ring material :SS316, - Process connection : Flanged to ANSI 150#,- Flange :CS,SORF,- Area classification :safe, - Protection class : IP 67 - IP 68 (underground) ,- Accuracy : + 0.5% of measured value ,- Outputs : 4-20ma, HART + Pulse - Status - Display : Digital, - Parameters : Actual flow rate,totalized flow (8 digit), - Local indication : Programmable , front fascia programming, - Power supply : 230 VAC, -200 mm dia	each	238180.66

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.300.2C	Supply and installation of Electromagnetic bulk flow meters with make which satisfies the specification as under - Electromagnetic flow sensor- type : Microprocessor based/pulsed DC - flow tube : SS304 - Coil housing: Fully welded sheet steel,- Liner : Teflon - Electrodes :SS316 - Grounding type : Rings - Grounding ring material :SS316 - Process connection : Flanged to ANSI 150# - Flange :CS,SORF- Area classification :safe - Protection class : IP 67 - IP 68 (underground) - Accuracy : + 0.5% of measured value - Outputs : 4-20ma, HART + Pulse - Status - Display : Digital - Parameters : Actual flow rate,totalized flow (8 digit) - Local indication : Programmable , front fascia programming - Power supply : 230 VAC -300 mm dia	each	270423.30
31.300.2D	Supply and installation of Electromagnetic bulk flow meters with make which satisfies the specification as under - Electromagnetic flow sensor- type : Microprocessor based/pulsed DC - flow tube : SS304 - Coil housing: Fully welded sheet steel,- Liner : Teflon - Electrodes :SS316 - Grounding type : Rings - Grounding ring material :SS316 - Process connection : Flanged to ANSI 150# - Flange :CS,SORF- Area classification :safe - Protection class : IP 67 - IP 68 (underground) - Accuracy : + 0.5% of measured value - Outputs : 4-20ma, HART + Pulse - Status - Display : Digital - Parameters : Actual flow rate,totalized flow (8 digit) - Local indication : Programmable , front fascia programming - Power supply : 230 VAC -400 mm dia	each	397807.60
31.301.1A	Providing, laying and jointing OPVC pipes conforming to IS specification 16647:2017 and ISI marked including transportation to the site, lowering to the trenches, laying to proper garde and alignment, testing of joints with required testing equipment, excluding PVC-O fittings such as bends, tees, threaded pieces, couplers, reducer, endcaps etc., complete all as per IS and CPWD specification - 110mm PVC -O pipe PN12.5 Class 500	metre	1169.93
31.301.1B	Providing, laying and jointing OPVC pipes conforming to IS specification 16647:2017 and ISI marked including transportation to the site, lowering to the trenches, laying to proper garde and alignment, testing of joints with required testing equipment, excluding PVC-O fittings such as bends, tees, threaded pieces, couplers, reducer, endcaps etc., complete all as per IS and CPWD specification - 160mm PVC -O pipe PN12.5 Class 500	meter	1731.21

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.301.1C	Providing, laying and jointing OPVC pipes conforming to IS specification 16647:2017 and ISI marked including transportation to the site, lowering to the trenches, laying to proper garde and alignment, testing of joints with required testing equipment, excluding PVC-O fittings such as bends, tees, threaded pieces, couplers, reducer, endcaps etc., complete all as per IS and CPWD specification - 200mm PVC -O pipe PN12.5 Class 500	metre	2267.88
31.301.1D	Providing, laying and jointing OPVC pipes conforming to IS specification 16647:2017 and ISI marked including transportation to the site, lowering to the trenches, laying to proper garde and alignment, testing of joints with required testing equipment, excluding PVC-O fittings such as bends, tees, threaded pieces, couplers, reducer, endcaps etc., complete all as per IS and CPWD specification - 250mm PVC -O pipe PN12.5 Class 500	metre	3004.94
31.301.1E	Providing, laying and jointing OPVC pipes conforming to IS specification 16647:2017 and ISI marked including transportation to the site, lowering to the trenches, laying to proper garde and alignment, testing of joints with required testing equipment, excluding PVC-O fittings such as bends, tees, threaded pieces, couplers, reducer, endcaps etc., complete all as per IS and CPWD specification - 315mm PVC -O pipe PN12.5 Class 500	metre	3829.91
31.301.1F	Providing, laying and jointing OPVC pipes conforming to IS specification 16647:2017 and ISI marked including transportation to the site, lowering to the trenches, laying to proper garde and alignment, testing of joints with required testing equipment, excluding PVC-O fittings such as bends, tees, threaded pieces, couplers, reducer, endcaps etc., complete all as per IS and CPWD specification - 400mm PVC -O pipe PN12.5 Class 500	metre	3829.91
31.302.1A	Providing, laying and jointing OPVC pipes conforming to IS specification 16647:2017 and ISI marked including transportation to the site, lowering to the trenches, laying to proper garde and alignment, testing of joints with required testing equipment, excluding PVC-O fittings such as bends, tees, threaded pieces, couplers, reducer, endcaps etc., complete all as per IS and CPWD specification - 110mm PVC -O pipe PN16 Class 500	metre	1309.14

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.302.1B	Providing, laying and jointing OPVC pipes conforming to IS specification 16647:2017 and ISI marked including transportation to the site, lowering to the trenches, laying to proper garde and alignment, testing of joints with required testing equipment, excluding PVC-O fittings such as bends, tees, threaded pieces, couplers, reducer, endcaps etc., complete all as per IS and CPWD specification - 160mm PVC -O pipe PN16 Class 500	metre	1320.92
31.302.1C	Providing, laying and jointing OPVC pipes conforming to IS specification 16647:2017 and ISI marked including transportation to the site, lowering to the trenches, laying to proper garde and alignment, testing of joints with required testing equipment, excluding PVC-O fittings such as bends, tees, threaded pieces, couplers, reducer, endcaps etc., complete all as per IS and CPWD specification - 200mm PVC -O pipe PN16 Class 500	metre	2625.42
31.302.1D	Providing, laying and jointing OPVC pipes conforming to IS specification 16647:2017 and ISI marked including transportation to the site, lowering to the trenches, laying to proper garde and alignment, testing of joints with required testing equipment, excluding PVC-O fittings such as bends, tees, threaded pieces, couplers, reducer, endcaps etc., complete all as per IS and CPWD specification - 250mm PVC -O pipe PN16 Class 500	metre	3462.11
31.302.1E	Providing, laying and jointing OPVC pipes conforming to IS specification 16647:2017 and ISI marked including transportation to the site, lowering to the trenches, laying to proper garde and alignment, testing of joints with required testing equipment, excluding PVC-O fittings such as bends, tees, threaded pieces, couplers, reducer, endcaps etc., complete all as per IS and CPWD specification - 315mm PVC -O pipe PN16 Class 500	metre	4013.07
31.302.1F	Providing, laying and jointing OPVC pipes conforming to IS specification 16647:2017 and ISI marked including transportation to the site, lowering to the trenches, laying to proper garde and alignment, testing of joints with required testing equipment, excluding PVC-O fittings such as bends, tees, threaded pieces, couplers, reducer, endcaps etc., complete all as per IS and CPWD specification - 400mm PVC -O pipe PN16 Class 500	metre	6653.57

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.310.1A	Providing and fixing in position PVC-O fittings 90 degree elbow 110mm diameter PN 16 including labour charges for jointing , jointing materials etc, complete	no	4243.45
31.310.1B	Providing and fixing in position PVC-O fittings 90 degree elbow 160mm diameter PN 16 including labour charges for jointing , jointing materials etc, complete	no	6267.05
31.310.1C	Providing and fixing in position PVC-O fittings 90 degree elbow 200mm diameter PN 16 including labour charges for jointing , jointing materials etc, complete	no	11281.37
31.310.1D	Providing and fixing in position PVC-O fittings 90 degree elbow 250mm diameter PN 16 including labour charges for jointing , jointing materials etc, complete	no	20570.16
31.310.1E	Providing and fixing in position PVC-O fittings 90 degree elbow 315 mm diameter PN 16 including labour charges for jointing , jointing materials etc, complete	no	27379.32
31.310.1F	Providing and fixing in position PVC-O fittings 90 degree elbow 400 mm diameter PN 16 including labour charges for jointing , jointing materials etc, complete	no	36710.46
31.310.1G	Providing and fixing in position PVC-O fittings 45 degree elbow 110 mm diameter PN 16 including labour charges for jointing , jointing materials etc, complete	no	3100.51
31.310.1H	Providing and fixing in position PVC-O fittings 45 degree elbow 160 mm diameter PN 16 including labour charges for jointing , jointing materials etc, complete	no	4833.98
31.310.1I	Providing and fixing in position PVC-O fittings 45 degree elbow 200 mm diameter PN 16 including labour charges for jointing , jointing materials etc, complete	no	8482.62
31.310.1J	Providing and fixing in position PVC-O fittings 45 degree elbow 250 mm diameter PN 16 including labour charges for jointing , jointing materials etc, complete	no	12145.91
31.310.1K	Providing and fixing in position PVC-O fittings 45 degree elbow 315 mm diameter PN 16 including labour charges for jointing , jointing materials etc, complete	no	15444.32

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.310.1L	Providing and fixing in position PVC-O fittings 45 degree elbow 400 mm diameter PN 16 including labour charges for jointing , jointing materials etc, complete	no	27358.81
31.310.1M	Providing and fixing in position PVC-O fittings 22.5 degree elbow 110 mm diameter PN 16 including labour charges for jointing , jointing materials etc, complete	no	2559.80
31.310.1N	Providing and fixing in position PVC-O fittings 22.5 degree elbow 160 mm diameter PN 16 including labour charges for jointing , jointing materials etc, complete	no	3660.26
31.310.1O	Providing and fixing in position PVC-O fittings 22.5 degree elbow 200 mm diameter PN 16 including labour charges for jointing , jointing materials etc, complete	no	5431.82
31.310.1P	Providing and fixing in position PVC-O fittings 22.5 degree elbow 250 mm diameter PN 16 including labour charges for jointing , jointing materials etc, complete	no	9240.18
31.310.1Q	Providing and fixing in position PVC-O fittings 22.5 degree elbow 315 mm diameter PN 16 including labour charges for jointing , jointing materials etc, complete	no	12979.67
31.310.1R	Providing and fixing in position PVC-O fittings 22.5 degree elbow 400 mm diameter PN 16 including labour charges for jointing , jointing materials etc, complete	no	21671.93
31.310.1S	Providing and fixing in position PVC-O fittings 11.25 degree elbow 110 mm diameter PN 16 including labour charges for jointing , jointing materials etc, complete	no	2512.92
31.310.1T	Providing and fixing in position PVC-O fittings 11.25 degree elbow 160 mm diameter PN 16 including labour charges for jointing , jointing materials etc, complete	no	3494.67
31.310.1U	Providing and fixing in position PVC-O fittings 11.25 degree elbow 200 mm diameter PN 16 including labour charges for jointing , jointing materials etc, complete	no	5156.35
31.310.1V	Providing and fixing in position PVC-O fittings 11.25 degree elbow 250 mm diameter PN 16 including labour charges for	no	8766.87

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	jointing , jointing materials etc, complete		
31.310.1W	Providing and fixing in position PVC-O fittings 11.25 degree elbow 315 mm diameter PN 16 including labour charges for jointing , jointing materials etc, complete	no	8766.87
31.310.1X	Providing and fixing in position PVC-O fittings 11.25 degree elbow 400 mm diameter PN 16 including labour charges for jointing , jointing materials etc, complete	no	20917.28
31.311.1A	Providing and fixing in position PVC-O fittings sliding coupler 110 mm diameter PN 16 including labour charges for jointing , jointing materials etc, complete	no	2277.00
31.311.1B	Providing and fixing in position PVC-O fittings sliding coupler 160 mm diameter PN 16 including labour charges for jointing , jointing materials etc, complete	no	4014.86
31.311.1C	Providing and fixing in position PVC-O fittings sliding coupler 200 mm diameter PN 16 including labour charges for jointing , jointing materials etc, complete	no	5777.63
31.311.1D	Providing and fixing in position PVC-O fittings sliding coupler 250 mm diameter PN 16 including labour charges for jointing , jointing materials etc, complete	no	10762.64
31.311.1E	Providing and fixing in position PVC-O fittings sliding coupler 315 mm diameter PN 16 including labour charges for jointing , jointing materials etc, complete	no	20353.14
31.311.1F	Providing and fixing in position PVC-O fittings sliding coupler 400 mm diameter PN 16 including labour charges for jointing , jointing materials etc, complete	no	27426.21
31.312.1A	Providing and fixing in position PVC-O fittings flange socket 110 mm diameter including labour charges for jointing , jointing materials etc, complete	no	3421.65
31.312.1B	Providing and fixing in position PVC-O fittings flange socket 160 mm diameter including labour charges for jointing , jointing materials etc, complete	no	4706.49

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.312.1C	Providing and fixing in position PVC-O fittings flange socket 200 mm diameter including labour charges for jointing , jointing materials etc, complete	no	5663.34
31.312.1D	Providing and fixing in position PVC-O fittings flange socket 250 mm diameter including labour charges for jointing , jointing materials etc, complete	no	7026.09
31.312.1E	Providing and fixing in position PVC-O fittings flange socket 315 mm diameter including labour charges for jointing , jointing materials etc, complete	no	8809.37
31.312.1F	Providing and fixing in position PVC-O fittings flange socket 400 mm diameter including labour charges for jointing , jointing materials etc, complete	no	14680.91
31.313.1A	Providing and fixing in position PVC-O fittings air tee 110 mm x 40 mm size including labour charges for jointing , jointing materials etc, complete	no	4237.60
31.313.1B	Providing and fixing in position PVC-O fittings air tee 160 mm x 40 mm size including labour charges for jointing , jointing materials etc, complete	no	4970.26
31.313.1C	Providing and fixing in position PVC-O fittings air tee 200 mm x 50 mm size including labour charges for jointing , jointing materials etc, complete	no	6498.58
31.313.1D	Providing and fixing in position PVC-O fittings air tee 250 mm x 50 mm size including labour charges for jointing , jointing materials etc, complete	no	8041.56
31.313.1F	Providing and fixing in position PVC-O fittings air tee 400 mm x 100 mm size including labour charges for jointing , jointing materials etc, complete	no	16294.22
31.314.1A	Providing and fixing in position PVC-O fittings reducer 110mm x 90 mm size including labour charges for jointing , jointing materials etc, complete	no	2621.35
31.314.1B	Providing and fixing in position PVC-O fittings reducer 160 mm x 40 mm size including labour charges for jointing , jointing materials etc, complete	no	3834.63

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.314.1C	Providing and fixing in position PVC-O fittings reducer 200 mm x 160 mm size including labour charges for jointing , jointing materials etc, complete	no	6394.54
31.314.1E	Providing and fixing in position PVC-O fittings reducer 315 mm x 250 mm size including labour charges for jointing , jointing materials etc, complete	no	18172.75
31.314.1F	Providing and fixing in position PVC-O fittings reducer 400 mm x 315 mm size including labour charges for jointing , jointing materials etc, complete	no	27681.18
31.315.1A	Providing and fixing in position PVC-O fittings equal tee 110 x 110 mm size including labour charges for jointing , jointing materials etc, complete	no	6756.47
31.315.1B	Providing and fixing in position PVC-O fittings equal tee 160 x 160 mm size including labour charges for jointing , jointing materials etc, complete	no	10079.80
31.315.1C	Providing and fixing in position PVC-O fittings equal tee 200 x 200 mm size including labour charges for jointing , jointing materials etc, complete	no	13517.45
31.315.1D	Providing and fixing in position PVC-O fittings equal tee 250 x 250 mm size including labour charges for jointing , jointing materials etc, complete	no	17306.74
31.315.1E	Providing and fixing in position PVC-O fittings equal tee 315 x 315 mm size including labour charges for jointing , jointing materials etc, complete	no	22038.24
31.315.1F	Providing and fixing in position PVC-O fittings equal tee 400 x 400 mm size including labour charges for jointing , jointing materials etc, complete	no	29334.07
31.400.1	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges &	metre	158.20

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 63mm dia HDPE pipe, PE-100, 6kg/sq.cm		
31.400.2	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 75mm dia HDPE pipe, PE-100, 6kg/sq.cm	metre	226.06
31.400.3	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 90mm dia HDPE pipe, PE-100, 6kg/sq.cm	metre	320.81
31.400.4	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 110mm dia HDPE pipe, PE-100, 6kg/sq.cm	metre	486.12
31.400.5	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 125mm dia HDPE pipe, PE-	metre	618.56

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	100, 6kg/sq.cm		
31.400.6	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 140mm dia HDPE pipe, PE-100, 6kg/sq.cm	metre	774.78
31.400.7	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 160mm dia HDPE pipe, PE-100, 6kg/sq.cm	metre	1015.77
31.400.8	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 180mm dia HDPE pipe, PE-100, 6kg/sq.cm	metre	1278.38
31.400.9	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 200 mm dia HDPE pipe, PE-100, 6kg/sq.cm	metre	1579.85

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.400.10	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 225mm dia HDPE pipe, PE-100, 6kg/sq.cm	metre	1997.67
31.400.11	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete -250mm dia HDPE pipe, PE-100, 6kg/sq.cm	metre	2463.15
31.400.12	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 280 mm dia HDPE pipe, PE-100, 6kg/sq.cm	metre	3074.04
31.400.13	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 315 mm dia HDPE pipe, PE-100, 6kg/sq.cm	metre	3874.84
31.400.14	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 /	metre	4920.90

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	13488 with necessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 355 mm dia HDPE pipe, PE-100, 6kg/sq.cm		
31.400.15	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with necessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 400 mm dia HDPE pipe, PE-100, 6kg/sq.cm	metre	6258.75
31.400.16	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with necessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 450 mm dia HDPE pipe, PE-100, 6kg/sq.cm	metre	8119.55
31.400.17	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with necessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 500 mm dia HDPE pipe, PE-100, 6kg/sq.cm	metre	10017.64
31.400.18	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with necessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler	metre	12909.00

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 560 mm dia HDPE pipe, PE-100, 6kg/sq.cm		
31.400.19	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 630 mm dia HDPE pipe, PE-100, 6kg/sq.cm	metre	16304.83
31.400.20	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 710 mm dia HDPE pipe, PE-100, 6kg/sq.cm	metre	18570.54
31.400.21	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 800 mm dia HDPE pipe, PE-100, 6kg/sq.cm	metre	22384.76
31.400.22	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight	metre	28361.54

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 900 mm dia HDPE pipe, PE-100, 6kg/sq.cm		
31.400.23	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 1000 mm dia HDPE pipe, PE-100, 6kg/sq.cm	metre	34972.12
31.401.1	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 63mm dia HDPE pipe, PE-100, 10kg/sq.cm	metre	238.87
31.401.2	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 75mm dia HDPE pipe, PE-100, 10kg/sq.cm	metre	338.72
31.401.3	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from	metre	485.26

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	sunrays & rains, etc., complete -90 mm dia HDPE pipe, PE-100, 10kg/sq.cm		
31.401.4	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 110 mm dia HDPE pipe, PE-100, 10kg/sq.cm	metre	711.89
31.401.5	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 125 mm dia HDPE pipe, PE-100, 10kg/sq.cm	metre	920.16
31.401.6	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 140 mm dia HDPE pipe, PE-100, 10kg/sq.cm	metre	1148.08
31.401.7	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 160 mm dia HDPE pipe, PE-100, 10kg/sq.cm	metre	1506.15

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.401.8	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 180 mm dia HDPE pipe, PE-100, 10kg/sq.cm	metre	1906.48
31.401.9	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 200 mm dia HDPE pipe, PE-100, 10kg/sq.cm	metre	2344.93
31.401.10	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 225 mm dia HDPE pipe, PE-100, 10kg/sq.cm	metre	2976.30
31.401.11	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 250 mm dia HDPE pipe, PE-100, 10kg/sq.cm	metre	3657.74
31.401.12	Providing and supplying in standard lengths	metre	4595.26

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 280 mm dia HDPE pipe, PE-100, 10kg/sq.cm		
31.401.13	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 315mm dia HDPE pipe, PE-100, 10kg/sq.cm	metre	5810.61
31.401.14	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 355 mm dia HDPE pipe, PE-100, 10kg/sq.cm	metre	7367.70
31.401.15	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 400 mm dia HDPE pipe, PE-100, 10kg/sq.cm	metre	9389.12
31.401.16	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical	metre	12378.09

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 450mm dia HDPE pipe, PE-100, 10kg/sq.cm		
31.401.17	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 500 mm dia HDPE pipe, PE-100, 10kg/sq.cm	metre	14820.33
31.401.18	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 560 mm dia HDPE pipe, PE-100, 10kg/sq.cm	metre	20101.86
31.401.19	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 630 mm dia HDPE pipe, PE-100, 10kg/sq.cm	metre	24556.27
31.401.20	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding	metre	28534.39

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 710 mm dia HDPE pipe, PE-100, 10kg/sq.cm		
31.401.21	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 800 mm dia HDPE pipe, PE-100, 10kg/sq.cm	metre	34392.10
31.401.22	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 900 mm dia HDPE pipe, PE-100, 10kg/sq.cm	metre	34800.54
31.401.23	Providing and supplying in standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges & stacking the same in closed shade duly protecting from sunrays & rains, etc., complete - 1000 mm dia HDPE pipe, PE-100, 10kg/sq.cm	metre	39100.03
31.402.1	Lowering, laying and jointing H.D.P.E. pipes and specials in proper position by butt fusion welding / electro fusion welding joints using fusion equipments as per ISO 21307 - 2011 and as per IS 7634 (Part-II) -2012 including cost of hire charges for butt fusion equipments powersupply arrangements etc, complete- 63 mm dia HDPE pipe for all classes	metre	145.54

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.402.2	Lowering, laying and jointing H.D.P.E. pipes and specials in proper position by butt fusion welding / electro fusion welding joints using fusion equipments as per ISO 21307 - 2011 and as per IS 7634 (Part-II) -2012 including cost of hire charges for butt fusion equipments powersupply arrangements etc, complete- 75 mm dia HDPE pipe for all classes	metre	173.70
31.402.3	Lowering, laying and jointing H.D.P.E. pipes and specials in proper position by butt fusion welding / electro fusion welding joints using fusion equipments as per ISO 21307 - 2011 and as per IS 7634 (Part-II) -2012 including cost of hire charges for butt fusion equipments powersupply arrangements etc, complete- 90 mm dia HDPE pipe for all classes	metre	212.39
31.402.4	Lowering, laying and jointing H.D.P.E. pipes and specials in proper position by butt fusion welding / electro fusion welding joints using fusion equipments as per ISO 21307 - 2011 and as per IS 7634 (Part-II) -2012 including cost of hire charges for butt fusion equipments powersupply arrangements etc, complete- 110 mm dia HDPE pipe for all classes	metre	255.37
31.402.5	Lowering, laying and jointing H.D.P.E. pipes and specials in proper position by butt fusion welding / electro fusion welding joints using fusion equipments as per ISO 21307 - 2011 and as per IS 7634 (Part-II) -2012 including cost of hire charges for butt fusion equipments powersupply arrangements etc, complete- 125 mm dia HDPE pipe for all classes	metre	291.07
31.402.6	Lowering, laying and jointing H.D.P.E. pipes and specials in proper position by butt fusion welding / electro fusion welding joints using fusion equipments as per ISO 21307 - 2011 and as per IS 7634 (Part-II) -2012 including cost of hire charges for butt fusion equipments powersupply arrangements etc, complete-140 mm dia HDPE pipe for all classes	metre	326.64
31.402.7	Lowering, laying and jointing H.D.P.E. pipes and specials in proper position by butt fusion welding / electro fusion welding joints using fusion equipments as per ISO 21307 - 2011 and as per IS 7634 (Part-II) -2012 including cost of hire charges for butt fusion equipments powersupply arrangements etc, complete- 160 mm dia HDPE pipe for all classes	metre	371.17
31.402.8	Lowering, laying and jointing H.D.P.E. pipes and specials in proper position by butt fusion welding / electro fusion welding joints using fusion equipments as per ISO 21307 - 2011 and as	metre	427.65

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	per IS 7634 (Part-II) -2012 including cost of hire charges for butt fusion equipments powersupply arrangements etc, complete- 180 mm dia HDPE pipe for all classes		
31.402.9	Lowering, laying and jointing H.D.P.E. pipes and specials in proper position by butt fusion welding / electro fusion welding joints using fusion equipments as per ISO 21307 - 2011 and as per IS 7634 (Part-II) -2012 including cost of hire charges for butt fusion equipments powersupply arrangements etc, complete- 200 mm dia HDPE pipe for all classes	metre	473.74
31.402.10	Lowering, laying and jointing H.D.P.E. pipes and specials in proper position by butt fusion welding / electro fusion welding joints using fusion equipments as per ISO 21307 - 2011 and as per IS 7634 (Part-II) -2012 including cost of hire charges for butt fusion equipments powersupply arrangements etc, complete-225 mm dia HDPE pipe for all classes	metre	536.06
31.402.11	Lowering, laying and jointing H.D.P.E. pipes and specials in proper position by butt fusion welding / electro fusion welding joints using fusion equipments as per ISO 21307 - 2011 and as per IS 7634 (Part-II) -2012 including cost of hire charges for butt fusion equipments powersupply arrangements etc, complete- 250 mm dia HDPE pipe for all classes	metre	595.39
31.402.12	Lowering, laying and jointing H.D.P.E. pipes and specials in proper position by butt fusion welding / electro fusion welding joints using fusion equipments as per ISO 21307 - 2011 and as per IS 7634 (Part-II) -2012 including cost of hire charges for butt fusion equipments powersupply arrangements etc, complete- 280 mm dia HDPE pipe for all classes	metre	663.81
31.402.13	Lowering, laying and jointing H.D.P.E. pipes and specials in proper position by butt fusion welding / electro fusion welding joints using fusion equipments as per ISO 21307 - 2011 and as per IS 7634 (Part-II) -2012 including cost of hire charges for butt fusion equipments powersupply arrangements etc, complete- 315 mm dia HDPE pipe for all classes	metre	748.45
31.402.14	Lowering, laying and jointing H.D.P.E. pipes and specials in proper position by butt fusion welding / electro fusion welding joints using fusion equipments as per ISO 21307 - 2011 and as per IS 7634 (Part-II) -2012 including cost of hire charges for butt fusion equipments powersupply arrangements etc, complete- 355 mm dia HDPE pipe for all classes	metre	841.93

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.402.15	Lowering, laying and jointing H.D.P.E. pipes and specials in proper position by butt fusion welding / electro fusion welding joints using fusion equipments as per ISO 21307 - 2011 and as per IS 7634 (Part-II) -2012 including cost of hire charges for butt fusion equipments powersupply arrangements etc, complete-400 mm dia HDPE pipe for all classes	metre	950.32
31.402.16	Lowering, laying and jointing H.D.P.E. pipes and specials in proper position by butt fusion welding / electro fusion welding joints using fusion equipments as per ISO 21307 - 2011 and as per IS 7634 (Part-II) -2012 including cost of hire charges for butt fusion equipments powersupply arrangements etc, complete- 450 mm dia HDPE pipe for all classes	metre	1067.70
31.402.17	Lowering, laying and jointing H.D.P.E. pipes and specials in proper position by butt fusion welding / electro fusion welding joints using fusion equipments as per ISO 21307 - 2011 and as per IS 7634 (Part-II) -2012 including cost of hire charges for butt fusion equipments powersupply arrangements etc, complete- 500 mm dia HDPE pipe for all classes	metre	1186.49
31.402.18	Lowering, laying and jointing H.D.P.E. pipes and specials in proper position by butt fusion welding / electro fusion welding joints using fusion equipments as per ISO 21307 - 2011 and as per IS 7634 (Part-II) -2012 including cost of hire charges for butt fusion equipments powersupply arrangements etc, complete- 560 mm dia HDPE pipe for all classes	metre	1371.98
31.402.19	Lowering, laying and jointing H.D.P.E. pipes and specials in proper position by butt fusion welding / electro fusion welding joints using fusion equipments as per ISO 21307 - 2011 and as per IS 7634 (Part-II) -2012 including cost of hire charges for butt fusion equipments powersupply arrangements etc, complete- 630 mm dia HDPE pipe for all classes	metre	1568.03
31.403.1	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 6kg / sq.cm -63 mm dia	no	93.18
31.403.2	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 6kg / sq.cm -75 mm dia	no	161.19

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.403.3	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 6kg / sq.cm -90 mm dia	no	311.13
31.403.4	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 6kg / sq.cm -110 mm dia	no	573.61
31.403.5	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 6kg / sq.cm -125 mm dia	no	792.27
31.403.6	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 6kg / sq.cm -140 mm dia	no	1090.60
31.403.7	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 6kg / sq.cm -160 mm dia	no	1580.69
31.403.8	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 6kg / sq.cm -180 mm dia	no	1817.57
31.403.9	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 6kg / sq.cm -200 mm dia	no	2479.51
31.403.10	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 6kg / sq.cm -225 mm dia	no	3560.71
31.403.11	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc.,	no	4900.28

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	complete - 90 degree bend - 6kg / sq.cm -250 mm dia		
31.403.12	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 6kg / sq.cm -280 mm dia	no	6776.43
31.403.13	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 6kg / sq.cm -315 mm dia	no	9816.47
31.403.14	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 6kg / sq.cm -355 mm dia	no	13758.04
31.403.15	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 6kg / sq.cm -400 mm dia	no	20334.74
31.403.16	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 6kg / sq.cm -450 mm dia	no	28787.62
31.403.17	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 6kg / sq.cm -500 mm dia	no	37839.71
31.403.18	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 6kg / sq.cm -560 mm dia	no	51588.38
31.403.19	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 6kg / sq.cm -630 mm dia	no	80567.75
31.404.1	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including	no	141.26

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	transportation, internal testing, loading and unloading etc., complete - Equal TEE - 6kg / sq.cm -63 mm dia		
31.404.2	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 6kg / sq.cm -75 mm dia	no	235.60
31.404.3	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 6kg / sq.cm -90mm dia	no	430.20
31.404.4	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 6kg / sq.cm -110 mm dia	no	729.82
31.404.5	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 6kg / sq.cm -125 mm dia	no	816.31
31.404.6	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 6kg / sq.cm -140 mm dia	no	1118.47
31.404.7	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 6kg / sq.cm -160 mm dia	no	1649.85
31.404.8	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 6kg / sq.cm -180 mm dia	no	2345.07
31.404.9	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 6kg / sq.cm -200 mm dia	no	3122.55

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.404.10	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 6kg / sq.cm -225 mm dia	no	4407.61
31.404.11	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 6kg / sq.cm -250 mm dia	no	5988.16
31.404.12	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 6kg / sq.cm -280 mm dia	no	8325.14
31.404.13	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 6kg / sq.cm -315 mm dia	no	11482.38
31.404.14	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 6kg / sq.cm -355 mm dia	no	16057.73
31.404.15	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 6kg / sq.cm -400 mm dia	no	23485.31
31.404.16	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 6kg / sq.cm -450 mm dia	no	33341.63
31.404.17	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 6kg / sq.cm -500 mm dia	no	52359.43
31.404.18	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 6kg / sq.cm -560 mm dia	no	71996.37

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.404.19	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 6kg / sq.cm -630 mm dia	no	99695.95
31.407.1	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 10kg / sq.cm -63 mm dia	no	139.84
31.407.2	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 10kg / sq.cm -75 mm dia	no	233.03
31.407.3	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 10kg / sq.cm -90 mm dia	no	439.88
31.407.4	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 10kg / sq.cm -110 mm dia	no	776.48
31.407.5	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 10kg / sq.cm -125 mm dia	no	1101.26
31.407.6	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 10kg / sq.cm -140 mm dia	no	1615.25
31.407.7	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 10kg / sq.cm -160 mm dia	no	2279.78
31.407.8	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc.,	no	2837.75

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	complete - 90 degree bend - 10kg / sq.cm -180 mm dia		
31.407.9	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 10kg / sq.cm -200 mm dia	no	3878.97
31.407.10	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 10kg / sq.cm -225 mm dia	no	5562.09
31.407.11	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 10kg / sq.cm -250 mm dia	no	7627.48
31.407.12	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 10kg / sq.cm -280 mm dia	no	10543.58
31.407.13	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 10kg / sq.cm -315 mm dia	no	15286.65
31.407.14	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 10kg / sq.cm -355 mm dia	no	21493.19
31.407.15	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 10kg / sq.cm -400 mm dia	no	31827.65
31.407.16	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 10kg / sq.cm -450 mm dia	no	44922.59
31.407.17	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including	no	59010.68

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 10kg / sq.cm -500 mm dia		
31.407.18	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 10kg / sq.cm -560 mm dia	no	81917.98
31.407.19	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - 90 degree bend - 10kg / sq.cm -630 mm dia	no	121495.45
31.408.1	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 10kg / sq.cm -63 mm dia	no	209.99
31.408.2	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 10kg / sq.cm -75 mm dia	no	355.94
31.408.3	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 10kg / sq.cm -155 mm dia	no	608.18
31.408.4	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 10kg / sq.cm -110 mm dia	no	1044.78
31.408.5	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 10kg / sq.cm -125 mm dia	no	1182.21
31.408.6	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 10kg / sq.cm -140 mm dia	no	1741.31

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.408.7	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 10kg / sq.cm -160 mm dia	no	2550.50
31.408.8	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 10kg / sq.cm -160 mm dia	no	3545.35
31.408.9	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 10kg / sq.cm -200 mm dia	no	4850.78
31.408.10	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 10kg / sq.cm -225 mm dia	no	6902.77
31.408.11	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 10kg / sq.cm -250 mm dia	no	9390.55
31.408.12	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 10kg / sq.cm -280 mm dia	no	13121.39
31.408.13	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 10kg / sq.cm -315 mm dia	no	18593.59
31.408.14	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 10kg / sq.cm -355 mm dia	no	27101.95
31.408.15	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 10kg / sq.cm -400 mm dia	no	38924.34

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
31.408.16	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 10kg / sq.cm -450 mm dia	no	55126.47
31.408.17	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 10kg / sq.cm -500 mm dia	no	81655.63
31.408.18	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 10kg / sq.cm -560 mm dia	no	122503.23
31.408.19	Providing and supplying special HDPE pipes as per IS 8360/1977 Reaffirmed /2002. The rates including transportation, internal testing, loading and unloading etc., complete - Equal TEE - 10kg / sq.cm -630 mm dia	no	182241.16

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
32.2.1	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40 mm nominal size) around S.W. pipes including bed concrete as per standard design - 100 mm diameter.	metre	1517.05
32.4.1.2	Providing and fixing square-mouth S.W. gully trap grade 'A' complete with C.I. grating brick masonry chamber with bricks of class designation 35 and water tight C.I. cover with frame of 300 x 300 mm size (inside) the weight of cover to be not less than 4.5 kg. and frame to be not less than 2.70 kg. as per standard design - 100 x 100 mm size P type.	each	3036.54
32.4.2.2	Providing and fixing square-mouth S.W. gully trap grade 'A' complete with C.I. grating brick masonry chamber with bricks of class designation 35 and water tight C.I. cover with frame of 300 x 300 mm size (inside) the weight of cover to be not less than 4.5 kg. and frame to be not less than 2.70 kg. as per standard design - 125 x 100 mm size P type.	each	3926.92
32.4.4.2	Providing and fixing square-mouth S.W. gully trap grade 'A' complete with C.I. grating brick masonry chamber with bricks of class designation 35 and water tight C.I. cover with frame of 300 x 300 mm size (inside) the weight of cover to be not less than 4.5 kg. and frame to be not less than 2.70 kg. as per standard design - 180 x 100 mm size P type.	each	3059.21
32.4.5.2	Providing and fixing square-mouth S.W. gully trap grade 'A' complete with C.I. grating brick masonry chamber with bricks of class designation 35 and water tight C.I. cover with frame of 300 x 300 mm size (inside) the weight of cover to be not less than 4.5 kg. and frame to be not less than 2.70 kg. as per standard design - 180 x 150 mm size P type.	each	3040.56
32.5.1	Dismantling of old S.W. pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps - 100 mm diameter	metre	105.21
32.5.2	Dismantling of old S.W. pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps - 150 mm diameter	metre	116.34
32.5.3	Dismantling of old S.W. pipes including breaking of joints and	metre	123.77

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps - 200 mm diameter		
32.5.4	Dismantling of old S.W. pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps - 230 mm dia.	metre	127.48
32.5.5	Dismantling of old S.W. pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps - 250 mm diameter	metre	131.20
32.5.6	Dismantling of old S.W. pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps - 300 mm diameter	metre	138.62
32.5.7	Dismantling of old S.W. pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps - 350 mm diameter	metre	159.66
32.5.8	Dismantling of old S.W. pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps - 400 mm diameter	metre	174.52
32.5.9	Dismantling of old S.W. pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps - 450 mm diameter	metre	181.94
32.6.1	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc. complete - 100 mm dia.	metre	597.45
32.6.2	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc. complete - 150 mm dia.	metre	655.49

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
32.6.3	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc. complete - 250 mm dia.	metre	1058.82
32.6.4	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc. complete - 300 mm dia.	metre	1580.93
32.6.5	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc. complete - 450 mm dia.	metre	1909.80
32.6.10	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc. complete - 900 mm dia.	metre	5603.63
32.11.1.2	Constructing brick masonry manhole with 35 class designation bricks in cement mortar 1:4 (1 cement : 4 fine aggregate) R.C.C. top slab with 1:2:4 mix (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 fine aggregate : 8 graded stone aggregate 40 mm nominal size) inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design - inside size 90 x 80 cm and 45 cm deep including C.I. cover with frame (light duty) 455 x 610 mm internal dimensions total weight of cover and frame to be not less than 38 kg. (weight of cover 23 kg. and weight of frame 15 kg) - with bricks of class designation 3.5	each	15775.18
32.11.2.2	Constructing brick masonry manhole with 35 class designation bricks in cement mortar 1:4 (1 cement : 4 fine aggregate) R.C.C. top slab with 1:2:4 mix (1 cement : 2 fine aggregate : 4 graded stone aggregate 20mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 fine aggregate : 8 graded stone aggregate 40mm nominal size) inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement and making	each	17428.28

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	channels in cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20mm nominal size) neatly finished complete as per standard design - inside size 90 x 80cm and 60cm deep including C.I. cover with frame (light duty) 455 x 610mm internal dimensions total weight of cover and frame to be not less than 38 kg. (weight of cover 23 kg. and weight of frame 15 kg.) - with bricks of class designation 3.5		
32.11.3.2	Constructing brick masonry manhole with 35 class designation bricks in cement mortar 1:4 (1 cement : 4 fine aggregate) R.C.C. top slab with 1:2:4 mix (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 fine aggregate : 8 graded stone aggregate 40 mm nominal size) inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design - inside size 120 x 90 cm and 90 cm deep including C.I. cover with frame (medium duty) 500 mm internal diameter, total weight of cover and frame to be not less than 116 kg. (weight of cover 58 kg. and weight of frame 58 kg) - with bricks of class designation 3.5.	each	28851.42
32.11.4.2	Constructing brick masonry manhole with 35 class designation bricks in cement mortar 1:4 (1 cement : 4 fine aggregate) R.C.C. top slab with 1:2:4 mix (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 fine aggregate : 8 graded stone aggregate 40 mm nominal size) inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design - inside size 120 x 90 cm and 90 cm deep including C.I. cover with frame (heavy duty) 560 mm internal diameter, total weight of cover and frame to be not less than 208 kg. (weight of cover 108 kg. and weight of frame 100 kg) - with bricks of class designation 3.5	each	30715.16
32.12.1.2	Extra for depth for manholes - size of 90 x 80 cm - with bricks of class designation 3.5	metre	10928.29
32.12.2.2	Extra for depth for manholes - size 120 x 90 cm - with bricks	metre	13103.59

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	of class designation 3.5		
32.17.1	Providing M.S. foot rests including fixing in manholes with 20 x 20 x 10 cm cement concrete blocks 1:3:6 (1 cement : 3 fine aggregate : 6 graded stone aggregate 20 mm nominal size) as per standard design - with 20 x 20 mm square bar.	each	668.64
32.17.2	Providing M.S. foot rests including fixing in manholes with 20 x 20 x 10 cm cement concrete blocks 1:3:6 (1 cement : 3 fine aggregate : 6 graded stone aggregate 20 mm nominal size) as per standard design - with 20 mm diameter round bar.	each	611.86
32.18.1	Replacement of M.S. foot rest in manhole including dismantling concrete blocks and fixing with 20 x 20 x 10 cm cement concrete blocks 1:3:6 (1 Cement : 3 fine aggregate : 6 grade stone aggregate 20mm nominal size) with 20 x 20 mm square bar.	each	814.61
32.18.2	Replacement of M.S foot rests in manhole including dismantling concrete blocks and fixing with 20 x 20 x 10 cm cement concrete blocks 1:3:6 (1 cement : 3 fine aggregate : 6 grade stone aggregate 20 mm nominal size) with 20 mm diameter round bar.	each	757.83
32.19.1	supplying and fixing C.I. cover without frame for manholes - 455 x 610 mm rectangular C.I. cover (light duty) the weight of the cover to be not less than 23 kg.	No	1049.05
32.19.2	supplying and fixing C.I. cover without frame for manholes - 500 mm diameter C.I. cover (medium duty) the weight of the cover to be not less than 58 kg.	No	2595.46
32.19.3	Supplying and fixing C.I. cover without frame for manholes - 560 mm diameter C.I. cover (heavy duty) the weight of the cover to be not less than 108 kg	.No	3514.48
32.19A.1.1	Providing and fixing in position precast R.C.C manhole cover and frame of required shape and approved quality - LD - 2.5 - rectangular shape 600 x 450 mm internal dimensions.	each	1792.80
32.19A.1.2	Providing and fixing in position precast R.C.C manhole cover and frame of required shape and approved quality - LD - 2.5 - square shape 450 mm internal dimensions	each	1702.77

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
32.19A.1.3	Providing and fixing in position precast R.C.C manhole cover and frame of required shape and approved quality - LD - 2.5 - circular shape 450 mm internal diameter.	each	1482.26
32.19A.2.1	Providing and fixing in position precast R.C.C manhole cover and frame of required shape and approved quality - MD - 10 - square 500 mm internal dimensions.	each	1721.67
32.19A.2.2	Providing and fixing in position precast R.C.C manhole cover and frame of required shape and approved quality - MD - 10 - circular shape 500 mm internal diameter	each	1576.49
32.19A.3.1	Providing and fixing in position precast R.C.C manhole cover and frame of required shape and approved quality - HD - 20 - circular shape 560 mm internal diameter.	each	2383.53
32.19A.4.1	Providing and fixing in position precast R.C.C manhole cover and frame of required shape and approved quality - EHD - 35 - circular shape 560 mm internal dia.	each	2596.91
32.20	supplying and fixing C.I. cover 300 x 300 mm without frame for gully trap (standard pattern) the weight of the cover to be not less than 4.5 kg.	No	583.43
32.20.1	Providing and fixing in manhole,intercepting chamber with G.I chain to a length of 1.20m,with hooks of 18cm to be incorporated in concrete link of size 5.5cm to be fixed with manhole cover by welding 10mm dia chain with weight not less than 3.50 kg.The ra	no	350.00
32.21.1	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 fine aggregate : 4 graded stone aggregate 40 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete. - for pipes 100 to 230 mm diameter.	each	932.37
32.21.2	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 fine	each	1068.02

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	aggregate : 4 graded stone aggregate 40 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete. - for pipes 250 to 300 mm diameter.		
32.21.3	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete. - for pipes 350 to 450 mm diameter.	each	1542.07
32.22.1	Providing sand cast iron drop connection externally for 60 cm drop from branch sewer line to main sewer manhole including inspection and cleaning eye with chain and lid, sand cast iron drop pipe and bend encased around with cement concrete 1:5:10 (1 cement: 5 fine aggregate: 10 graded stone aggregate with 40 mm nominal size) with all centering and shuttering required, cutting holes in walls and making good with brick work in cement mortar 1:5 (1 cement : 5 fine cement) plastered with cement mortar 1:3 (1 cement : 3 fine aggregate) on inside of the manhole wall lead caulked joints between sand cast iron pipes and fittings, stiff cement mortar 1:1 (1 cement : 1 fine aggregate) joints between sand cast iron tee and S.W. pipe making required channels complete as per standard design and specification. - 100 mm dia. sand cast iron drop connection.	each	13639.19
32.22.2	Providing sand cast iron drop connection externally for 60 cm drop from branch sewer line to main sewer manhole including inspection and cleaning eye with chain and lid, sand cast iron drop pipe and bend encased around with cement concrete 1:5:10 (1 cement: 5 fine aggregate: 10 graded stone aggregate with 40 mm nominal size) with all centering and shuttering required, cutting holes in walls and making good with brick work in cement mortar 1:5 (1 cement : 5 fine aggregate) plastered with cement mortar 1:3 (1 cement : 3 fine aggregate) on inside of the manhole wall lead caulked joints between sand cast iron pipes and fittings, stiff cement mortar 1:1 (1 cement : 1 fine aggregate) joints between sand cast iron tee and S.W. pipe making required channels complete as per standard design and specification. - 150 mm dia. sand cast iron drop connection.	each	18912.26

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
32.23.1	Extra for depths beyond 60 cm of sand cast iron drop connection complete. - for 100 mm dia sand cast iron drop connection.	metre	3766.29
32.23.2	Extra for depths beyond 60 cm of sand cast iron drop connection complete. - for 150 mm dia sand cast iron drop connection.	metre	4886.56
32.24.1	Dismantling of manhole including R.C.C.top slab, C.I. cover with frame including stacking of useful materials near the site and disposal of unserviceable materials into municipal dumps within 50 m lead - Rectangular manhole 90 x 80 cm and 45 cm deep.	each	2992.65
32.24.2	Dismantling of manhole including R.C.C.top slab, C.I.cover with frame including stacking of useful materials near the site and disposal of unserviceable materials into municipal dumps within 50 m lead - Rectangular manhole 120 x 90 cm and 90 cm deep.	each	5276.85
32.24.3	Dismantling of manhole including R.C.C.top slab,C.I.cover with frame including stacking of useful materials near the site and disposal of unserviceable materials into municipal dumps within 50 m lead - Rectangular arch type manhole 140 x 90 cm and 2.45 m deep.	each	9982.09
32.24.4	Dismantling of manhole including R.C.C.top slab, C.I.cover with frame including stacking of useful materials near the site and disposal of unserviceable materials into municipal dumps within 50 m lead - Circular manhole 122 cm diameter and 1.68 m deep.	each	6330.87
32.25.1	Extra for depth of manholes dismantled-rectangular manhole 90 x 80 cm and 45cm deep	metre	2413.76
32.25.2	Extra for depth of manholes dismantled - rectangular manhole 120 x 90 cm and 90 cm deep.	metre	2876.03
32.25.3	Extra for depth of manholes dismantled - rectangular arch type manhole 140 x 90 cm and 2.45 m deep. (upto 4.25 m depth)	meter	2333.10
32.26A	Providing R.C.C.spun vent shaft with cowl 140 mm and 200 mm internal and external dia. respectively at top 300 and 450 mm internal and external dia. respectively at bottom and 9.10	each	22379.47

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	m overall length, bottom 1.25 m below ground level fixed in a pit 90 x 90 x 150 cm with cement concrete 1:4:8 (1 cement : 4 sand : 8 graded stone aggregate 20 mm nominal size) 25 cm in bed and minimum 20 cm around with top 15 cm in cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size), junction of vent shaft and concrete grouted with cement mortar 1:1 (1 cement : 1 fine aggregate) including making connection with sewer manhole with 150 mm dia. cement concrete pipe of required length complete as per standard design.		
32.27.2	Constructing brick masonry road gully chamber 50x45x60cm with bricks of class designation 35 in cement mortar 1:4 (1 cement : 4 fine aggregate) including 500x450mm precast R.C.C. horizontal grating with frame complete as per standard design:- With Class 3.5 designation bricks.	each	7659.96
32.28.2	Constructing brick masonry road gully chamber 45x45x77.5cm with bricks of class designation 35 in cement mortar 1:4 (1 cement : 4 fine aggregate) with precast R.C.C. vertical grating complete as per standard design - with class designation 3.5 bricks.	each	8920.91
32.29.2	Constructing brick masonry road gully chamber 110x50x77.5cm with bricks of class designation 35 in cement mortar 1:4 (1 cement : 4 fine aggregate) including 500x450mm precast R.C.C. horizontal grating with frame and vertical grating complete as per standard design:-with class designation 3.5 bricks.	each	14604.98
32.33.1.2	Constructing brick masonry chamber for underground C.I.inspection chamber and bends with 35 class designation bricks in cement mortar 1:4 (1 cement : 4 fine aggregate) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) R.C.C. top slab with 1:2:4 mix (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) foundation concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 fine aggregate) finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design - inside dimensions 455 x 610 mm and 45 cm deep for single pipe line. - With 3.5 class designation bricks.	each	8174.97

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
32.33.2.2	Constructing brick masonry chamber for underground C.I.inspection chamber and bends with 35 class designation bricks in cement mortar 1:4 (1 cement : 4 fine aggregate) C.I. cover with frame (light duty) 455x 610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) R.C.C. top slab with 1:2:4 mix (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) foundation concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement :3 fine aggregate) finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design - inside dimensions 500 x 700 mm and 45 cm deep for pipe line with one or two inlets.	each	9939.99
32.33.3.2	Constructing brick masonry chamber for underground C.I.inspection chamber and bends with 35 class designation bricks in cement mortar 1:4 (1 cement : 4 fine aggregate) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) R.C.C. top slab with 1:2:4 mix (1 cement : 2 sand : 4 graded stone aggregate 20 mm nominal size) foundation concrete 1:5:10 (1 cement : 5 sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement :3 sand) finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design - inside dimensions 600 x 850 mm and 45 cm deep for pipe line with three or more inlets.	each	11853.60
32.34.1.2	Extra for depth beyond 45 cm of brick masonry chamber - for 455x610 mm size with bricks of class designation 3.5	metre	7582.20
32.34.2.2	Extra for depth beyond 45 cm of brick masonry chamber - for 500x700 mm size with bricks of class designation 3.5	metre	8278.32
32.34.3.2	Extra for depth beyond 45 cm of brick masonry chamber - for 600 x 850 mm size with bricks of class designation 3.5	metre	9649.42
32.35.1.2	Constructing brick masonry open surface drain with bricks of class designation 35 in cement mortar 1 : 4 (1 cement : 4 fine aggregate) including earth excavation, 10 cm thick bed concrete 1 : 5 : 10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40 mm nominal size and 25 mm thick cement	metre	1288.79

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	concrete 1 : 2 : 4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size) for filling haunches including 12 mm cement plaster 1 : 4 (1 cement : 4 fine aggregate) with a floating coat of neat cement inside the drain, its top and exposed side including disposal of surplus earth complete as per standard design - 10 cm drain 20 cm average depth with class designation 3.5 bricks.		
32.35.2.2	Constructing brick masonry open surface drain with class designation 35 in cement mortar 1 : 4 (1 cement : 4 fine aggregate) including earth excavation, 10 cm thick bed concrete 1 : 5 : 10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40 mm nominal size and 25 mm thick cement concrete 1 : 2 : 4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size) for filling haunches including 12 mm cement plaster 1 : 4 (1 cement : 4 fine aggregate) with a floating coat of neat cement inside the drain, its top and exposed side including disposal of surplus earth complete as per standard design - 15 cm drain 20 cm average depth - with brick class designation 3.5	metre	1352.99
32.35.3.2	Constructing brick masonry open surface drain with class designation 35 in cement mortar 1:4 (1 cement : 4 fine aggregate) including earth excavation, 10 cm thick bed concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40 mm nominal size and 25 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size) for filling haunches including 12 mm cement plaster 1:4 (1 cement : 4 fine aggregate) with a floating coat of neat cement inside the drain, its top and exposed side including disposal of surplus earth complete as per standard design - 25 cm drain 30 cm average depth - with brick class designation 3.5	metre	1830.08
32.39.2	Making soak pit 2.5m diameter 3.0 metre deep with 45x45cm dry brick honey comb shaft with bricks of class designation 3.5 and S.W drain pipe 100mm diameter, 1.8m long complete as per standard design - with brick of class designation 3.5	each	35596.92
32.40.1A	Cutting open B.T. Road or macadam road for laying water main / sewer lines and stacking the usable materials on road side for reuse in road works.	cum	293.70
32.40.1B	Cutting open concrete road for laying water main/sewer lines & stacking the usable materials on road side for reuse in road	cum	411.40

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	works.		
32.40.2A	Earth work excavation above water level and depositing on bank in sandy silt or other soil, wet sand or silt, light black cotton soil or clay, sandy loam and ordinary soil for I.C's manhole, well, infiltration, suction well including driving shoring materials etc., for excavation purpose and removing the shoring materials and refilling the trenches with excavated earth complying with standard specifications etc., complete. For first depth of 2 metres (using open timbering)	cum	181.68
32.40.2B	Earth work excavation above water level and depositing on bank in sandy silt or other soil, wet sand or silt, light black cotton soil or clay, sandy loam & ordinary soil for I.C's man hole, well, infiltration, suction well including driving shoring materials etc. for excavation purpose and removing the shoring materials and refilling the trenches with excavated earth complying with standard specification., complete - For first depth of 2 metres (using close timbering).	cum	381.86
32.40.2C	Earth work excavation above water level and depositing on bank in sandy silt or other soil, wet sand or silt, light black cotton soil or clay, sandy loam and ordinary soil for I.C's manhole, well, infiltration, suction well including driving shoring materials etc., for excavation purpose and removing the shoring materials and refilling the trenches with excavated earth complying with standard specifications etc., complete – For second depth of 2 metres (using close timbering)	cum	454.03
32.40.2D	Earth work excavation above water level and depositing on bank in sandy silt or other soil, wet sand or silt, light black cotton soil or clay, sandy loam and ordinary soil for I.C's manhole, well, infiltration, suction well including driving shoring materials etc., for excavation purpose and removing the shoring materials and refilling the trenches with excavated earth complying with standard specifications etc., complete – For third depth of 2 metres (using close timbering)	cum	729.29
32.41.1A	Earth work excavation below water level and depositing on bank in sandy, silt or other soil, wet sand or silt, light black cotton soil or clay, sandy loam and ordinary soil for I.Cs, manhole, well, infiltration well, suction well, siphon or connecting pipe	cum	876.00
32.41.1B	Earth work excavation below water level and depositing on	cum	1207.00

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	bank in sandy silt or other soil, wet sand or silt, light black cotton soil or clay, sandy loam and ordinary soil for I.Cs, manhole, well, infiltration well, suction well,siphon or connecting pipe		
32.41.1C	Earth work excavation below water level and depositing on bank in sandy silt or other soil, wet sand or silt, light black cotton soil or clay, sandy loam and ordinary soil for I.Cs, manhole, well, infiltration well, suction well,siphon or connecting pipe	cum	1864.00
32.41.1D	Earth work excavation below water level and depositing on bank in sandy silt or other soil, wet sand or silt, light black cotton soil or clay, sandy loam and ordinary soil for I.Cs, manhole, well, infiltration well, suction well,siphon or connecting pipe	cum	2895.00
32.41.2A	Earth work excavation above water level and depositing on bank in sandy, silt or other soil, wet sand or silt, light black cotton soil or clay, sandy loam and ordinary soil for infiltration, gallery siphon or connecting pipe line including driving shoring materials as mentioned below. Removing the shoring materials and refilling with excavated earth complying with standard specification etc., complete. - First depth of 2m (using open timbering)	cum	247.20
32.41.2B	Earth work excavation above water level and depositing on bank in sandy, silt or other soil, wet sand or silt, light black cotton soil or clay, sandy loam and ordinary soil for infiltration, gallery siphon or connecting pipe line including driving shoring materials as mentioned below. Removing the shoring materials and refilling with excavated earth complying with standard specification etc., complete. - First depth of 2m (using close timbering)	cum	406.15
32.41.2C	Earth work excavation above water level and depositing on bank in sandy, silt or other soil, wet sand or silt, light black cotton soil or clay, sandy loam and ordinary soil for infiltration, gallery siphon or connecting pipe line including driving shoring materials as mentioned below. Removing the shoring materials and refilling with excavated earth complying with standard specification etc., complete. - Second depth of 2m (using close timbering)	cum	463.69
32.41.2D	Earth work excavation above water level and depositing on	cum	615.96

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	bank in sandy, silt or other soil, wet sand or silt, light black cotton soil or clay,sandy loam and ordinary soil for infiltration, gallery siphon or connecting pipe line including driving shoring materials as mentioned below. Removing the shoring materials and refilling with excavated earth complying with standard specification etc., complete. - Third depth of 2m (using close timbering)		
32.42.1A	Sinking well of 1.25m to 2.0m internal dia below water level including all incidental charges, such as bailing and pumping of water, using special tools and plants etc.,complete in ordinary soil,loose soil,sandy soil and clay soil. – For first depth of 2	metre	808.00
32.42.1B	Sinking well of 1.25m to 2.0m internal dia below water level including all incidental charges such as bailing and pumping of water,using special tools and plants etc.,complete in ordinary soil,loose soil,sandy soil and clay soil. – For second depth of 2	metre	1615.00
32.42.1C	Sinking well of 1.25m to 2.0m internal dia below water level including all incidental charges such as bailing and pumping of water, using special tools and plants etc.,complete in ordinary soil,loose soil,sandy soil and clay soil. – For third depth of 2 m	metre	3233.00
32.42.1D	Sinking well of 1.25m to 2.0m internal dia below water level including all incidental charges such as bailing and pumping of water, using special tools and plants etc.,complete in ordinary soil,loose soil,sandy soil and clay soil. – For fourth depth of 2	metre	5700.00
32.42.2A	Sinking well of 4 metre internal dia below water level including all incidental charges such as bailing and pumping of water, using special tools and plants etc.,complete in ordinary soil,loose soil,sandy soil and clay soil. – For first depth of 2m.	metre	2430.00
32.42.2B	Sinking well of 4 metre internal dia below water level including all incidental charges such as bailing and pumping of water, using special tools and plants etc.,complete in ordinary soil,loose soil,sandy soil and clay soil. – For second depth of 2m.	metre	4662.00
32.42.2C	Sinking well of 4 metre internal dia below water level including all incidental charges such as bailing and pumping of water, using special tools and plants etc.,complete in ordinary soil,loose soil,sandy soil and clay soil. – For third depth of 2m.	metre	9305.00

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
32.42.2D	Sinking well of 4 metre internal dia below water level including all incidental charges such as bailing and pumping of water,using special tools and plants etc.,complete in ordinary soil,loose soil,sandy soil and clay soil. – For fourth depth of 2m.	metre	17449.00
32.42.2E	Sinking well of 4 metre internal dia below water level including all incidental charges such as bailing and pumping of water,using special tools and plants etc.,complete in ordinary soil,loose soil,sandy soil and clay soil. – For fifth depth of 2m.	metre	32574.00
32.42.3A	Sinking well of 6 metre internal dia below water level including all incidental charges such as bailing and pumping of water, using special tools and plants etc., complete in ordinary soil,loose soil,sandy soil and clay soil. – For first depth of 2m.	metre	5079.00
32.42.3B	Sinking well of 6 metre internal dia below water level including all incidental charges such as bailing and pumping of water, using special tools and plants etc.,complete in ordinary soil,loose soil,sandy soil and clay soil. – For second depth of 2m.	metre	9831.00
32.42.3C	Sinking well of 6 metre internal dia below water level including all incidental charges such as bailing and pumping of water,using special tools and plants etc.,complete in ordinary soil,loose soil,sandy soil and clay soil. – For third depth of 2m.	metre	19279.00
32.42.3D	Sinking well of 6 metre internal dia below water level including all incidental charges such as bailing and pumping of water,using special tools and plants etc.,complete in ordinary soil,loose soil,sandy soil and clay soil. – For fourth depth of 2m.	metre	36811.00
32.42.3E	Sinking well of 6 metre internal dia below water level including all incidental charges such as bailing and pumping of water,using special tools and plants etc.,complete in ordinary soil,loose soil,sandy soil and clay soil. – For fifth depth of 2m.	metre	68717.00
32.45.1	Construction of manhole with foundation concrete for 200 mm thick in 1:4:8 (one cement, four sand and eight hard broken granite stone aggregate of 40 mm nominal size), side walls in brick work in C.M. 1:4 (one cement and four sand) using best available country bricks for 23 cm thickness as shown in detailed drawing, relieving arches in brick work in C.M. 1:4	no	35592.92

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	(one cement and four sand) shall be turned over pipes wherever it passes through walls, top R.C.C. slab in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) for 150mm thick and fixing 560 mm dia circular ductile iron manhole cover and frame) of heavy duty and weight not less than 80 kg in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) and fixing of C.I. Steps all as shown in drawings,but excluding cost of CI steps. Inside and outside plastering for 20mm thick with C.M. 1:3 (one cement and three sand) in making channels and benching as shown in drawings in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) rendered with C.M. 1:3 (one cement and three sand) for 20mm thick including curing and testing the manhole for its water tightness. A drop in water more than 50mm in 24 hours shall not be permitted. The rate includes the cost of D.I manhole cover with frame, centering, shuttering and reinforcement with TMT bars excluding the cost of earthwork excavation. - 800mm x 800mm x 1000mm deep		
32.45.1A	Extra/rebate for every additional / reduction in depth of 0.10 m in 23 cm thick wall or part thereof for manhole of size. - 800mm x 800mm x 1000mm deep.	no	1396.94
32.45.2	Construction of manhole with foundation concrete for 200 mm thick in 1:4:8 (one cement, four sand and eight hard broken granite stone aggregate of 40 mm nominal size), side walls in brick work in C.M. 1:4 (one cement and four sand) using best available country bricks for 23 cm thickness as shown in detailed drawing, relieving arches in brick work in C.M. 1:4 (one cement and four sand) shall be turned over pipes wherever it passes through walls, top R.C.C. slab in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) for 150mm thick and fixing 560 mm dia circular ductile iron manhole cover and frame) of heavy duty and weight not less than 80 kg in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) and fixing of C.I. Steps all as shown in drawings,but excluding cost of CI steps. Inside and outside plastering for 20mm thick with C.M. 1:3 (one cement and three sand) in making channels and benching as shown in drawings in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) rendered with C.M. 1:3 (one cement and three sand) for 20mm thick including curing and testing the manhole for its water tightness. A drop in water more than 50mm in 24 hours shall	no	43494.77

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	not be permitted. The rate includes the cost of D.I manhole cover with frame, centering, shuttering and reinforcement with TMT bars excluding the cost of earthwork excavation. - 900mm x 1200mm x 1000mm deep		
32.45.2A	Extra/rebate for every additional / reduction in depth of 0.10 m in 23 cm thick wall or part thereof for manhole of size - 900mm x 1200mm x 1000mm deep.	no	1811.87
32.45.3	Construction of manhole with foundation concrete for 300 mm thick in 1:4:8 (one cement, four sand and eight hard broken granite stone aggregate of 40 mm nominal size), side walls in brick work in C.M. 1:4 (one cement and four sand) using best available country bricks in the 23 cm up to 1.50 m from ground level and exceeding 1.50 m 34 cm thickness as shown in detailed drawing, relieving arches in brick work in C.M. 1:4 (one cement and four sand) shall be turned over pipes wherever it passes through walls, top R.C.C. slab in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) for 150mm thick and fixing 560 mm dia circular ductile iron manhole cover and frame) of heavy duty and weight not less than 80 kg in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) and fixing of C.I. Steps all as shown in drawings, but excluding cost of CI steps. Inside and outside plastering for 20mm thick with C.M. 1:3 (one cement and three sand) in making channels and benching as shown in drawings in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) rendered with C.M. 1:3 (one cement and three sand) for 20mm thick including curing and testing the manhole for its water tightness. A drop in water more than 50mm in 24 hours shall not be permitted. The rate includes the cost of D.I manhole cover with frame, centering, shuttering and reinforcement with TMT bars excluding the cost of earthwork excavation. - 900mm x 1200mm x 1600mm deep	no	60473.45
32.45.3A	Extra/rebate for every additional / reduction in depth of 0.10 m in 34 cm thick wall or part thereof for manhole of size - 900mm x 1200mm x 1600mm deep.	no	2519.70
32.45.4	Construction of manhole with foundation concrete for 300 mm thick in 1:4:8 (one cement, four sand and eight hard broken granite stone aggregate of 40 mm nominal size), side walls in brick work in C.M. 1:4 (one cement and four sand) using best available country bricks in the 23 cm up to 1.50 m from ground	no	72617.06

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	level and exceeding 1.50 m 34 cm thickness as shown in detailed drawing, relieving arches in brick work in C.M. 1:4 (one cement and four sand) shall be turned over pipes wherever it passes through walls, top R.C.C. slab in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) for 150mm thick and fixing 560 mm dia circular ductile iron manhole cover and frame) of heavy duty and weight not less than 80 kg in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) and fixing of C.I. Steps all as shown in drawings,but excluding cost of CI steps. Inside and outside plastering for 20mm thick with C.M. 1:3 (one cement and three sand) in making channels and benching as shown in drawings in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) rendered with C.M. 1:3 (one cement and three sand) for 20mm thick including curing and testing the manhole for its water tightness. A drop in water more than 50mm in 24 hours shall not be permitted. The rate includes the cost of D.I manhole cover with frame, centering, shuttering and reinforcement with TMT bars excluding the cost of earthwork excavation. - 900mm x 1200mm x 2100mm deep		
32.45.4A	Extra/rebate for every additional / reduction in depth of 0.10 m in 34 cm thick wall or part thereof for manhole of size - 900mm x 1200mm x 2100mm deep.	no	2519.70
32.45.5	Construction of circular manhole of 1.40m internal diameter and to the depth detailed below with R.C.C. kerb in 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) with a overall size of 500 x 340 mm and shaped at bottom as shown in drawing to receive M.S. angle of size 100 x 100 x 10 mm as cutting edge, with reinforcement not less than 70 kg as indicated in drawing, and with vertical rods of 12 mm diameter at 60 cm c/c, 120 cm long to bind the steining wall and kerb, bottom plugging to a depth of 0.50 m with plain cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) with walls as detailed below. Providing relieving arch over the sewer pipe wherever it passes through the walls of the manholes, fixing of C.I. Rungs,excluding cost of CI rungs, fixing of D.I. manhole cover and frame) of heavy duty of size 560 mm diameter and weight not less than 80 kg in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) all shown in drawing, the rate includes cost of manhole cover with frame, centering, shuttering and reinforcement with TMT bars	no	96147.20

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	excluding the cost of earth work excavation. Plastering both inside and outside for 20 mm thick with CM 1:3 (one cement and three sand) and making channels in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) all as shown in drawing , rendered with cement mortar 1:3 (one cement and three sand) for 20 mm thick etc., complete including curing and testing the manhole for water tightness. A drop in water level more than 50 mm in 24 hours will not be permitted - For Manhole 2.5m deep with wall of 23cm thick upto 1.5m and 34cm thick for depth greater than 1.5m of brick masonry using best available country bricks in cement mortar 1:4 (1 cement & 4 sand).		
32.45.5A	Extra/rebate for every additional/reduction in depth of 0.10m or part thereof in 34cm thick wall for the circular manhole of 1.40m internal dia. and 2.5m deep.	no	2505.87
32.45.6	Construction of circular manhole of 1.40m internal diameter and to the depth detailed below with R.C.C. kerb in 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) with a overall size of 500 x 340 mm and shaped at bottom as shown in drawing to receive M.S. angle of size 100 x 100 x 10 mm as cutting edge, with reinforcement not less than 70 kg as indicated in drawing, and with vertical rods of 12 mm diameter at 60 cm c/c, 120 cm long to bind the steining wall and kerb, bottom plugging to a depth of 0.50 m with plain cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) with walls as detailed below. Providing relieving arch over the sewer pipe wherever it passes through the walls of the manholes, fixing of C.I. Rungs,excluding cost of CI rungs, fixing of D.I. manhole cover and frame) of heavy duty of size 560 mm diameter and weight not less than 80 kg in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) all shown in drawing, the rate includes cost of manhole cover with frame, centering, shuttering and reinforcement with TMT bars excluding the cost of earth work excavation. Plastering both inside and outside for 20 mm thick with CM 1:3 (one cement and three sand) and making channels in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) all as shown in drawing , rendered with cement mortar 1:3 (one cement and three sand) for 20 mm thick etc., complete including curing and testing the manhole for water tightness. A drop in water level more than 50 mm in 24 hours will not be permitted - For manhole 5m deep with wall 23 cm thick upto 1.5m and 34 cm thick for	no	184702.69

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	depth from 1.5m and upto 2.8m and 45cm thick for depth greater than 2.8m of brick masonry using best available country bricks in cement mortar 1:4 (1 cement and 4 sand).		
32.45.6A	Extra/rebate for every additional/reduction in depth of 0.10m or part thereof in 34cm thick wall for the circular manhole of 1.40m internal dia. and 5.0m deep.	no	2413.66
32.45.7	Construction of flushing tank of internal size 2000 x 1200 x 1000 mm deep with R.C.C. top slab of 150 mm thick in R.C.C 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) with reinforcement as shown in detailed drawing, foundation concrete of 200 mm thick in 1:4:8 (one cement, four sand and eight hard broken granite stone aggregate of 40 mm nominal size) with 230 mm thick wall in brick masonry using country bricks in CM 1:4 (one cement and four sand) inside and outside plastering with 20 mm thick CM 1:3 (one cement and three sand) making flooring for 40 mm thick in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) and rendered with CM 1:3 (one cement and three sand) 20 mm thick ,conveying and fixing circular ductile iron manhole cover and frame) of heavy duty of size of 560 mm diameter and weight not less than 80 kg in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) (all as shown in drawing) providing and fixing of C.I. pipes and specials for flushing pipe of 200 mm diameter and overflow pipe of 150 mm diameter conforming to IS 1536 and IS 1538, jointing of socket and spigot of C.I. pipes and specials shall be in molten lead and encasing them in CC 1:4:8 (one cement, four sand, eight HBG metal) block of size 1000 x 600 x 800 mm.The cost includes curing and testing the flushing tank for its water tightness. A drop in water more than 50mm in 24 hours shall not be permitted. The rate includes the cost of D.I manhole cover with frame, centering, shuttering and reinforcement with TMT bars, but excluding the cost of earth work excavation.	no	99372.86
32.45.7A	Extra/rebate for every additional/reduction in depth of 0.10m or part thereof in 23cm thick wall for the flush tank of size 2000x1200x1000mm deep.	no	5151.65
32.46.1	Construction of intercepting chamber of the size 600 x 850 x 1100 mm deep with R.C.C. top slab of 100mm thick in R.C.C 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) as shown in drawings,	no	29638.18

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	foundation in PCC 1:4:8 mix (one cement, four sand and eight hard broken granite stone aggregate of 40 mm nominal size), side wall of 23 cm thick in brick, inside and outside plastering with 20 mm thick in CM 1:3 (one cement and three sand) and making channel for house service connection in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) rendered with CM 1:3 (one cement and three sand) 20mm thick complete. Conveying and fixing of rectangular ductile iron manhole cover and frame) of medium duty size 450 x 600 mm and weight not less than 70 kg in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size).The cost includes curing and testing of the intercepting chamber for its water tightness. A drop in water more than 50 mm in 24 hours shall not be permitted. The rate includes cost of rectangular D.I cover with frame, centering, shuttering and reinforcement with TMT bars,but excluding the cost of earth work excavation.		
32.46.1A	Extra/rebate for every additional/reduction in depth of 0.10m or part thereof in 23cm thick wall for the intercepting chamber of size 600x850x1100mm deep	no	1355.45
32.47.1	Making C.I. vent shaft using 150 mm diameter C.I class LA conforming to IS 1536 with C.I cowl / wire guard balloon at top, having an over all length of 5.50 m long and fixing from bottom and overflow pipe size of 150mm dia,extending to a depth of 1.25 m below ground level, with C.I. bend of 150 mm dia medium class conforming to IS 1538 at bottom and resting over the CC block of size 650 x 650 x 250 mm in 1:4:8 mix (one cement, four sand and eight hard broken granite stone aggregate of 40 mm nominal size) encasing all round the pipe with CC 1:4:8 mix (one cement, four sand and eight hard broken granite stone aggregate of 40 mm nominal size) to form a block of 650 x 650 x 1000 mm and top is finishing with cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) for 250 mm thick including fixing of M.S. foundation bolts and nuts of 20 mm diameter and 600 mm long with split up end and bottom to receive the C.I. pedestal of 175 mm internal diameter and 600 mm height and weight not less than 150kg to join above and below ground level.The rate includes the cost of C.I. specials and C.I. Pedestal etc.,complete.	no	49686.48
32.47.2	Fixing of 150 mm wide cast iron steps in the manholes with 200 x 200 x 100 mm CC block in cement concrete 1:1.5:3 (one	no	654.47

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	cement ,one and half sand and three hard broken granite stone aggregate of 20 mm nominal size) all as shown in drawings.		
32.48.1	Jointing the C.I./D.I. pipes with manhole including dismantling of brick work to the required extent and making good the angular space with brick work in CM 1:3 (one cement and three sand) and encasing with cement concrete 1:1.5:3 (one cement ,one and half sand and three hard broken granite stone aggregate of 20 mm nominal size) etc. complete. - 450 mm dia pipe.	no	2714.17
32.48.2	Jointing the C.I./D.I. pipes with manhole including dismantling of brick work to the required extent and making good the angular space with brick work in CM 1:3 (one cement and three sand) and encasing with cement concrete 1:1.5:3 (one cement ,one and half sand and three hard broken granite stone aggregate of 20 mm nominal size) etc. complete. - 600 mm dia pipe.	no	3927.10
32.49.1	Providing wooden (Padak) brackets of size 80 cm X 100 cm, with vertical up right of size 7.5 cm x7.5 cm, 100cm long and bolted with horizontal wooden plank of size 80cm x 15cm with 4cm thickness with 4 nos of 10mm dia MS bolts and nuts, 13cm long for supporting of CI pipes for trunk sewer.	no	1723.92
32.50.1A	Raising of intercepting chamber by dismantling the old R.C.C. slab, removing the I.C. cover and frame from the chamber and raising the chamber height with brick work in cement mortar 1:4 (one cement and four sand), refixing the frame in position by laying reinforced cement concrete 1:1.5:3 (One cement one and half sand and three HBG metal) including curing but excluding the cost of reinforcement, finishing the top, inside and outside plastering with 20mm thick in cement mortar 1:3(one cement three sand), the rate includes all materials, providing barricading,caution board, watch and ward etc.,complete till the completion of work with minimum hindrance to the traffic.- 30cm height.	no	8112.05
32.50.1B	Raising of various types of manholes and flushing tank by cutting alround the manhole cover, removing the frame and cover from the manhole by cutting the B.T., W.B.M., surface, raising the manhole to the required height with brick work in cement motar 1:4 (One cement and four sand), refixing the frame in position by laying cement concrete 1:1.5:3 (One cement one and half sand and three 20mm HBG metal)	no	3726.33

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	including curing, but excluding the cost of reinforcement, finishing the top, inside and outside plastering with 20mm thick in cement mortar 1:3(one cement three sand), the rate includes all materials, providing barricading, caution board, watch and ward etc., complete till the completion of work with minimum hindrance to the traffic.- 30cm height.		
32.51.1	Providing salt glazed stoneware pipe with spigot and sockets ends, conforming to IS 651 with standard length of 60 cm, laying to level or slope to the depth required and jointing with spun yarn soaked with cement slurry or tarred gasket shall be passed round the joints and inserted into the joint by means of caulking tool and filled the joint with stiff mixture of CM in proportion 1:1 (one cement and one sand), including the cost of testing the pipe, joints etc., complete. - 100 mm dia	metre	887.64
32.51.1A	Providing salt glazed stoneware pipe with spigot and sockets ends, conforming to IS 651 with standard length of 60 cm, laying to level or slope to the depth required and jointing with spun yarn soaked with cement slurry or tarred gasket shall be passed round the joints and inserted into the joint by means of caulking tool and filled the joint with stiff mixture of CM in proportion 1:1 (one cement and one sand), including the cost of testing the pipe, joints etc., complete. - 150 mm dia	metre	1025.61
32.51.1B	Providing salt glazed stoneware pipe with spigot and sockets ends, conforming to IS 651 with standard length of 60 cm, laying to level or slope to the depth required and jointing with spun yarn soaked with cement slurry or tarred gasket shall be passed round the joints and inserted into the joint by means of caulking tool and filled the joint with stiff mixture of CM in proportion 1:1 (one cement and one sand), including the cost of testing the pipe, joints etc., complete. - 200 mm dia	metre	1346.44
32.51.1C	Providing salt glazed stoneware pipe with spigot and sockets ends, conforming to IS 651 with standard length of 60 cm, laying to level or slope to the depth required and jointing with spun yarn soaked with cement slurry or tarred gasket shall be passed round the joints and inserted into the joint by means of caulking tool and filled the joint with stiff mixture of CM in proportion 1:1 (one cement and one sand), including the cost of testing the pipe, joints etc., complete. - 250 mm dia	metre	1973.01
32.51.1D	Providing salt glazed stoneware pipe with spigot and sockets ends, conforming to IS 651 with standard length of 60 cm,	metre	2386.83

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	laying to level or slope to the depth required and jointing with spun yarn soaked with cement slurry or tarred gasket shall be passed round the joints and inserted into the joint by means of caulking tool and filled the joint with stiff mixture of CM in proportion 1:1 (one cement and one sand),including the cost of testing the pipe, joints etc., complete. - 300 mm dia		
32.51.1E	Providing salt glazed stoneware pipe with spigot and sockets ends, conforming to IS 651 with standard length of 60 cm, laying to level or slope to the depth required and jointing with spun yarn soaked with cement slurry or tarred gasket shall be passed round the joints and inserted into the joint by means of caulking tool and filled the joint with stiff mixture of CM in proportion 1:1 (one cement and one sand),including the cost of testing the pipe, joints etc., complete. - 375 mm dia	metre	4144.30
32.52.1A	Providing stoneware specials – ‘Y’ junction with spigot and socket ends conforming to I.S.651 with a standard length of 60 cm, laying to level or slope to the depth required and jointing with spun yarn soaked with cement slurry or tarred gasket shall be passed round the joints by means of caulking tools and filled the joint with stiff mixture of CM in proportion 1:1 (one cement and one sand),including the cost of testing the pipe, joints etc, complete - 150 x 150 mm 'Y'	no	932.10
32.52.1B	Providing stoneware specials – ‘Y’ junction with spigot and socket ends conforming to I.S. 651 with a standard length of 60 cm, laying to level or slope to the depth required and jointing with spun yarn soaked with cement slurry or tarred gasket shall be passed round the joints by means of caulking tools and filled the joint with stiff mixture of CM in proportion 1:1 (one cement and one sand),including the cost of testing the pipe, joints etc, complete - 200 x 150 mm 'Y'	no	1018.91
32.52.1C	Providing stoneware specials – ‘Y’ junction with spigot and socket ends conforming to I.S. 651 with a standard length of 60 cm, laying to level or slope to the depth required and jointing with spun yarn soaked with cement slurry or tarred gasket shall be passed round the joints by means of caulking tools and filled the joint with stiff mixture of CM in proportion 1:1 (one cement and one sand),including the cost of testing the pipe, joints etc, complete - 250 x 150 mm 'Y'	no	1239.11
32.52.1D	Providing stoneware specials – ‘Y’ junction with spigot and socket ends conforming to I.S. 651 with a standard length of	no	1791.53

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	60 cm, laying to level or slope to the depth required and jointing with spun yarn soaked with cement slurry or tarred gasket shall be passed round the joints by means of caulking tools and filled the joint with stiff mixture of CM in proportion 1:1 (one cement and one sand),including the cost of testing the pipe, joints etc, complete - 300 x 150 mm 'Y'		
32.60.1	Cleaning the site by removing the slushy soil on both the sides of road and making the road fit for laying WBM and making smooth surface for vehicular traffic including disposing the same within 2 Km lead.	cum	92.00
32.60.2	Rectification of Road including earthwork excavation not less than 35 cm in thick, Providing & laying of sand gravel mix of 15 cm in thick, WBM Gr-I of 10 cm in thick, WBM Gr-II of 7.5 cm in thick, tack coat at 10 kg/10 sq.m, premix carpet of 20 mm in thick and seal coat of type –‘B’. The rate includes the cost of cleaning the WBM surface and compaction using power roller etc. complete.	Sqm	1850.45
32.61.1A	Providing and laying Fibre reinforced plastic sheet 6mm thickness using glass fibre mat and isophthalic resin laid in alternate layers. The final surface of the sheet will be finished with gel coat,including moulding charges to fabricate circular segments	sqm	5400.00
32.61.1B	Providing and laying Fibre reinforced plastic lining to the steel section including rubbing and claning the rusts and dusts and applying resin and glass fibre mat on the surface to a thickness of 2mm and finished with a gel coat including all labour and	sqm	1800.00
32.65.1	Providing and fixing PE graded manholes as per EN 13598-2 , suitable for sewer / drainage lines with 1.00 meter inner diameter consisting of manhole base , Shaft/s, eccentric cone , inbuilt ladder , with 10mt . Capacity GRP light duty frame and cover at top including suitable accessories for inlet , outlets of 160 , 200 , 250 and 315 mm pipes as per requirement & with minimum accessories with required rubber rings for sealing. The item includes all rings / sealent with reducer if required and two in-situ connections 110 mm at top as per site requirement etc complete. The minimum depth of the chamber is 1250 mm. (1000 mm inner dia and depth 1200 mm)	no	42747.38
32.65.2	Providing and fixing PE graded manholes as per EN 13598-2 , suitable for sewer / drainage lines with 1.00 meter inner	no	50704.19

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	diameter consisting of manhole base , Shaft/s, eccentric cone , inbuilt ladder , with 10mt . Capacity GRP light duty frame and cover at top including suitable accessories for inlet , outlets of 160 , 200 , 250 and 315 mm pipes as per requirement & with minimum accessories with required rubber rings for sealing. The item includes all rings / sealent with reducer if required and two in-situ connections 110 mm at top as per site requirement etc complete. (1000 mm inner dia and depth 1800 mm)		
32.65.3	Providing and fixing PE graded manholes as per EN 13598-2 , suitable for sewer / drainage lines with 1.00 meter inner diameter consisting of manhole base , Shaft/s, eccentric cone , inbuilt ladder , with 10mt . Capacity GRP light duty frame and cover at top including suitable accessories for inlet , outlets of 160 , 200 , 250 and 315 mm pipes as per requirement & with minimum accessories with required rubber rings for sealing. The item includes all rings / sealent with reducer if required and two in-situ connections 110 mm at top as per site requirement etc complete. (1000 mm inner dia and depth 2300 mm)	no	65654.69
32.65.4	Providing and fixing PE graded manholes as per EN 13598-2 , suitable for sewer / drainage lines with 1.00 meter inner diameter consisting of manhole base , Shaft/s, eccentric cone , inbuilt ladder , with 10mt . Capacity GRP light duty frame and cover at top including suitable accessories for inlet , outlets of 160 , 200 , 250 and 315 mm pipes as per requirement & with minimum accessories with required rubber rings for sealing. The item includes all rings / sealent with reducer if required and two in-situ connections 110 mm at top as per site requirement etc complete. (1000 mm inner dia and depth 2800 mm)	no	74093.76
32.65.5	Providing and fixing PE graded manholes as per EN 13598-2 , suitable for sewer / drainage lines with 1.00 meter inner diameter consisting of manhole base , Shaft/s, eccentric cone , inbuilt ladder , with 10mt . Capacity GRP light duty frame and cover at top including suitable accessories for inlet , outlets of 160 , 200 , 250 and 315 mm pipes as per requirement & with minimum accessories with required rubber rings for sealing. The item includes all rings / sealent with reducer if required and two in-situ connections 110 mm at top as per site requirement etc complete. (1000 mm inner dia and depth 3300 mm)	no	88561.97

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
32.65.6	Providing and fixing PE graded manholes as per EN 13598-2 , suitable for sewer / drainage lines with 1.00 meter inner diameter consisting of manhole base , Shaft/s, eccentric cone , inbuilt ladder , with 10mt . Capacity GRP light duty frame and cover at top including suitable accessories for inlet , outlets of 160 , 200 , 250 and 315 mm pipes as per requirement & with minimum accessories with required rubber rings for sealing. The item includes all rings / sealent with reducer if required and two in-situ connections 110 mm at top as per site requirement etc complete. (1000 mm inner dia and depth 3800 mm)	no	97001.05
32.65.7	Providing and fixing PE graded manholes as per EN 13598-2 , suitable for sewer / drainage lines with 1.00 meter inner diameter consisting of manhole base , Shaft/s, eccentric cone , inbuilt ladder , with 10mt . Capacity GRP light duty frame and cover at top including suitable accessories for inlet , outlets of 160 , 200 , 250 and 315 mm pipes as per requirement & with minimum accessories with required rubber rings for sealing. The item includes all rings / sealent with reducer if required and two in-situ connections 110 mm at top as per site requirement etc complete. (1000 mm inner dia and depth 4300 mm)	no	111469.26
32.65.8	Providing and fixing PE graded manholes as per EN 13598-2 , suitable for sewer / drainage lines with 1.00 meter inner diameter consisting of manhole base , Shaft/s, eccentric cone , inbuilt ladder , with 10mt . Capacity GRP light duty frame and cover at top including suitable accessories for inlet , outlets of 160 , 200 , 250 and 315 mm pipes as per requirement & with minimum accessories with required rubber rings for sealing. The item includes all rings / sealent with reducer if required and two in-situ connections 110 mm at top as per site requirement etc complete. (1000 mm inner dia and depth 4800 mm)	no	118703.37
32.65.9	Providing and fixing PE graded manholes as per EN 13598-2 , suitable for sewer / drainage lines with 1.00 meter inner diameter consisting of manhole base , Shaft/s, eccentric cone , inbuilt ladder , with 10mt . Capacity GRP light duty frame and cover at top including suitable accessories for inlet , outlets of 160 , 200 , 250 and 315 mm pipes as per requirement & with minimum accessories with required rubber rings for sealing. The item includes all rings / sealent with reducer if required and two in-situ connections 110 mm at top as per site requirement etc complete. (1000 mm inner dia and depth 5300 mm)	no	134376.56

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	mm)		
32.65.10	Providing and fixing PE graded manholes as per EN 13598-2 , suitable for sewer / drainage lines with 1.00 meter inner diameter consisting of manhole base , Shaft/s, eccentric cone , inbuilt ladder , with 10mt . Capacity GRP light duty frame and cover at top including suitable accessories for inlet , outlets of 160 , 200 , 250 and 315 mm pipes as per requirement & with minimum accessories with required rubber rings for sealing. The item includes all rings / sealent with reducer if required and two in-situ connections 110 mm at top as per site requirement etc complete. (1000 mm inner dia and depth 5800 mm)	no	141610.67
32.65.11	Providing and fixing PE graded manholes as per EN 13598-2 , suitable for sewer / drainage lines with 1.20 meter inner diameter consisting of manhole base , Shaft/s, eccentric cone , inbuilt ladder , with 10mt . Capacity GRP light duty frame and cover at top including suitable accessories for inlet , outlet of 160 , 200 , 250 and 315 mm diameter pipes & with minimum accessories with required rubber rings for sealing. The item includes all rings / sealent with reducer if required and two in-situ connections 110 mm at top as per site requirement etc complete. (1200 mm inner dia and depth 1300 mm)	no	66118.46
32.65.12	Providing and fixing PE graded manholes as per EN 13598-2 , suitable for sewer / drainage lines with 1.20 meter inner diameter consisting of manhole base , Shaft/s, eccentric cone , inbuilt ladder , with 10mt . Capacity GRP light duty frame and cover at top including suitable accessories for inlet , outlet of 160 , 200 , 250 and 315 mm diameter pipes & with minimum accessories with required rubber rings for sealing. The item includes all rings / sealent with reducer if required and two in-situ connections 110 mm at top as per site requirement etc complete. (1200 mm inner dia and depth 1800 mm)	no	87458.00
32.65.13	Providing and fixing PE graded manholes as per EN 13598-2 , suitable for sewer / drainage lines with 1.20 meter inner diameter consisting of manhole base , Shaft/s, eccentric cone , inbuilt ladder , with 10mt . Capacity GRP light duty frame and cover at top including suitable accessories for inlet , outlet of 160 , 200 , 250 and 315 mm diameter pipes & with minimum accessories with required rubber rings for sealing. The item includes all rings / sealent with reducer if required and two in-situ connections 110 mm at top as per site requirement etc complete. (1200 mm inner dia and depth 2300 mm)	no	97416.46

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
32.65.14	Providing and fixing PE graded manholes as per EN 13598-2 , suitable for sewer / drainage lines with 1.20 meter inner diameter consisting of manhole base , Shaft/s, eccentric cone , inbuilt ladder , with 10mt . Capacity GRP light duty frame and cover at top including suitable accessories for inlet , outlet of 160 , 200 , 250 and 315 mm diameter pipes & with minimum accessories with required rubber rings for sealing. The item includes all rings / sealent with reducer if required and two in-situ connections 110 mm at top as per site requirement etc complete. (1200 mm inner dia and depth 2800 mm)	no	118756.01
32.65.15	Providing and fixing PE graded manholes as per EN 13598-2 , suitable for sewer / drainage lines with 1.20 meter inner diameter consisting of manhole base , Shaft/s, eccentric cone , inbuilt ladder , with 10mt . Capacity GRP light duty frame and cover at top including suitable accessories for inlet , outlet of 160 , 200 , 250 and 315 mm diameter pipes & with minimum accessories with required rubber rings for sealing. The item includes all rings / sealent with reducer if required and two in-situ connections 110 mm at top as per site requirement etc complete. (1200 mm inner dia and depth 3300 mm)	no	128714.47
32.65.16	Providing and fixing PE graded manholes as per EN 13598-2 , suitable for sewer / drainage lines with 1.20 meter inner diameter consisting of manhole base , Shaft/s, eccentric cone , inbuilt ladder , with 10mt . Capacity GRP light duty frame and cover at top including suitable accessories for inlet , outlet of 160 , 200 , 250 and 315 mm diameter pipes & with minimum accessories with required rubber rings for sealing. The item includes all rings / sealent with reducer if required and two in-situ connections 110 mm at top as per site requirement etc complete. (1200 mm inner dia and depth 3800 mm)	no	150054.01
32.65.17	Providing and fixing PE graded manholes as per EN 13598-2 , suitable for sewer / drainage lines with 1.20 meter inner diameter consisting of manhole base , Shaft/s, eccentric cone , inbuilt ladder , with 10mt . Capacity GRP light duty frame and cover at top including suitable accessories for inlet , outlet of 160 , 200 , 250 and 315 mm diameter pipes & with minimum accessories with required rubber rings for sealing. The item includes all rings / sealent with reducer if required and two in-situ connections 110 mm at top as per site requirement etc complete. (1200 mm inner dia and depth 4300 mm)	no	160012.47
32.65.18	Providing and fixing PE graded manholes as per EN 13598-2 ,	no	181352.02

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	suitable for sewer / drainage lines with 1.20 meter inner diameter consisting of manhole base , Shaft/s, eccentric cone , inbuilt ladder , with 10mt . Capacity GRP light duty frame and cover at top including suitable accessories for inlet , outlet of 160 , 200 , 250 and 315 mm diameter pipes & with minimum accessories with required rubber rings for sealing. The item includes all rings / sealent with reducer if required and two in-situ connections 110 mm at top as per site requirement etc complete. (1200 mm inner dia and depth 4800 mm)		
32.65.19	Providing and fixing PE graded manholes as per EN 13598-2 , suitable for sewer / drainage lines with 1.20 meter inner diameter consisting of manhole base , Shaft/s, eccentric cone , inbuilt ladder , with 10mt . Capacity GRP light duty frame and cover at top including suitable accessories for inlet , outlet of 160 , 200 , 250 and 315 mm diameter pipes & with minimum accessories with required rubber rings for sealing. The item includes all rings / sealent with reducer if required and two in-situ connections 110 mm at top as per site requirement etc complete. (1200 mm inner dia and depth 5300 mm)	no	191310.48
32.65.20	Providing and fixing PE graded manholes as per EN 13598-2 , suitable for sewer / drainage lines with 1.20 meter inner diameter consisting of manhole base , Shaft/s, eccentric cone , inbuilt ladder , with 10mt . Capacity GRP light duty frame and cover at top including suitable accessories for inlet , outlet of 160 , 200 , 250 and 315 mm diameter pipes & with minimum accessories with required rubber rings for sealing. The item includes all rings / sealent with reducer if required and two in-situ connections 110 mm at top as per site requirement etc complete. (1200 mm inner dia and depth 5800 mm)	no	212650.03

33 . Miscellaneous (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
33.10	Cutting holes upto 15x15 cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the holes after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement:2 fine aggregate:4 graded stone aggregate 20mm nominal size) including finishing complete so as to make it leak proof.	each	459.34
33.21.9	Extra for every operation of disinfecting the C.I. main by flushing with water containing bleaching powder at 0.5gms per litre of water and cleaning the same with fresh water including getting the samples of water tested in the Public health laboratory - 400 mm diameter C.I. pipe.	mts	36.36
33.22.1	Dismantling old C.I. pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes at site, lead upto 50 metres : 80 mm diameter C.I. pipe.	metre	380.15
33.22.2	Dismantling old C.I. pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes at site, lead upto 50 metres : 100 mm diameter C.I. pipe.	metre	399.83
33.22.4	Dismantling old C.I. pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes at site, lead upto 50 metres : 150 mm diameter C.I. pipe.	metre	437.48
33.22.5	Dismantling old C.I. pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes at site, lead upto 50 metres : 200 mm diameter C.I. pipe.	metre	491.81
33.22.6	Dismantling old C.I. pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes at site, lead upto 50 metres : 250 mm diameter C.I. pipe.	metre	544.47
33.22.7	Dismantling old C.I. pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked	metre	593.04

33 . Miscellaneous (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	joints, melting of lead and making into blocks including stacking of pipes at site, lead upto 50 metres : 300 mm diameter C.I. pipe.		
33.23.1	Labour for cutting C.I. pipe with steel saw:- 80mm diameter C.I. pipe.	each	170.14
33.23.2	Labour for cutting C.I. pipe with steel saw:- 100mm diameter C.I. pipe.	each	227.20
33.23.3	Labour for cutting C.I. pipe with steel saw:- 125mm diameter C.I. pipe.	each	313.12
33.23.4	Labour for cutting C.I. pipe with steel saw:- 150mm diameter C.I. pipe.	each	426.22
33.23.5	Labour for cutting C.I. pipe with steel saw:- 200mm diameter C.I. pipe.	each	568.35
33.23.6	Labour for cutting C.I. pipe with steel saw:- 250mm diameter C.I. pipe.	each	709.46
33.23.7	Labour for cutting C.I. pipe with steel saw:- 300mm diameter C.I. pipe.	each	851.60
33.23.8	Labour for cutting C.I. pipe with steel saw:- 350mm diameter C.I. pipe.	each	992.72
33.24	Supplying and stacking of hard stone (for stone pitching) 22.5 cm thick at site.	cum	1721.40
33.25A	Dry stone pitching 22.5 cm thick laid in courses and required profile with hammer dressed stones having no side less than 15 cm, with minimum depth of 20 cm including preparing the bedding surface etc. all complete. (Excluding cost of stone)	sqm	768.79
33.26.1	75 mm thick back filling for pitching including supplying of required materials and consolidation etc. complete with moorum.	sqm	99.87
33.26.2	75 mm thick back filling for pitching including supplying of required materials and consolidation etc. complete with stone	sqm	207.49

33 . Miscellaneous (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	aggregate 20 mm nominal size.		
33.26.3	75 mm thick back filling for pitching including supplying of required materials and consolidation etc. complete with stone aggregate 40 mm nominal size.	sqm	204.29
33.27.1.1	Drilling of borewell any where in UT of Pondicherry including transportation in alluvial soil, sedimentary strata of clay,sand stone, shale, pebbles, boulders etc. by first taking a pilot bore of 140mm / 150mm / 200mm and then enlarging to required dia by direct	metre	619.30
33.27.1.2	Drilling of borewell any where in UT of Pondicherry including transportation in alluvial soil, sedimentary strata of clay,sand stone, shale, pebbles, boulders etc. by first taking a pilot bore of 140mm / 150mm / 200mm and then enlarging to required dia by direct	metre	669.90
33.27.1.3	Drilling of borewell any where in UT of Pondicherry including transportation in alluvial soil, sedimentary strata of clay,sand stone, shale, pebbles, boulders etc. by first taking a pilot bore of 140mm / 150mm / 200mm and then enlarging to required dia by direct	metre	710.60
33.27.1.4	Drilling of borewell any where in UT of Pondicherry including transportation in alluvial soil, sedimentary strata of clay,sand stone, shale, pebbles, boulders etc. by first taking a pilot bore of 140mm / 150mm / 200mm and then enlarging to required dia by direct	metre	748.00
33.27.1.5	Drilling of borewell any where in UT of Pondicherry including transportation in alluvial soil, sedimentary strata of clay,sand stone, shale, pebbles, boulders etc. by first taking a pilot bore of 140mm / 150mm / 200mm and then enlarging to required dia by direct	metre	760.10
33.27.1.6	Drilling of borewell any where in UT of Pondicherry including transportation in alluvial soil, sedimentary strata of clay,sand stone, shale, pebbles, boulders etc. by first taking a pilot bore of 140mm / 150mm / 200mm and then enlarging to required dia by direct	metre	784.30
33.27.1.7	Drilling of borewell any where in UT of Pondicherry including transportation in alluvial soil, sedimentary strata of clay,sand	metre	807.40

33 . Miscellaneous (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	stone, shale, pebbles, boulders etc. by first taking a pilot bore of 140mm / 150mm / 200mm and then enlarging to required dia by direct		
33.27.1.8	Drilling of borewell any where in UT of Pondicherry including transportation in alluvial soil, sedimentary strata of clay,sand stone, shale, pebbles, boulders etc. by first taking a pilot bore of 140mm / 150mm / 200mm and then enlarging to required dia by direct	metre	834.90
33.27.1.9	Drilling of borewell any where in UT of Pondicherry including transportation in alluvial soil, sedimentary strata of clay,sand stone, shale, pebbles, boulders etc. by first taking a pilot bore of 140mm / 150mm / 200mm and then enlarging to required dia by direct	metre	853.60
33.27.1.10	Drilling of borewell any where in UT of Pondicherry including transportation in alluvial soil, sedimentary strata of clay,sand stone, shale, pebbles, boulders etc. by first taking a pilot bore of 140mm / 150mm / 200mm and then enlarging to required dia by direct	metre	874.50
33.27.1.11	Drilling of borewell any where in UT of Pondicherry including transportation in alluvial soil, sedimentary strata of clay,sand stone, shale, pebbles, boulders etc. by first taking a pilot bore of 140mm / 150mm / 200mm and then enlarging to required dia by direct	metre	892.10
33.27.2.1	Reaming from 140/150 mm dia pilot bore to 300mm dia bore. Upto 60 mts depth ending below ground level.	metre	155.10
33.27.2.2	Reaming from 140/150 mm dia pilot bore to 300mm dia bore. From 60 mts and upto 90 mts depth ending from ground level	metre	165.00
33.27.2.3	Reaming from 140/150 mm dia pilot bore to 300mm dia bore. From 90 mts and upto 120 mts depth ending from ground level	metre	176.00
33.27.2.4	Reaming from 140/150 mm dia pilot bore to 300mm dia bore. From 120 mts and upto 150 mts depth ending from ground level	metre	178.20
33.27.2.5	Reaming from 140/150mm dia pilot bore to 300mm dia bore.From 150 mts and upto 180 mts depth ending from ground level.	metre	187.00

33 . Miscellaneous (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
33.27.2.6	Reaming from 140/150mm dia pilot bore to 300mm dia bore.From 180 mts and upto 210 mts depth ending from ground level.	metre	196.90
33.27.2.7	Reaming from 140/150mm dia pilot bore to 300mm dia bore.From 210 mts and upto 240 mts depth ending from ground level.	metre	205.70
33.27.2.8	Reaming from 140/150mm dia pilot bore to 300mm dia bore.From 240 mts and upto 270 mts depth ending from ground level.	metre	213.40
33.27.2.9	Reaming from 140/150mm dia pilot bore to 300mm dia bore.From 270 mts and upto 300 mts depth ending from ground level.	metre	224.40
33.27.2.10	Reaming from 140/150mm dia pilot bore to 300mm dia bore.From 300 mts and upto 330 mts depth ending from ground level.	metre	233.20
33.27.2.11	Reaming from 140/150mm dia pilot bore to 300mm dia bore.From 300 mts and upto360 mts depth ending from ground level.	metre	242.00
33.27.3.1	Reaming from 200 mm dia pilot bore to 350mm dia bore. Upto 60 mts depth ending below ground level	metre	174.90
33.27.3.2	Reaming from 200mm dia pilot bore to 350mm dia bore. From 60 mts and upto 90 mts depth ending below ground level	metre	184.80
33.27.3.3	Reaming from 200mm dia pilot bore to 350mm dia bore. From 90 mts and upto 120 mts depth ending below ground level	metre	196.90
33.27.3.4	Reaming from 200mm dia pilot bore to 350mm dia bore. From 120mts and upto 150 mts depth ending below ground level	metre	202.40
33.27.3.5	Reaming from 200mm dia pilot bore to 350mm dia bore.From 150 mts and upto 180 mts depth ending from ground level.	metre	209.00
33.27.3.6	Reaming from 200mm dia pilot bore to 350mm dia bore.From 180 mts and upto 210 mts depth ending from ground level.	metre	225.50

33 . Miscellaneous (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
33.27.3.7	Reaming from 200mm dia pilot bore to 350mm dia bore.From 210 mts and upto 240 mts depth ending from ground level.	metre	257.40
33.27.3.8	Reaming from 200mm dia pilot bore to 350mm dia bore.From 240 mts and upto 270 mts depth ending from ground level.	metre	264.00
33.27.3.9	Reaming from 200mm dia pilot bore to 350mm dia bore.From 270 mts and upto 300 mts depth ending from ground level.	metre	270.60
33.27.3.10	Reaming from 200mm dia pilot bore to 350mm dia bore.From 300 mts and upto 330 mts depth ending from ground level.	metre	279.40
33.27.3.11	Reaming from 200mm dia pilot bore to 350mm dia bore.From 330 mts and upto 360 mts depth ending from ground level.	metre	286.00
33.27.4.1	Reaming from 300 mm dia pilot bore to 400/450mm dia. Upto 60 mts depth ending below ground level.	metre	239.80
33.27.4.2	Reaming from 300mm dia pilot bore to 400/450mm dia bore. From 60 mts and upto 90 mts depth ending below ground level	metre	268.40
33.27.4.3	Reaming from 300mm dia pilot bore to 400/450mm dia bore. From 90 mts and upto 120 mts depth ending below ground level	metre	286.00
33.27.4.4	Reaming from 300mm dia pilot bore to 400/450mm dia bore. From 120 mts and upto 150 mts depth ending below ground level	metre	303.60
33.27.4.5	Reaming from 300mm dia pilot bore to 400/450mm dia bore .From 150 mts and upto180 mts depth ending below ground level.	metre	315.70
33.27.4.6	Reaming from 300mm dia pilot bore to 400/450mm dia bore.From 180 mts and upto210 mts depth ending below ground level.	metre	324.50
33.27.4.7	Reaming from 300mm dia pilot bore to 400/450mm dia bore.From 210 mts and upto240 mts depth ending below ground level.	metre	332.20
33.27.4.8	Reaming from 300mm dia pilot bore to 400/450mm dia	metre	347.60

33 . Miscellaneous (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	bore.From 240 mts and upto270 mts depth ending below ground level.		
33.27.4.9	Reaming from 300mm dia pilot bore to 400/450mm dia bore.From 270 mts and upto300 mts depth ending below ground level.	metre	360.80
33.27.4.10	Reaming from 300mm dia pilot bore to 400/450mm dia bore.From 300 mts and upto330 mts depth ending below ground level.	metre	378.40
33.27.4.11	Reaming from 300mm dia pilot bore to 400/450mm dia bore.From 330 mts and upto360 mts depth ending below ground level.	metre	391.60
33.27.5	Charges for developing the borewells with air compressor of 600 CFM capacity (minimum 8 hours) including transportation labour and fuel charges for compressor and conducting yield test by"V" Notch methods.	1 hour	911.90
33.27.5	Charges for developing the borewells with air compressor of 600 CFM capacity including transportation labour and fuel charges for compressor and conducting yield test by "V" Notch methods	hour	9218.68
33.27.7	Supplying of UPVC plain casing pipe for borewells conforming to I.S. 12818 -1992 with relevent amendments with class designation 'CM' and with minimum wall thickness 10mm including transportation and stocking at site -200mm dia	metre	2172.37
33.27.8	Supplying of UPVC ribbed screen slotted pipe for borewells conforming to IS 12818 -1992 with relevent amendments with class designation 'RS' and with minimum wall thickness 10mm including transportation and stocking at site - 200mm dia	metre	1499.47
33.27.9	Supplying of MS centering guide of size 25 mm x 3 mm thickness suitable for 200 mm UPVC pipe.	no	199.17
33.27.10	Lowering of UPVC plain casing pipe/ribbed screen slotted pipes into the borewell including cost of cleaning material,fixing of M.S centering guide size of 25mm x 3mm thick suitable for 200mm dia UPVC pipe,including cost of labour for positioning of assembly for lowering purpose using rig.	no	188.65

33 . Miscellaneous (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
33.27.11	Supplying transportation and packing of 8mm size down gauge graded pebbles including filling the annular space gradually complete. The pebbles disintegrated pieces. should be free from any disintegrated pieces.	cum	6037.10
33.27.12	Supplying, transporting and packing of clay balls including filling the annular space gradually complete. The clay balls should be free from any sand particles.	cum	1900.00
33.27.12	Supplying, transporting and packing of clay balls including filling the annular space gradually complete. The clay balls should be free from any sand particles	cum	4329.94
33.27.13	Providing and fixing M.S. top cover suitable for UPVC pipes including the cost of materials and labour etc.	no	745.46
33.27.14	Drilling 200mm dia borehole in hard rock formation by DTH method (Down the hole hammer) inside the already inserted 200mm UPVC casing pipe. The entire column is to be cleaned at site. The rate includes hire charges for the power rig for drilling the bores, the cost of fuel charges, transporting to and fro the power rig flushing the bore using compressor providing danger lights during night time etc., complete.	metre	1495.95
33.27.15	Supplying and fixing electronic type battery charger unit for energizing the genset including charging indicator lamp, AC&DC fuses, AC supply ON&OFF control, DC output MCB, automatic float/booster charger rating 12V-15Amps capacity etc., complete.	no	10750.00
33.27.16	Providing and fixing of UPVC End Cap embedded in M.S. Cone suitable for UPVC casing pipe including the cost of materials and labour for jointing.	No.	1880.72

34 . OHT (Works)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
34.1.1	Providing two legged scaffolding using 15 cm diameter blue - gum posts or casurina posts or best quality bamboo - posts of 4m over all length (3.0m height + 0.5 m projection + 0.5 into the ground) the distance between the two rows being 1.25 m and the spacing of posts with 0.5 m overlap on either side and braces to step up and providing a platform with country wood planks of 40mm thick and 1m width etc in a complete form using coir and nails 1 m run (Rate of scaffolding for a height of 3 m and length of 1 m)	Rmt	758.74
34.1.2	Exta for Providing two legged scaffolding for every additional height of 2.5 m (Rate for scaffolding for a height of 3 m and length of 1m)	Rmt	702.67
34.1A	Providing two legged scaffolding using 15 cm diameter blue - gum posts or casurina posts or best quality bamboo posts of 4m overall length (3.0 m height + 0.5m projection + 0.5 m in to the ground) the distance between the two rows being 1.25 m and the spacing of posts with 0.5m over lap on either side and braces at 2m c/c including longitudinal and transverse middle braces to step up and providing a platform with country wood planks of 40mm thick and 1 m width etc in a complete form using coir and nails 1m run	operation	2034.37
34.2.1	Centering and shuttering including strutting , propping for 3m height and removal of form for floor slabs , roof slabs, landings, balconies and access platforms	sqm	1778.54
34.2.2	Centering and shuttering including , strutting, propping etc, and removal of form for foundations ,footing , bases of columns etc	sqm	1778.54
34.2.3	Centering and shuttering including strutting , propping etc and removal of form for walls (any thickness) including attached pillastering , buttresses, plinth and string courses etc.	sqm	1821.21
34.2.4	Centering and shuttering including strutting , propping etc and removal of form for lintels , beams , girders , bracers brussummers and cantilevers etc	sqm	1778.54
34.2.5	Centering and shuttering including strutting , propping etc and removal of form for columns , pillars, piers, abutments , posts and struts	sqm	1863.89

34 . OHT (Works)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
34.2.6	Centering and shuttering including strutting , propping etc and removal of form for vertical and horizontal firms individually or forming box louvers bund , fascias and lares boards	sqm	1821.21
34.2A	Extra for providing two legged scaffolding for every additional height of 2.5m	Opreations	1697.92
34.3A	Centering for soffits of RCC slabs or plane surfacses including strutting 3m height	Operations	4828.00

35 . Subsoil Exploration

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
35.1.1	Drilling 150mm diameter bore holes in all types of soils except boulders , weathered / hard rocks , conducting the following field and laboratory tests and furnishing the detailed report consisting of site plan showing the locations of the bore holes with R.L .of the locations with a reference bench mark , bore logs , field & laboratory test results , recommendations for the depths & types of foundations allowable safe bearing capacities / pile carrying capacities etc .in triplicate all as per the procedures given in the relevant I.S.codes (the rate includes mobilisation and demobilisation charges) A) Field work: (i) Conducting standard penetration test at regular intervals of 1m upto 4m depth & of 1.5m interval in further depths and change of layers . (ii) Collecting disturbed soil samples in case of cohesionless soil layers and undisturbed soil samples in case of cohesive soil layers (the representative samples shall be at every 0.5m interval including the soil recovered from split spoon sampler). (iii) Observing and recording ground water table .(iv) Collecting water sample for conducting chemical analysis if the ground water is present at or above the depth of foundations . B) Laboratory tests:(i) Grain size analysis , (ii) Atterberg's Limits , (iii) Free swell tests , (iv) Unit weight , (v) Water content (vi) Shear test / UCC test (vii) Consolidation test - upto 10 m depth from the ground level or 3m into the very dense / very hard soil strata with N value more than 50, whichever is met earlier (If the observed N values are more than 50 , the same shall be ascertained in further depths of minimum 3 m at 1m intervals and if the observed N vlues are 50 or less , the test shall be continued again upto 10m depth or into the very dense / very hard strata for 3 more metres)	no	11665.62
35.1.2	Drilling 150mm diameter bore holes in all types of soils except boulders , weathered / hard rocks , conducting the following field and laboratory tests and furnishing the detailed report consisting of site plan showing the locations of the bore holes with R.L .of the locations with a reference bench mark , bore logs , field & laboratory test results , recommendations for the depths & types of foundations allowable safe bearing capacities / pile carrying capacities etc .in triplicate all as per the procedures given in the relevant I.S.codes (the rate includes mobilisation and demobilisation charges) A) Field work: (i) Conducting standard penetration test at regular intervals of 1.5m and change of layers . (ii) Collecting disturbed soil samples in case of cohesionless soil layers and undisturbed soil samples in case of cohesive soil layers (the representative samples shall be at every 0.5m interval including	meter	1422.64

35 . Subsoil Exploration

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	the soil recovered from split spoon sampler). (iii) Observing and recording ground water table .(iv) Collecting water sample for conducting chemical analysis if the ground water is present at or above the depth of foundations . B) Laboratory tests:(i) Grain size analysis , (ii) Atterberg's Limits , (iii) Free swell tests , (iv) Unit weight , (v) Water content (vi) Shear test / UCC test (vii) Consolidation test - 10 m to 20 m depth from the ground level or 5m into the very dense / very hard soil strata with N value more than 50, whichever is met earlier (If the observed N values are more than 50 , the same shall be ascertained in further depths of minimum 5 m at 1m intervals)		
35.1.3	Drilling 150mm diameter bore holes in all types of soils except boulders , weathered / hard rocks , conducting the following field and laboratory tests and furnishing the detailed report consisting of site plan showing the locations of the bore holes with R.L .of the locations with a reference bench mark , bore logs , field & laboratory test results , recommendations for the depths & types of foundations allowable safe bearing capacities / pile carrying capacities etc .in triplicate all as per the procedures given in the relevant I.S.codes (the rate includes mobilisation and demobilisation charges) A) Field work: (i) Conducting standard penetration test at regular intervals of 1m upto 4m depth & of 1.5m interval in further depths and change of layers . (ii) Collecting disturbed soil samples in case of cohesionless soil layers and undisturbed soil samples in case of cohesive soil layers (the representative samples shall be at every 0.5m interval including the soil recovered from split spoon sampler). (iii) Observing and recording ground water table .(iv) Collecting water sample for conducting chemical analysis if the ground water is present at or above the depth of foundations . B) Laboratory tests:(i) Grain size analysis , (ii) Atterberg's Limits , (iii) Free swell tests , (iv) Unit weight , (v) Water content (vi) Shear test / UCC test (vii) Consolidation test - 20m to 30 m depth from the ground level or 5m into the very dense / very hard soil strata with N value more than 50, whichever is met earlier (If the observed N values are more than 50 , the same shall be ascertained in further depths of minimum 5 m at 1m intervals)	meter	1564.90
35.1.4	Drilling 150mm diameter bore holes in all types of soils except boulders , weathered / hard rocks , conducting the following field and laboratory tests and furnishing the detailed report consisting of site plan showing the locations of the bore holes with R.L .of the locations with a reference bench mark , bore	metre	2062.82

35 . Subsoil Exploration

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	logs , field & laboratory test results , recommendations for the depths & types of foundations allowable safe bearing capacities / pile carrying capacities etc .in triplicate all as per the procedures given in the relevant I.S.codes (the rate includes mobilisation and demobilisation charges) A) Field work: (i) Conducting standard penetration test at regular intervals of 1m upto 4m depth & of 1.5m interval in further depths and change of layers . (ii) Collecting disturbed soil samples in case of cohesionless soil layers and undisturbed soil samples in case of cohesive soil layers (the representative samples shall be at every 0.5m interval including the soil recovered from split spoon sampler). (iii) Observing and recording ground water table .(iv) Collecting water sample for conducting chemical analysis if the ground water is present at or above the depth of foundations . B) Laboratory tests:(i) Grain size analysis , (ii) Atterberg's Limits , (iii) Free swell tests , (iv) Unit weight , (v) Water content (vi) Shear test / UCC test (vii) Consolidation test - 30m to 40 m depth from the ground level or 5m into the very dense / very hard soil strata with N value more than 50, whichever is met earlier (If the observed N values are more than 50 , the same shall be ascertained in further depths of minimum 5 m at 1m intervals)		
35.1.5	Conducting Chemical Analysis of ground water to check whether the ground water will affect the foundation concrete	no	3414.33
35.1.6	Conducting Chemical Analysis of sub soil to check whether the soil will affect the foundation concrete	no	3414.33
35.1.7	Making trial pits of required size upto maximum of 1.5m depth , collecting disturbed and / or undisturbed soil samples at the depth decided , conducting necessary laboratory tests and furnishing test results viz ., soaked CBR value , Optimum moisture content , grain size analysis , Atterberg's limits , free swell index , field moisture content , field density and maximum dry density etc. for formation and improvement of roads	no	8678.08

36 . Energy Conservation Building Code

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
36.1	Providing and fixing polyurethane foam (PUF) slab 40mm thick average with PU slab density 36+/-2 kg/m ³ for external wall insulation including necessary polymerized plaster reinforced with glass fibre mesh, epoxy based bonding adhesive etc., complete.	sqm	1462.00
36.2	Providing and fixing cast in situ polyurethane foam (PUF) spray 40mm thick average with PU foam spray density 35+/-5 kg/m ³ for external wall insulation including necessary adhesive etc., complete.	sqm	1239.00
36.3	Providing and fixing cast in situ polyurethane foam (PUF) spray 50mm thick average with PU foam spray density 35+/-5 kg/m ³ for external wall insulation including necessary adhesive etc., complete.	sqm	1270.00
36.4	Providing and fixing Extruded Polystyrene (XPS) thermal insulating boards 25mm thick average for external wall insulation including necessary fasteners etc., complete.	sqm	526.00
36.5	Providing and fixing Extruded Polystyrene (XPS) thermal insulating boards 50mm thick average for external wall insulation including necessary fasteners etc., complete.	sqm	806.00
36.6	Providing and fixing Extruded Polystyrene (XPS) thermal insulating boards 75mm thick average for external wall insulation including necessary fasteners etc., complete.	sqm	1123.00
36.7	Providing and fixing Extruded Polystyrene (XPS) thermal insulating boards 100mm thick average for external wall insulation including necessary fasteners etc., complete.	sqm	1440.00
36.8	Providing and fixing polyurethane foam (PUF) spray 40mm thick average PU foam spray having density 35+/-5 kg/m ³ density for insulation of cavity wall with including necessary fasteners etc., complete.	sqm	647.00
36.9	Providing and fixing polyurethane foam (PUF) spray 50mm thick average PU foam spray having density 35+/-5 kg/m ³ density for insulation of cavity wall with including necessary fasteners etc.,	sqm	922.00
36.10	Providing and fixing glass wool slab 12mm thick resin bonded	sqm	593.00

36 . Energy Conservation Building Code

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	slab with density 48kg/m ³ for insulation of cavity wall, fixed using GI wire 200 SWG, GI chicken mesh 12.50mm x 24 SWG including necessary criss-cross GI wire mesh,raw plugs, adhesive etc., complete		
36.11	Providing and fixing glass wool slab 25mm thick resin bonded slab with density 48kg/m ³ for insulation of cavity wall, fixed using GI wire 200 SWG, GI chicken mesh 12.50mm x 24 SWG including necessary criss-cross GI wire mesh,raw plugs, adhesive etc., complete	sqm	725.00
36.12	Providing and fixing glass wool slab 50mm thick resin bonded slab with density 48kg/m ³ for insulation of cavity wall, fixed using GI wire 200 SWG, GI chicken mesh 12.50mm x 24 SWG including necessary criss-cross GI wire mesh,raw plugs, adhesive etc., complete	sqm	840.00
36.13	Providing and fixing rock wool slab 25mm thick resin bonded rock wool slab having density 36+/-5 kg/m ³ for insulation of cavity wall with including necessary criss-cross GI wire, mesh,raw plugs, adhesive etc., complete.	sqm	512.00
36.14	Providing and fixing rock wool slab 40mm thick resin bonded rock wool slab having density 36+/-5 kg/cum for insulation of cavity wall with including necessary criss-cross GI wire, mesh, raw plugs, adhesive etc., complete	sqm	541.00
36.15	Providing and fixing rock wool slab 50mm thick resin bonded rock wool slab having density 36+/-5 kg/m ³ for insulation of cavity wall with including necessary criss-cross GI wire, mesh,raw plugs, adhesive etc., complete.	sqm	559.00
36.16	Providing and fixing rock wool slab 65mm thick resin bonded rock wool slab having density 36+/-5 kg/m ³ for insulation of cavity wall with including necessary criss-cross GI wire, mesh,raw plugs, adhesive etc., complete.	sqm	591.00
36.17	Providing and fixing rock wool slab 75mm thick resin bonded rock wool slab having density 36+/-5 kg/m ³ for insulation of cavity wall with including necessary criss-cross GI wire, mesh,raw plugs, adhesive etc., complete.	sqm	611.00
36.18	Providing and fixing rock wool slab 100mm thick resin bonded rock wool slab having density 36+/-5 kg/m ³ for insulation of	sqm	879.00

36 . Energy Conservation Building Code

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	cavity wall with including necessary criss-cross GI wire, mesh,raw plugs, adhesive etc., complete.		
36.19	Providing and fixing extruded polystyrene (XPS) 50mm thick thermal insulating boards having density 36+/-5 kg/m3 for insulation of cavity wall including necessary criss-cross GI wire, mesh,raw plugs, adhesive etc., complete.	sqm	1066.00
36.20	Providing and fixing extruded polystyrene (XPS) 60mm thick thermal insulating boards having density 36+/-5 kg/m3 for insulation of cavity wall including necessary criss-cross GI wire, mesh,raw plugs, adhesive etc., complete.	sqm	1084.00
36.21	Providing and fixing extruded polystyrene (XPS) 70mm thick thermal insulating boards having density 36+/-5 kg/m3 for insulation of cavity wall including necessary criss-cross GI wire, mesh,raw plugs, adhesive etc., complete.	sqm	1384.00
36.22	Providing and fixing extruded polystyrene (XPS) 25mm thick thermal insulating boards having density 32kg/m3 for insulation of cavity wall including necessary criss-cross GI wire, mesh,raw plugs, adhesive etc., complete.	sqm	763.00
36.23	Providing and fixing extruded polystyrene (XPS) 50mm thick thermal insulating boards having density 32kg/m3 for insulation of cavity wall including necessary criss-cross GI wire, mesh,raw plugs, adhesive etc., complete.	sqm	1066.00
36.24	Providing and fixing extruded polystyrene (XPS) 75mm thick thermal insulating boards having density 32kg/m3 for insulation of cavity wall including necessary criss-cross GI wire, mesh,raw plugs, adhesive etc., complete.	sqm	1407.00
36.25	Providing and fixing extruded polystyrene (XPS) 100mm thick thermal insulating boards having density 32kg/m3 for insulation of cavity wall including necessary criss-cross GI wire, mesh,raw plugs, adhesive etc., complete.	sqm	1749.00
36.26	Providing and fixing polyurethane foam (PUF) slab 40mm thick average with PU slab density 36+/-2 kg/m ³ insulation for over deck covered with two layers of 40mm thick cement concrete screed with mix proportion 1:1.5:3 (M20grade) smooth finished with floating coat of neat cement, including necessary polymerized plaster reinforced with glass fibre mesh	sqm	1333.00

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	for PUF slabs, epoxy bases bonding adhesive etc., complete		
36.27	Providing and fixing polyurethane foam (PUF) slab 50mm thick average with PU slab density 36+/-2 kg/m ³ insulation for over deck covered with two layers of 40mm thick cement concrete screed with mix proportion 1:1.5:3 (M20grade) smooth finished with floating coat of neat cement, including necessary polymerized plaster reinforced with glass fibre mesh for PUF slabs, epoxy bases bonding adhesive etc., complete	sqm	1635.00
36.28	Providing and fixing polyurethane foam (PUF) slab 60mm thick average with PU slab density 36+/-2 kg/m ³ insulation for over deck covered with two layers of 40mm thick cement concrete screed with mix proportion 1:1.5:3 (M20grade) smooth finished with floating coat of neat cement, including necessary polymerized plaster reinforced with glass fibre mesh for PUF slabs, epoxy bases bonding adhesive etc., complete	sqm	1928.00
36.29	Providing and fixing polyurethane foam (PUF) slab 70mm thick average with PU slab density 36+/-2 kg/m ³ insulation for over deck covered with two layers of 40mm thick cement concrete screed with mix proportion 1:1.5:3 (M20grade) smooth finished with floating coat of neat cement, including necessary polymerized plaster reinforced with glass fibre mesh for PUF slabs, epoxy bases bonding adhesive etc., complete	sqm	2214.00
36.30	Providing and fixing Over deck insulation with cast insitu polyurethane foam (PUF) spray 40mm thick average with PU foam spray including necessary fasteners etc., complete covered with two layers of 40mm thick cement concrete screed with mix proportion 1:1.5:3 (M20 grade) smooth finished with floating coat of neat cement, including necessary polymerized plaster reinforced with glass fibre mesh for PUF slabs, epoxy bases bonding adhesive etc., complete	sqm	1222.00
36.31	Providing and fixing Over deck insulation with cast insitu polyurethane foam (PUF) spray 50mm thick average with PU foam spray including necessary fasteners etc., complete covered with two layers of 40mm thick cement concrete screed with mix proportion 1:1.5:3 (M20 grade) smooth finished with floating coat of neat cement, including necessary polymerized plaster reinforced with glass fibre mesh for PUF slabs, epoxy bases bonding adhesive etc., complete	sqm	1401.00
36.32	Providing and fixing Over deck insulation with cast insitu	sqm	2064.00

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	polyurethane foam (PUF) spray 60mm thick average with PU foam spray including necessary fasteners etc., complete covered with two layers of 40mm thick cement concrete screed with mix proportion 1:1.5:3 (M20 grade) smooth finished with floating coat of neat cement, including necessary polymerized plaster reinforced with glass fibre mesh for PUF slabs, epoxy bases bonding adhesive etc., complete		
36.33	Providing and fixing Over deck insulation with cast insitu polyurethane foam (PUF) spray 70mm thick average with PU foam spray including necessary fasteners etc., complete covered with two layers of 40mm thick cement concrete screed with mix proportion 1:1.5:3 (M20 grade) smooth finished with floating coat of neat cement, including necessary polymerized plaster reinforced with glass fibre mesh for PUF slabs, epoxy bases bonding adhesive etc., complete (The cost of concrete to be paid separately)	sqm	2453.00
36.34	Providing and fixing expanded polystyrene (EPS) 50mm thick average for under deck thermal insulation including necessary fasteners etc., complete (excluding cost of screed concrete which is to be measured and paid seperately)	sqm	862.00
36.35	Providing and fixing expanded polystyrene (EPS) 70mm thick average for under deck thermal insulation including necessary fasteners etc., complete (excluding cost of screed concrete which is to be measured and paid seperately)	sqm	940.00
36.36	Providing and fixing expanded polystyrene (EPS) 90mm thick average for under deck thermal insulation including necessary fasteners etc., complete (excluding cost of screed concrete which is to be measured and paid seperately)	sqm	1015.00
36.37	Providing and fixing expanded polystyrene (EPS) 110mm thick average for under deck thermal insulation including necessary fasteners etc., complete (excluding cost of screed concrete which is to be measured and paid seperately)	sqm	1089.00
36.38	Providing and fixing expanded polystyrene (EPS) 120mm thick average for under deck thermal insulation including necessary fasteners etc., complete (excluding cost of screed concrete which is to be measured and paid seperately)	sqm	1127.00
36.39	Providing and fixing expanded polystyrene (EPS) 30mm	sqm	850.00

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	thick with density 20kg/m3 for under deck thermal insulation including necessary fasteners etc., complete (excluding cost of screed concrete which is to be measured and paid seperately)		
36.40	Providing and fixing expanded polystyrene (EPS) 40mm thick with density 20kg/m3 for under deck thermal insulation including necessary fasteners etc., complete (excluding cost of screed concrete which is to be measured and paid seperately)	sqm	860.00
36.41	Providing and fixing expanded polystyrene (EPS) 50mm thick with density 20kg/m3 for under deck thermal insulation including necessary fasteners etc., complete (excluding cost of screed concrete which is to be measured and paid seperately)	sqm	865.00
36.42	Providing and fixing expanded polystyrene (EPS) 75mm thick with density 20kg/m3 for under deck thermal insulation including necessary fasteners etc., complete (excluding cost of screed concrete which is to be measured and paid seperately)	sqm	940.00
36.43	Providing and fixing expanded polystyrene (EPS) 100mm thick with density 20kg/m3 for under deck thermal insulation including necessary fasteners etc., complete (excluding cost of screed concrete which is to be measured and paid seperately)	sqm	1037.00
36.44	Providing and fixing expanded polystyrene (50 mm thick) with aluminium strips at every 600mm c/c over existing false ceiling for thermal insulation of roofing including necessary fasteners etc., complete (excluding cost of screed concrete which is to be measured and paid seperately)	sqm	648.00
36.45	Providing and fixing expanded polystyrene (70 mm thick) with aluminium strips at every 600mm c/c over existing false ceiling for thermal insulation of roofing including necessary fasteners etc., complete (excluding cost of screed concrete which is to be measured and paid seperately)	sqm	745.00
36.46	Providing and fixing expanded polystyrene (90 mm thick) with aluminium strips at every 600mm c/c over existing false ceiling for thermal insulation of roofing including necessary fasteners etc., complete (excluding cost of screed concrete which is to be measured and paid seperately)	sqm	813.00
36.47	Providing and fixing expanded polystyrene (110 mm thick) with aluminium strips at every 600mm c/c over existing false	sqm	910.00

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	ceiling for thermal insulation of roofing including necessary fasteners etc., complete (excluding cost of screed concrete which is to be measured and paid separately)		
36.48	Providing and fixing expanded polystyrene (120 mm thick) with aluminium strips at every 600mm c/c over existing false ceiling for thermal insulation of roofing including necessary fasteners etc., complete (excluding cost of screed concrete which is to be measured and paid separately)	sqm	961.00
36.49	Providing and fixing expanded polystyrene (50 mm thick) for over deck thermal insulation of roofing including necessary fasteners etc., complete covered with two layers of 40mm thick cement concrete screed with mix proportion 1:1.5:3 (M20grade) smooth finished with floating coat of neat cement, including necessary polymerized plaster reinforced with glass fibre mesh for PUF slab, epoxy based bonding adhesive etc., complete	sqm	685.00
36.50	Providing and fixing expanded polystyrene (70 mm thick) for over deck thermal insulation of roofing including necessary fasteners etc., complete covered with two layers of 40mm thick cement concrete screed with mix proportion 1:1.5:3 (M20grade) smooth finished with floating coat of neat cement, including necessary polymerized plaster reinforced with glass fibre mesh for PUF slab, epoxy based bonding adhesive etc., complete	sqm	781.00
36.51	Providing and fixing expanded polystyrene (90 mm thick) for over deck thermal insulation of roofing including necessary fasteners etc., complete covered with two layers of 40mm thick cement concrete screed with mix proportion 1:1.5:3 (M20grade) smooth finished with floating coat of neat cement, including necessary polymerized plaster reinforced with glass fibre mesh for PUF slab, epoxy based bonding adhesive etc., complete	sqm	847.00
36.52	Providing and fixing expanded polystyrene (110 mm thick) for over deck thermal insulation of roofing including necessary fasteners etc., complete covered with two layers of 40mm thick cement concrete screed with mix proportion 1:1.5:3 (M20grade) smooth finished with floating coat of neat cement, including necessary polymerized plaster reinforced with glass fibre mesh for PUF slab, epoxy based bonding adhesive etc., complete	sqm	944.00

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
36.53	Providing and fixing expanded polystyrene (120 mm thick) for over deck thermal insulation of roofing including necessary fasteners etc., complete covered with two layers of 40mm thick cement concrete screed with mix proportion 1:1.5:3 (M20grade) smooth finished with floating coat of neat cement, including necessary polymerized plaster reinforced with glass fibre mesh for PUF slab, epoxy based bonding adhesive etc., complete	sqm	994.00
36.54	Providing and fixing 12mm resin bonded glass wool slab having density 48 kg/ cum for over deck insulation of roofing with glass wool including necessary fasteners, GI wire & mesh etc., complete	sqm	1059.00
36.55	Providing and fixing 25mm resin bonded glass wool slab having density 48 kg/ cum for over deck insulation of roofing with glass wool including necessary fasteners, GI wire & mesh etc., complete	sqm	1191.00
36.56	Providing and fixing 50mm resin bonded glass wool slab having density 48 kg/ cum for over deck insulation of roofing with glass wool including necessary fasteners, GI wire & mesh etc., complete	sqm	1306.00
36.57	Providing and fixing Rock wool 25mm resin bonded rock wool slab having density 48 kg/ cum for over deck insulation of roofing including necessary fasteners, GI wire & mesh etc., complete (excluding cost of screed concrete which is to be measured and paid separately)	sqm	738.00
36.58	Providing and fixing Rock wool 40mm resin bonded rock wool slab having density 48 kg/ cum for over deck insulation of roofing including necessary fasteners, GI wire & mesh etc., complete (excluding cost of screed concrete which is to be measured and paid separately)	sqm	766.00
36.59	Providing and fixing Rock wool 50mm resin bonded rock wool slab having density 48 kg/ cum for over deck insulation of roofing including necessary fasteners, GI wire & mesh etc., complete (excluding cost of screed concrete which is to be measured and paid separately)	sqm	783.00
36.60	Providing and fixing Rock wool 60mm resin bonded rock wool slab having density 48 kg/ cum for over deck insulation of		813.00

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	roofing including necessary fastners, GI wire & mesh etc., complete (excluding cost of screed concrete which is to be measured and paid seperately)		
36.61	Poviding and fixing Rock wool 75mm resin bonded rock wool slab having density 48 kg/ cum for over deck insulation of roofing including necessary fastners, GI wire & mesh etc., complete (excluding cost of screed concrete which is to be measured and paid seperately)	sqm	833.00
36.62	Poviding and fixing Rock wool 100mm resin bonded rock wool slab having density 48 kg/ cum for over deck insulation of roofing including necessary fastners, GI wire & mesh etc., complete (excluding cost of screed concrete which is to be measured and paid seperately)	sqm	884.00
36.63	Providing and fixing glass wool 25mm resin bonded glass wool slab having density 48 kg/cum for under deck insulation of roofing including necessary fasteners, GI wire & mesh etc., complete (excluding cost of screed concrete which is to be measured and paid seperately)	sqm	1248.00
36.64	Providing and fixing glass wool 50mm resin bonded glass wool slab having density 48 kg/cum for under deck insulation of roofing including necessary fasteners, GI wire & mesh etc., complete (excluding cost of screed concrete which is to be measured and paid seperately)	sqm	1359.00
36.65	Providing and fixing Rock wool 25mm resin bonded rock wool slab having density 48 kg/cum for under deck insulation of roofing including necessary fasteners, GI wire & mesh etc., complete	sqm	736.00
36.66	Providing and fixing Rock wool 40mm resin bonded rock wool slab having density 48 kg/cum for under deck insulation of roofing including necessary fasteners, GI wire & mesh etc., complete	sqm	764.00
36.67	Providing and fixing Rock wool 50mm resin bonded rock wool slab having density 48 kg/cum for under deck insulation of roofing including necessary fasteners, GI wire & mesh etc., complete	sqm	780.00
36.68	Providing and fixing Rock wool 65mm resin bonded rock wool	sqm	810.00

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	slab having density 48 kg/cum for under deck insulation of roofing including necessary fasteners, GI wire & mesh etc., complete with all lead and lift, transportation charges, loading unloading charges all taxes, cost of all materials, labour, Usage Charges of machinery, scaffolding etc., complete		
36.69	Providing and fixing Rock wool 75mm resin bonded rock wool slab having density 48 kg/cum for under deck insulation of roofing including necessary fasteners, GI wire & mesh etc., complete with all lead and lift, transportation charges, loading unloading charges all taxes, cost of all materials, labour, Usage Charges of machinery, scaffolding etc., complete	sqm	829.00
36.70	Providing and fixing Rock wool 100mm resin bonded rock wool slab having density 48 kg/cum for under deck insulation of roofing including necessary fasteners, GI wire & mesh etc., complete with all lead and lift, transportation charges, loading unloading charges all taxes, cost of all materials, labour, Usage Charges of machinery, scaffolding etc., complete	sqm	880.00
36.71	Providing and fixing Ceramic Cool tiles of size 254x254x15mm thickness thermal insulation properties as per GRIHA guidelines with satisfactory SRI > 70% & R value laid on 12mm insulated Mortar mixusing heat proof sand complete	sqm	1146.00
36.72	Providing and supplying Non load bearing bricks of size 200/150/100 mm thickness for infill masonry with excellent thermal and sound insulation with density 700-800 kg/cum and compressive strength > 3.5N/sq.mm & water absorption not greater than 15% & U value 1 w/sqm K laid with Cement Mortar 1:6 conforming to building envelope as per GRIHA certification etc complete	sqm	742.00
36.73	Providing and supplying Non load bearing bricks of size 200/150/100 mm thickness for infill masonry with excellent thermal and sound insulation with density 750-850kg/cum and compressive strength > 7.0 N/sq.mm & water absorption not greater than 15% & U value 1.30 W/sqm K laid with cement Mortar 1:6 conforming to Building envelope as per GRIHA certification etc complete	sqm	793.00
36.74	Poviding and fixing double glazed hermetically sealed glazing in aluminium windows, Ventilators and partition etc. with 6mm thick clear float glass both side, having 12mm air gap, including providing EPDM gasket, perforated aluminium	sqm	4345.00

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	spacers, desiccants, sealant (Both primary and secondary sealant) etc. as per specifications, drawings and direction of Engineer-in-charge complete including cost of materials, labour, usage charges of machinery complete as per specifications and as per directions of the Engineer-in-charge		
36.75	Supply, Installation, Testing and Commissioning of LED RGB/RGBW floodlighting luminaire for façade lighting with Die-cast aluminium housing, powder-coated finish, of following wattage. Luminaire shall be capable of producing dynamic color changing light for with 16 million colors by DMX/Ethernet based control. The beam angle of the fitting shall be narrow, medium, wide or asymmetric as per the requirement. Luminaire shall be complete with driver and capable of operating at linevoltage without any separate power supply from 100-270 V AC, 50 Hz with power factor >0.9. Fixture shall be suitable to operate at an ambient temperature range of -10 degree C to + 50 degree C and shall be IP 65 and IK 06 rated. Lifetime shall be at least L70:50000 burning hours at 50 degree C. Luminaire shall be conforming to BIS (IS 10322) and shall be complete with all necessary accessories required for proper working of fixture including weather proof connection cables, water proof connectors etc.as required - 600W/580W	each	290460.00
36.76	Supply, Installation, Testing and Commissioning of LED RGB/RGBW floodlighting luminaire for façade lighting with Die-cast aluminium housing, powder-coated finish, of following wattage. Luminaire shall be capable of producing dynamic color changing light for with 16 million colors by DMX/Ethernet based control. The beam angle of the fitting shall be narrow, medium, wide or asymmetric as per the requirement. Luminaire shall be complete with driver and capable of operating at linevoltage without any separate power supply from 100-270 V AC, 50 Hz with power factor >0.9. Fixture shall be suitable to operate at an ambient temperature range of -10 degree C to + 50 degree C and shall be IP 65 and IK 06 rated. Lifetime shall be at least L70:50000 burning hours at 50 degree C. Luminaire shall be conforming to BIS (IS 10322) and shall be complete with all necessary accessories required for proper working of fixture including weather proof connection cables, water proof connectors etc.as required - 300 W/ 280 W	each	140100.00
36.77	Supply, Installation, Testing and Commissioning of LED RGB/RGBW floodlighting luminaire for façade lighting with	each	120200.00

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	Die-cast aluminium housing, powder-coated finish, of following wattage. Luminaire shall be capable of producing dynamic color changing light for with 16 million colors by DMX/Ethernet based control. The beam angle of the fitting shall be narrow, medium, wide or asymmetric as per the requirement. Luminaire shall be complete with driver and capable of operating at linevoltage without any separate power supply from 100-270 V AC, 50 Hz with power factor >0.9. Fixture shall be suitable to operate at an ambient temperature range of -10 degree C to + 50 degree C and shall be IP 65 and IK 06 rated. Lifetime shall be at least L70:50000 burning hours at 50 degree C. Luminaire shall be conforming to BIS (IS 10322) and shall be complete with all necessary accessories required for proper working of fixture including weather proof connection cables, water proof connectors etc.as required - 250 W		
36.78	Supply, Installation, Testing and Commissioning of LED RGB/RGBW floodlighting luminaire for façade lighting with Die-cast aluminium housing, powder-coated finish, of following wattage. Luminaire shall be capable of producing dynamic color changing light for with 16 million colors by DMX/Ethernet based control. The beam angle of the fitting shall be narrow, medium, wide or asymmetric as per the requirement. Luminaire shall be complete with driver and capable of operating at linevoltage without any separate power supply from 100-270 V AC, 50 Hz with power factor >0.9. Fixture shall be suitable to operate at an ambient temperature range of -10 degree C to + 50 degree C and shall be IP 65 and IK 06 rated. Lifetime shall be at least L70:50000 burning hours at 50 degree C. Luminaire shall be conforming to BIS (IS 10322) and shall be complete with all necessary accessories required for proper working of fixture including weather proof connection cables, water proof connectors etc.as required - 140 W	each	75016.00
36.79	Supply, Installation, Testing and Commissioning of LED RGB/RGBW floodlighting luminaire for façade lighting with Die-cast aluminium housing, powder-coated finish, of following wattage. Luminaire shall be capable of producing dynamic color changing light for with 16 million colors by DMX/Ethernet based control. The beam angle of the fitting shall be narrow, medium, wide or asymmetric as per the requirement. Luminaire shall be complete with driver and capable of operating at linevoltage without any separate power supply from 100-270 V AC, 50 Hz with power factor >0.9. Fixture shall be suitable to operate at an ambient temperature	each	68389.00

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	range of -10 degree C to + 50 degree C and shall be IP 65 and IK 06 rated. Lifetime shall be at least L70:50000 burning hours at 50 degree C. Luminaire shall be conforming to BIS (IS 10322) and shall be complete with all necessary accessories required for proper working of fixture including weather proof connection cables, water proof connectors etc.as required - 130 W		
36.80	Supply, Installation, Testing and Commissioning of LED RGB/RGBW floodlighting luminaire for façade lighting with Die-cast aluminium housing, powder-coated finish, of following wattage. Luminaire shall be capable of producing dynamic color changing light for with 16 million colors by DMX/Ethernet based control. The beam angle of the fitting shall be narrow, medium, wide or asymmetric as per the requirement. Luminaire shall be complete with driver and capable of operating at linevoltage without any separate power supply from 100-270 V AC, 50 Hz with power factor >0.9. Fixture shall be suitable to operate at an ambient temperature range of -10 degree C to + 50 degree C and shall be IP 65 and IK 06 rated. Lifetime shall be at least L70:50000 burning hours at 50 degree C. Luminaire shall be conforming to BIS (IS 10322) and shall be complete with all necessary accessories required for proper working of fixture including weather proof connection cables, water proof connectors etc.as required - 110 W/115 W	each	57050.00
36.81	Supply, Installation, Testing and Commissioning of LED RGB/RGBW floodlighting luminaire for façade lighting with Die-cast aluminium housing, powder-coated finish, of following wattage. Luminaire shall be capable of producing dynamic color changing light for with 16 million colors by DMX/Ethernet based control. The beam angle of the fitting shall be narrow, medium, wide or asymmetric as per the requirement. Luminaire shall be complete with driver and capable of operating at linevoltage without any separate power supply from 100-270 V AC, 50 Hz with power factor >0.9. Fixture shall be suitable to operate at an ambient temperature range of -10 degree C to + 50 degree C and shall be IP 65 and IK 06 rated. Lifetime shall be at least L70:50000 burning hours at 50 degree C. Luminaire shall be conforming to BIS (IS 10322) and shall be complete with all necessary accessories required for proper working of fixture including weather proof connection cables, water proof connectors etc.as required - 90 W	each	52460.00

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
36.82	Supply, Installation, Testing and Commissioning of LED RGB/RGBW floodlighting luminaire for façade lighting with Die-cast aluminium housing, powder-coated finish, of following wattage. Luminaire shall be capable of producing dynamic color changing light for with 16 million colors by DMX/Ethernet based control. The beam angle of the fitting shall be narrow, medium, wide or asymmetric as per the requirement. Luminaire shall be complete with driver and capable of operating at linevoltage without any separate power supply from 100-270 V AC, 50 Hz with power factor >0.9. Fixture shall be suitable to operate at an ambient temperature range of -10 degree C to + 50 degree C and shall be IP 65 and IK 06 rated. Lifetime shall be at least L70:50000 burning hours at 50 degree C. Luminaire shall be conforming to BIS (IS 10322) and shall be complete with all necessary accessories required for proper working of fixture including weather proof connection cables, water proof connectors etc.as required - 75 W	each	49010.00
36.83	Supply, Installation, Testing and Commissioning of LED RGB/RGBW floodlighting luminaire for façade lighting with Die-cast aluminium housing, powder-coated finish, of following wattage. Luminaire shall be capable of producing dynamic color changing light for with 16 million colors by DMX/Ethernet based control. The beam angle of the fitting shall be narrow, medium, wide or asymmetric as per the requirement. Luminaire shall be complete with driver and capable of operating at linevoltage without any separate power supply from 100-270 V AC, 50 Hz with power factor >0.9. Fixture shall be suitable to operate at an ambient temperature range of -10 degree C to + 50 degree C and shall be IP 65 and IK 06 rated. Lifetime shall be at least L70:50000 burning hours at 50 degree C. Luminaire shall be conforming to BIS (IS 10322) and shall be complete with all necessary accessories required for proper working of fixture including weather proof connection cables, water proof connectors etc.as required - 55 W	each	43007.00
36.84	Supply, Installation, Testing and Commissioning of LED RGB/RGBW floodlighting luminaire for façade lighting with Die-cast aluminium housing, powder-coated finish, of following wattage. Luminaire shall be capable of producing dynamic color changing light for with 16 million colors by DMX/Ethernet based control. The beam angle of the fitting shall be narrow, medium, wide or asymmetric as per the requirement. Luminaire shall be complete with driver and capable of operating at linevoltage without any separate power	each	37240.00

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	supply from 100-270 V AC, 50 Hz with power factor >0.9. Fixture shall be suitable to operate at an ambient temperature range of -10 degree C to + 50 degree C and shall be IP 65 and IK 06 rated. Lifetime shall be at least L70:50000 burning hours at 50 degree C. Luminaire shall be conforming to BIS (IS 10322) and shall be complete with all necessary accessories required for proper working of fixture including weather proof connection cables, water proof connectors etc.as required - 45 W/40 W		
36.85	Supply, Installation, Testing and Commissioning of LED RGB/RGBW floodlighting luminaire for façade lighting with Die-cast aluminium housing, powder-coated finish, of following wattage. Luminaire shall be capable of producing dynamic color changing light for with 16 million colors by DMX/Ethernet based control. The beam angle of the fitting shall be narrow, medium, wide or asymmetric as per the requirement. Luminaire shall be complete with driver and capable of operating at linevoltage without any separate power supply from 100-270 V AC, 50 Hz with power factor >0.9. Fixture shall be suitable to operate at an ambient temperature range of -10 degree C to + 50 degree C and shall be IP 65 and IK 06 rated. Lifetime shall be at least L70:50000 burning hours at 50 degree C. Luminaire shall be conforming to BIS (IS 10322) and shall be complete with all necessary accessories required for proper working of fixture including weather proof connection cables, water proof connectors etc.as required - 30 W	each	20019.00
36.86	Supply, Installation, Testing and Commissioning of LED RGB/RGBW Linear Wall Washer luminaire for Façade Lighting with aluminium extruded housing , of following wattage. Luminaire shall be capable of producing dynamic color changing light with 16 million colors by DMX/Ethernet based control. The beam angle of the fitting shall be narrow, medium, wide or asymmetric as per the requirement. Luminaire shall be complete with driver and capable of operating at line voltage without any separate power supply from 100 to 270 V AC, 50 Hz, power factor > 0.9. Fixture shall be suitable to operate at ambient temperature range of -10 degree C to +50degree C and shall be IP 65 and IK06 rated. Lifetime should be at least L70:50000 burning hours at 50 degree C. Luminaire shall be conforming to BIS and shall be complete with all necessary accessories required for proper working of fixture including weather proof connection cables, water proof connectors etc. as required- 80 W	each	56720.00

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
36.87	Supply, Installation, Testing and Commissioning of LED RGB/RGBW Linear Wall Washer luminaire for Façade Lighting with aluminium extruded housing , of following wattage. Luminaire shall be capable of producing dynamic color changing light with 16 million colors by DMX/Ethernet based control. The beam angle of the fitting shall be narrow, medium, wide or asymmetric as per the requirement. Luminaire shall be complete with driver and capable of operating at line voltage without any separate power supply from 100 to 270 V AC, 50 Hz, power factor > 0.9. Fixture shall be suitable to operate at ambient temperature range of -10 degree C to +50degree C and shall be IP 65 and IK06 rated. Lifetime should be at least L70:50000 burning hours at 50 degree C. Luminaire shall be conforming to BIS and shall be complete with all necessary accessories required for proper working of fixture including weather proof connection cables, water proof connectors etc. as required- 70 W	each	54100.00
36.88	Supply, Installation, Testing and Commissioning of LED RGB/RGBW Linear Wall Washer luminaire for Façade Lighting with aluminium extruded housing , of following wattage. Luminaire shall be capable of producing dynamic color changing light with 16 million colors by DMX/Ethernet based control. The beam angle of the fitting shall be narrow, medium, wide or asymmetric as per the requirement. Luminaire shall be complete with driver and capable of operating at line voltage without any separate power supply from 100 to 270 V AC, 50 Hz, power factor > 0.9. Fixture shall be suitable to operate at ambient temperature range of -10 degree C to +50degree C and shall be IP 65 and IK06 rated. Lifetime should be at least L70:50000 burning hours at 50 degree C. Luminaire shall be conforming to BIS and shall be complete with all necessary accessories required for proper working of fixture including weather proof connection cables, water proof connectors etc. as required- 60 W	each	46036.00
36.89	Supply, Installation, Testing and Commissioning of LED RGB/RGBW Linear Wall Washer luminaire for Façade Lighting with aluminium extruded housing , of following wattage. Luminaire shall be capable of producing dynamic color changing light with 16 million colors by DMX/Ethernet based control. The beam angle of the fitting shall be narrow, medium, wide or asymmetric as per the requirement. Luminaire shall be complete with driver and capable of operating at line voltage without any separate power supply from 100 to 270 V AC, 50 Hz, power factor > 0.9. Fixture shall be suitable to operate at ambient temperature range of -10 degree C to	each	39050.00

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	+50degree C and shall be IP 65 and IK06 rated. Lifetime should be at least L70:50000 burning hours at 50 degree C. Luminaire shall be conforming to BIS and shall be complete with all necessary accessories required for proper working of fixture including weather proof connection cables, water proof connectors etc. as required- 40 W		
36.90	Supply, Installation, Testing and Commissioning of LED RGB/RGBW Linear Wall Washer luminaire for Façade Lighting with aluminium extruded housing , of following wattage. Luminaire shall be capable of producing dynamic color changing light with 16 million colors by DMX/Ethernet based control. The beam angle of the fitting shall be narrow, medium, wide or asymmetric as per the requirement. Luminaire shall be complete with driver and capable of operating at line voltage without any separate power supply from 100 to 270 V AC, 50 Hz, power factor > 0.9. Fixture shall be suitable to operate at ambient temperature range of -10 degree C to +50degree C and shall be IP 65 and IK06 rated. Lifetime should be at least L70:50000 burning hours at 50 degree C. Luminaire shall be conforming to BIS and shall be complete with all necessary accessories required for proper working of fixture including weather proof connection cables, water proof connectors etc. as required- 25 W	each	23130.00
36.91	Supply, Installation, Testing and Commissioning of 1200 mm sweep, BEE 5 star rated, ceiling fan with Brush Less Direct Current (BLDC) Motor, class of insulation : B, 3nos. Blades, 30 cm long down rod, 2nos. Canopies, shackle kit, safety rope, copper winding , Power Factor not less than 0.9, Service Value (CM/M/W) minimum 6.00, Air delivery minimum 210 Cum/Min, 350 RPM (tolerance as per IS: 374-2019), THD less than 10%, remote or electronic regulator unit for speed control and all remaining accessories including safety pin, nut bolts, washers, temperature rise= 75 degree C (max), insulation resistance more than 2 mega ohm , suitable for 230 V, 50 Hz, single phase AC Supply, earthing etc.complete as required	each	2730.00
36.92	Supply Installation, Testing & Commissioning of modular type Variable Refrigerant Flow / Variable Refrigerant Volume air cooled outdoor units suitable for cooling and heating, having all hermetically sealed inverter type Scroll Compressor(s), minimum two compressors for above 14 HP modules, microprocessor based Controller, top discharge type condensing unit(S), with R 410 A Refrigerant, vibration isolators, with suitable foundation etc. complete as required.	per hp	16415.00

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	The unit shall deliver the rated capacity at AHRI Conditions and work even at 50 degree C ambient temperature without tripping. The unit shall be suitable to work on 400V +/- 10%, 3 Phase, 50Hz AC power supply. The unit shall be filled with first charge of the refrigerant and ready for use as required. The COP at AHRI conditions shall not be less than 3.1 and IEER not less than 6.5		
36.93	Supply, Installation, testing and commissioning of following minimum capacity 4-way flow VRV/ VRF Cassette Type Indoor ceiling mounted unit equipped with synthetic washable media pre-filter, fan section with low noise fan/ dynamically balanced blower, multispeed motor, coil section with DX Copper coil, electronic expansion valve, outer cabinet, drain pump, grill, necessary supports, vibration isolation, cord less remote control etc., suitable for operation on single phase 230 V +_ 10% , 50Hz AC supply, complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The colling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature - 0.8TR	each	27381.00
36.94	Supply, Installation, testing and commissioning of following minimum capacity 4-way flow VRV/ VRF Cassette Type Indoor ceiling mounted unit equipped with synthetic washable media pre-filter, fan section with low noise fan/ dynamically balanced blower, multispeed motor, coil section with DX Copper coil, electronic expansion valve, outer cabinet, drain pump, grill, necessary supports, vibration isolation, cord less remote control etc., suitable for operation on single phase 230 V +_ 10% , 50Hz AC supply, complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The colling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature - 1 TR	each	29137.00
36.95	Supply, Installation, testing and commissioning of following minimum capacity 4-way flow VRV/ VRF Cassette Type Indoor ceiling mounted unit equipped with synthetic washable media pre-filter, fan section with low noise fan/ dynamically balanced blower, multispeed motor, coil section with DX Copper coil, electronic expansion valve, outer cabinet, drain pump, grill, necessary supports, vibration isolation, cord less remote control etc., suitable for operation on single phase 230 V +_ 10% , 50Hz AC supply, complete as required. The unit shall have automatic force shut down provision in case of fire	each	29488.00

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	on receiving signal from BMS System. The colling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature - 1.2 TR		
36.96	Supply, Installation, testing and commissioning of following minimum capacity 4-way flow VRV/ VRF Cassette Type Indoor ceiling mounted unit equipped with synthetic washable media pre-filter, fan section with low noise fan/ dynamically balanced blower, multispeed motor, coil section with DX Copper coil, electronic expansion valve, outer cabinet, drain pump, grill, necessary supports, vibration isolation, cord less remote control etc., suitable for operation on single phase 230 V + _ 10% , 50Hz AC supply, complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The colling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature - 1.6 TR	each	30204.00
36.97	Supply, Installation, testing and commissioning of following minimum capacity 4-way flow VRV/ VRF Cassette Type Indoor ceiling mounted unit equipped with synthetic washable media pre-filter, fan section with low noise fan/ dynamically balanced blower, multispeed motor, coil section with DX Copper coil, electronic expansion valve, outer cabinet, drain pump, grill, necessary supports, vibration isolation, cord less remote control etc., suitable for operation on single phase 230 V + _ 10% , 50Hz AC supply, complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The colling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature - 2 TR	each	30801.00
36.98	Supply, Installation, testing and commissioning of following minimum capacity 4-way flow VRV/ VRF Cassette Type Indoor ceiling mounted unit equipped with synthetic washable media pre-filter, fan section with low noise fan/ dynamically balanced blower, multispeed motor, coil section with DX Copper coil, electronic expansion valve, outer cabinet, drain pump, grill, necessary supports, vibration isolation, cord less remote control etc., suitable for operation on single phase 230 V + _ 10% , 50Hz AC supply, complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The colling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature - 2.4 TR	each	31453.00

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
36.99	Supply, Installation, testing and commissioning of following minimum capacity 4-way flow VRV/ VRF Cassette Type Indoor ceiling mounted unit equipped with synthetic washable media pre-filter, fan section with low noise fan/ dynamically balanced blower, multispeed motor, coil section with DX Copper coil, electronic expansion valve, outer cabinet, drain pump, grill, necessary supports, vibration isolation, cord less remote control etc., suitable for operation on single phase 230 V +_ 10% , 50Hz AC supply, complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The colling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature - 2.8 TR	each	32015.00
36.100	Supply, Installation, testing and commissioning of following minimum capacity 4-way flow VRV/ VRF Cassette Type Indoor ceiling mounted unit equipped with synthetic washable media pre-filter, fan section with low noise fan/ dynamically balanced blower, multispeed motor, coil section with DX Copper coil, electronic expansion valve, outer cabinet, drain pump, grill, necessary supports, vibration isolation, cord less remote control etc., suitable for operation on single phase 230 V +_ 10% , 50Hz AC supply, complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The colling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature - 3.2 TR	each	32787.00
36.101	Supply, Installation, testing and commissioning of following minimum capacity 4-way flow VRV/ VRF Cassette Type Indoor ceiling mounted unit equipped with synthetic washable media pre-filter, fan section with low noise fan/ dynamically balanced blower, multispeed motor, coil section with DX Copper coil, electronic expansion valve, outer cabinet, drain pump, grill, necessary supports, vibration isolation, cord less remote control etc., suitable for operation on single phase 230 V +_ 10% , 50Hz AC supply, complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The colling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature - 3.6 TR	each	33209.00
36.102	Supply, Installation, testing and commissioning of following minimum capacity 4-way flow VRV/ VRF Cassette Type Indoor ceiling mounted unit equipped with synthetic washable media pre-filter, fan section with low noise fan/ dynamically	each	33981.00

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	balanced blower, multispeed motor, coil section with DX Copper coil, electronic expansion valve, outer cabinet, drain pump, grill, necessary supports, vibration isolation, cord less remote control etc., suitable for operation on single phase 230 V +_ 10% , 50Hz AC supply, complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The colling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature - 4 TR		
36.103	Supply, installation, testing and commissioning of following minimum capacity VRV/VRF High wall type Indoor unit equipped with washable synthetic media pre-filter, fan section with low noise fan/ dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, outer cabinet, cord less remote control, drain pan, necessary accessories etc., suitable for operation on 230 V +_ 10%, 50 Hz, single phase AC supply, complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature-0.6 TR	each	18730.00
36.104	Supply, installation, testing and commissioning of following minimum capacity VRV/VRF High wall type Indoor unit equipped with washable synthetic media pre-filter, fan section with low noise fan/ dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, outer cabinet, cord less remote control, drain pan, necessary accessories etc., suitable for operation on 230 V +_ 10%, 50 Hz, single phase AC supply, complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature-0.8 TR	each	19312.00
36.105	Supply, installation, testing and commissioning of following minimum capacity VRV/VRF High wall type Indoor unit equipped with washable synthetic media pre-filter, fan section with low noise fan/ dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, outer cabinet, cord less remote control, drain pan, necessary accessories etc., suitable for operation on 230 V +_ 10%, 50 Hz, single phase AC supply, complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling	each	19700.00

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature-1 TR		
36.106	Supply, installation, testing and commissioning of following minimum capacity VRV/VRF High wall type Indoor unit equipped with washable synthetic media pre-filter, fan section with low noise fan/ dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, outer cabinet, cord less remote control, drain pan, necessary accessories etc., suitable for operation on 230 V +_10%, 50 Hz, single phase AC supply, complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature-1.3 TR	each	21176.00
36.107	Supply, installation, testing and commissioning of following minimum capacity VRV/VRF High wall type Indoor unit equipped with washable synthetic media pre-filter, fan section with low noise fan/ dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, outer cabinet, cord less remote control, drain pan, necessary accessories etc., suitable for operation on 230 V +_10%, 50 Hz, single phase AC supply, complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature-1.45 TR	each	21315.00
36.108	Supply, installation, testing and commissioning of following minimum capacity VRV/VRF High wall type Indoor unit equipped with washable synthetic media pre-filter, fan section with low noise fan/ dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, outer cabinet, cord less remote control, drain pan, necessary accessories etc., suitable for operation on 230 V +_10%, 50 Hz, single phase AC supply, complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature-1.65 TR	each	21746.00
36.109	Supply, installation, testing and commissioning of following minimum capacity VRV/VRF High wall type Indoor unit equipped with washable synthetic media pre-filter, fan section with low noise fan/ dynamically balanced blower, multispeed	each	22100.00

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	motor, coil section with DX copper coil, electronic expansion valve, outer cabinet, cord less remote control, drain pan, necessary accessories etc., suitable for operation on 230 V +_ 10%, 50 Hz, single phase AC supply, complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature-2 TR		
36.110	Supply, installation , testing and commissioning of following minimum capacity and external static pressure VRF/VRV ceiling mounted ductable type Indoor unit equipped with washable synthetic media pre-filter, fan section with low noise fan / dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, cored remote control, outer cabinet, vibration isolators, drain pan, other necessary supports etc., suitable for operation on single phase AC supply 230 V +_ 10%, 50 Hz complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature - Low static ductable units (minimum 25 pascal external static pressure) - 0.6 TR	each	26896.00
36.111	Supply, installation , testing and commissioning of following minimum capacity and external static pressure VRF/VRV ceiling mounted ductable type Indoor unit equipped with washable synthetic media pre-filter, fan section with low noise fan / dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, cored remote control, outer cabinet, vibration isolators, drain pan, other necessary supports etc., suitable for operation on single phase AC supply 230 V +_ 10%, 50 Hz complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature - Low static ductable units (minimum 25 pascal external static pressure) - 0.7 TR	each	27735.00
36.112	Supply, installation , testing and commissioning of following minimum capacity and external static pressure VRF/VRV ceiling mounted ductable type Indoor unit equipped with washable synthetic media pre-filter, fan section with low noise fan / dynamically balanced blower, multispeed motor, coil	each	28336.00

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	section with DX copper coil, electronic expansion valve, cored remote control, outer cabinet, vibration isolators, drain pan, other necessary supports etc., suitable for operation on single phase AC supply 230 V $\pm$ 10%, 50 Hz complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature - Low static ductable units (minimum 25 pascal external static pressure) - 0.8 TR		
36.113	Supply, installation , testing and commissioning of following minimum capacity and external static pressure VRF/VRV ceiling mounted ductable type Indoor unit equipped with washable synthetic media pre-filter, fan section with low noise fan / dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, cored remote control, outer cabinet, vibration isolators, drain pan, other necessary supports etc., suitable for operation on single phase AC supply 230 V $\pm$ 10%, 50 Hz complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature - Low static ductable units (minimum 25 pascal external static pressure) - 0.9 TR	each	29598.00
36.114	Supply, installation , testing and commissioning of following minimum capacity and external static pressure VRF/VRV ceiling mounted ductable type Indoor unit equipped with washable synthetic media pre-filter, fan section with low noise fan / dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, cored remote control, outer cabinet, vibration isolators, drain pan, other necessary supports etc., suitable for operation on single phase AC supply 230 V $\pm$ 10%, 50 Hz complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature - Low static ductable units (minimum 25 pascal external static pressure) - 1 TR	each	29660.00
36.115	Supply, installation , testing and commissioning of following minimum capacity and external static pressure VRF/VRV ceiling mounted ductable type Indoor unit equipped with	each	32610.00

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	washable synthetic media pre-filter, fan section with low noise fan / dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, cored remote control, outer cabinet, vibration isolators, drain pan, other necessary supports etc., suitable for operation on single phase AC supply 230 V +_ 10%, 50 Hz complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature - Low static ductable units (minimum 25 pascal external static pressure) - 1.1 TR		
36.116	Supply, installation , testing and commissioning of following minimum capacity and external static pressure VRF/VRV ceiling mounted ductable type Indoor unit equipped with washable synthetic media pre-filter, fan section with low noise fan / dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, cored remote control, outer cabinet, vibration isolators, drain pan, other necessary supports etc., suitable for operation on single phase AC supply 230 V +_ 10%, 50 Hz complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature - Low static ductable units (minimum 25 pascal external static pressure) - 1.3 TR	each	34350.00
36.117	Supply, installation , testing and commissioning of following minimum capacity and external static pressure VRF/VRV ceiling mounted ductable type Indoor unit equipped with washable synthetic media pre-filter, fan section with low noise fan / dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, cored remote control, outer cabinet, vibration isolators, drain pan, other necessary supports etc., suitable for operation on single phase AC supply 230 V +_ 10%, 50 Hz complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature - Low static ductable units (minimum 25 pascal external static pressure) - 1.4 TR	each	34650.00
36.118	Supply, installation , testing and commissioning of following	each	35259.00

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	minimum capacity and external static pressure VRF/VRV ceiling mounted ductable type Indoor unit equipped with washable synthetic media pre-filter, fan section with low noise fan / dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, cored remote control, outer cabinet, vibration isolators, drain pan, other necessary supports etc., suitable for operation on single phase AC supply 230 V $\pm$ 10%, 50 Hz complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature - Low static ductable units (minimum 25 pascal external static pressure) - 1.6 TR		
36.119	Supply, installation , testing and commissioning of following minimum capacity and external static pressure VRF/VRV ceiling mounted ductable type Indoor unit equipped with washable synthetic media pre-filter, fan section with low noise fan / dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, cored remote control, outer cabinet, vibration isolators, drain pan, other necessary supports etc., suitable for operation on single phase AC supply 230 V $\pm$ 10%, 50 Hz complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature - Mid static ductable units (minimum 45 pascal external static pressure) - 1.8 TR	each	38032.00
36.120	Supply, installation , testing and commissioning of following minimum capacity and external static pressure VRF/VRV ceiling mounted ductable type Indoor unit equipped with washable synthetic media pre-filter, fan section with low noise fan / dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, cored remote control, outer cabinet, vibration isolators, drain pan, other necessary supports etc., suitable for operation on single phase AC supply 230 V $\pm$ 10%, 50 Hz complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature - Mid static ductable units (minimum 45 pascal external static pressure) - 2 TR	each	38913.00

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
36.121	Supply, installation , testing and commissioning of following minimum capacity and external static pressure VRF/VRV ceiling mounted ductable type Indoor unit equipped with washable synthetic media pre-filter, fan section with low noise fan / dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, cored remote control, outer cabinet, vibration isolators, drain pan, other necessary supports etc., suitable for operation on single phase AC supply 230 V +_ 10%, 50 Hz complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature - Mid static ductable units (minimum 45 pascal external static pressure) - 2.3 TR	each	39669.00
36.122	Supply, installation , testing and commissioning of following minimum capacity and external static pressure VRF/VRV ceiling mounted ductable type Indoor unit equipped with washable synthetic media pre-filter, fan section with low noise fan / dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, cored remote control, outer cabinet, vibration isolators, drain pan, other necessary supports etc., suitable for operation on single phase AC supply 230 V +_ 10%, 50 Hz complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature - Mid static ductable units (minimum 45 pascal external static pressure) - 2.6 TR	each	42350.00
36.123	Supply, installation , testing and commissioning of following minimum capacity and external static pressure VRF/VRV ceiling mounted ductable type Indoor unit equipped with washable synthetic media pre-filter, fan section with low noise fan / dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, cored remote control, outer cabinet, vibration isolators, drain pan, other necessary supports etc., suitable for operation on single phase AC supply 230 V +_ 10%, 50 Hz complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature - Mid static ductable units (minimum 45 pascal external static pressure) - 2.8 TR	each	46782.00

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
36.124	Supply, installation , testing and commissioning of following minimum capacity and external static pressure VRF/VRV ceiling mounted ductable type Indoor unit equipped with washable synthetic media pre-filter, fan section with low noise fan / dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, cored remote control, outer cabinet, vibration isolators, drain pan, other necessary supports etc., suitable for operation on single phase AC supply 230 V +_ 10%, 50 Hz complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temparature - Mid static ductable units (minimum 45 pascal external static pressure) - 3.4 TR	each	47651.00
36.125	Supply, installation , testing and commissioning of following minimum capacity and external static pressure VRF/VRV ceiling mounted ductable type Indoor unit equipped with washable synthetic media pre-filter, fan section with low noise fan / dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, cored remote control, outer cabinet, vibration isolators, drain pan, other necessary supports etc., suitable for operation on single phase AC supply 230 V +_ 10%, 50 Hz complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temparature - Mid static ductable units (minimum 45 pascal external static pressure) - 4 TR	each	48731.00
36.126	Supply, installation , testing and commissioning of following minimum capacity and external static pressure VRF/VRV ceiling mounted ductable type Indoor unit equipped with washable synthetic media pre-filter, fan section with low noise fan / dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, cored remote control, outer cabinet, vibration isolators, drain pan, other necessary supports etc., suitable for operation on single phase AC supply 230 V +_ 10%, 50 Hz complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temparature - High static	each	85766.00

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	ductable units (minimum 110 pascal external static pressure) - 5.5 TR		
36.127	Supply, installation , testing and commissioning of following minimum capacity and external static pressure VRF/VRV ceiling mounted ductable type Indoor unit equipped with washable synthetic media pre-filter, fan section with low noise fan / dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, cored remote control, outer cabinet, vibration isolators, drain pan, other necessary supports etc., suitable for operation on single phase AC supply 230 V +_ 10%, 50 Hz complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature - High static ductable units (minimum 110 pascal external static pressure) - 7.1 TR	each	87281.00
36.128	Supply, installation , testing and commissioning of following minimum capacity and external static pressure VRF/VRV ceiling mounted ductable type Indoor unit equipped with washable synthetic media pre-filter, fan section with low noise fan / dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, cored remote control, outer cabinet, vibration isolators, drain pan, other necessary supports etc., suitable for operation on single phase AC supply 230 V +_ 10%, 50 Hz complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature - High static ductable units (minimum 110 pascal external static pressure) - 8 TR	each	89590.00
36.129	Supply, Installation, testing and commissioning including vaccumiazation and Nitrogen testing of following nominal sizes of soft / hard drawn copper refrigerant piping for VRV / VRF system, complete with fittings, with suitable adjustable ring type hanger supports, jointing/brazing including accessories, insulated with XPLE Class-O tubular insulation/with Class-O closed cell elastometric nitrile rubber tubular sleeves sections of specified thickness as given below for Suction and Liquid lines, all accessories as per specifications etc.as required: - 6.4 mm dia (OD) (Soft drawn) with tube thickness 1.2 mm with 19mm thick insulation	m	245.00

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
36.130	Supply, Installation, testing and commissioning including vaccumiazation and Nitrogen testing of following nominal sizes of soft / hard drawn copper refrigerant piping for VRV / VRF system, complete with fittings, with suitable adjustable ring type hanger supports, jointing/brazing including accessories, insulated with XPLE Class-O tubular insulation/with Class-O closed cell elastometric nitrile rubber tubular sleeves sections of specified thickness as given below for Suction and Liquid lines, all accessories as per specifications etc.as required: - 9.5mm dia (OD) (Soft drawn) with tube thickness 1.2 mm with 19mm thick insulation	m	331.00
36.131	Supply, Installation, testing and commissioning including vaccumiazation and Nitrogen testing of following nominal sizes of soft / hard drawn copper refrigerant piping for VRV / VRF system, complete with fittings, with suitable adjustable ring type hanger supports, jointing/brazing including accessories, insulated with XPLE Class-O tubular insulation/with Class-O closed cell elastometric nitrile rubber tubular sleeves sections of specified thickness as given below for Suction and Liquid lines, all accessories as per specifications etc.as required: - 12.7 mm dia (OD) (Soft drawn) with tube thickness 1.2 mm with 19mm thick insulation	m	466.00
36.132	Supply, Installation, testing and commissioning including vaccumiazation and Nitrogen testing of following nominal sizes of soft / hard drawn copper refrigerant piping for VRV / VRF system, complete with fittings, with suitable adjustable ring type hanger supports, jointing/brazing including accessories, insulated with XPLE Class-O tubular insulation/with Class-O closed cell elastometric nitrile rubber tubular sleeves sections of specified thickness as given below for Suction and Liquid lines, all accessories as per specifications etc.as required: - 15.86 mm dia (OD) (Soft drawn) with tube thickness 1.2 mm with 19mm thick insulation	m	588.00
36.133	Supply, Installation, testing and commissioning including vaccumiazation and Nitrogen testing of following nominal sizes of soft / hard drawn copper refrigerant piping for VRV / VRF system, complete with fittings, with suitable adjustable ring type hanger supports, jointing/brazing including accessories, insulated with XPLE Class-O tubular insulation/with Class-O closed cell elastometric nitrile rubber tubular sleeves sections of specified thickness as given below for Suction and Liquid lines, all accessories as per specifications etc.as required: - 19 mm dia (OD) (Soft drawn)	m	707.00

36 . Energy Conservation Building Code

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	with tube thickness 1.2 mm with 19mm thick insulation		
36.134	Supply, Installation, testing and commissioning including vaccumiazation and Nitrogen testing of following nominal sizes of soft / hard drawn copper refrigerant piping for VRV / VRF system, complete with fittings, with suitable adjustable ring type hanger supports, jointing/brazing including accessories, insulated with XPLE Class-O tubular insulation/with Class-O closed cell elastometric nitrile rubber tubular sleeves sections of specified thickness as given below for Suction and Liquid lines, all accessories as per specifications etc.as required: - 22.2 mm dia (OD) (Soft drawn) with tube thickness 1.2 mm with 19mm thick insulation	m	865.00
36.135	Supply, Installation, testing and commissioning including vaccumiazation and Nitrogen testing of following nominal sizes of soft / hard drawn copper refrigerant piping for VRV / VRF system, complete with fittings, with suitable adjustable ring type hanger supports, jointing/brazing including accessories, insulated with XPLE Class-O tubular insulation/with Class-O closed cell elastometric nitrile rubber tubular sleeves sections of specified thickness as given below for Suction and Liquid lines, all accessories as per specifications etc.as required: - 25.4 mm dia (OD) (Soft drawn) with tube thickness 1.2 mm with 19mm thick insulation	m	1022.00
36.136	Supply, Installation, testing and commissioning including vaccumiazation and Nitrogen testing of following nominal sizes of soft / hard drawn copper refrigerant piping for VRV / VRF system, complete with fittings, with suitable adjustable ring type hanger supports, jointing/brazing including accessories, insulated with XPLE Class-O tubular insulation/with Class-O closed cell elastometric nitrile rubber tubular sleeves sections of specified thickness as given below for Suction and Liquid lines, all accessories as per specifications etc.as required: - 28.58 mm dia (OD) (Soft drawn) with tube thickness 1.2 mm with 19mm thick insulation	m	1108.00
36.137	Supply, Installation, testing and commissioning including vaccumiazation and Nitrogen testing of following nominal sizes of soft / hard drawn copper refrigerant piping for VRV / VRF system, complete with fittings, with suitable adjustable ring type hanger supports, jointing/brazing including accessories, insulated with XPLE Class-O tubular insulation/with Class-O closed cell elastometric nitrile rubber tubular sleeves sections of specified thickness as given below	m	1170.00

36 . Energy Conservation Building Code

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	for Suction and Liquid lines, all accessories as per specifications etc.as required: -31.8 mm dia (OD) (Soft drawn) with tube thickness 1.62 mm with 19mm thick insulation		
36.138	Supply, Installation, testing and commissioning including vaccumiazation and Nitrogen testing of following nominal sizes of soft / hard drawn copper refrigerant piping for VRV / VRF system, complete with fittings, with suitable adjustable ring type hanger supports, jointing/brazing including accessories, insulated with XPLE Class-O tubular insulation/with Class-O closed cell elastometric nitrile rubber tubular sleeves sections of specified thickness as given below for Suction and Liquid lines, all accessories as per specifications etc.as required: - 34.9 mm dia (OD) (Soft drawn) with tube thickness 1.62 mm with 19mm thick insulation	m	1230.00
36.139	Supply, Installation, testing and commissioning including vaccumiazation and Nitrogen testing of following nominal sizes of soft / hard drawn copper refrigerant piping for VRV / VRF system, complete with fittings, with suitable adjustable ring type hanger supports, jointing/brazing including accessories, insulated with XPLE Class-O tubular insulation/with Class-O closed cell elastometric nitrile rubber tubular sleeves sections of specified thickness as given below for Suction and Liquid lines, all accessories as per specifications etc.as required: - 38.1 mm dia (OD) (Soft drawn) with tube thickness 1.62 mm with 19mm thick insulation	m	1265.00
36.140	Supply, Installation, testing and commissioning including vaccumiazation and Nitrogen testing of following nominal sizes of soft / hard drawn copper refrigerant piping for VRV / VRF system, complete with fittings, with suitable adjustable ring type hanger supports, jointing/brazing including accessories, insulated with XPLE Class-O tubular insulation/with Class-O closed cell elastometric nitrile rubber tubular sleeves sections of specified thickness as given below for Suction and Liquid lines, all accessories as per specifications etc.as required: -41.27 mm dia (OD) (Soft drawn) with tube thickness 1.62 mm with 19mm thick insulation	m	1309.00
36.141	Supply, Installation, Testing and Commissioning of ongrid Solar Photovoltaic Power plant conforming to MNRE specifications as amended, considting of Mono/Poly Crystalline silicon solar cells, net metering facility, necessary protections, earthing, mounted on Aluminium / GI structure of suitable strength with following components complete as	kWp	61060.00

36 . Energy Conservation Building Code

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	required:- (a) Solar Photovoltaic Module of capacity 330 Wp or above, manufactured in India, conforming to IS 14286/IEC 61215, IS/IEC 61730-part-1, IS/IEC 61730-Part-2. Solar Photovoltaic Module conversion efficiency shall not be less than 16.5% . PV modules used in solar power plants/ systems must be warranted for their output peak watt capacity, which should not be less than 90% at the end of 10 years and 80% at the end of 25 years. (b) Power Conditioning Unit (PCU) of 350-800 V Dc Input voltage range and 400 V AC, three phase, 4 wire, 50Hz +/- 2.5 Hz, output voltage suitable to generate AC Power with efficiency not less than 97%, total harmonic distortion less than 3% and suitable for ambient temperature from 0 to 50 degree C. The PCU shall adjust the voltage and frequency level to suit the Grid Voltage Frequency. ©Data Monitoring System complete with accessories. (D) Fixing of Array junction box & Main junction box with IP 65 protection and termination arrangement for incoming and outgoing cable along with glands, lugs and other accessories etc.as required. (e) Lightning and surge voltage protection. (f) Connection & Interconnections by supplying & fixing required size XLPE insulated copper conductor 1.1 kV grade armoured power and control cables between solar modules, main power cable to grid supply PCU unit along with supplying & fixing of necessary channel/conduit lugs and other accessories etc.as required		

ROAD WORK
(MOST)

4 . Granular Sub-base

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
4.2D.MO	Providing and laying fine aggregate gravel mix 1:1 of 150mm consolidated thickness using 0.68cum of fine aggregate & 0.62cum of gravel for 1cum finished to a soaked CBR value of minimum 20 including cost and conveyance of fine aggregate and gravel to the work site and stacking to the standard departmental gauge for premeasurement, mixing the required quantities of fine aggregate and gravel, spreading watering and consolidation the mix by power roller rolling to achieve the required proctor density including the labour charges for mixing, spreading, hire and fuel charges for power roller and all other tools and plants employed etc., complete. As per clause no 401 of MOT specification.	cum	3148.53

6 . Bituminous Construction

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
6.1.MO	Cleaning the existing W.B.M. road surface including removing of binding material and other foreign matter with wire brushes and small picks, sweeping with brooms or soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment. As per clause no 502.4.2 and 503.3.1 of MOST specification.	sqm	51.89
6.2.MO	Cleaning of the existing black topped surfaces with brooms, soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment. As per clause no 503.3.1 of MOST specification.	sqm	12.97
6.3.MO	Scarifying existing stone metal layer up to 75mm thick along with their bituminous surface, picking up scarified material and stacking of old serviceable material within a lead of 100m sequential spreading the salvage aggregates with fresh aggregates on prepared base and consolidating as per water bound macadam specification. As per clause no 404 of MOST specification.	cum	5282.66
6.5E.1.MO	Providing and applying tackcoat on the prepared surface, heating bitumen in boiler and spraying the bitumen with sprayset fitted on bitumen boiler - on black topped surface bitumen @ 5kg/10sqm.	sqm	37.15
6.5F.1.MO	Providing and applying tack coat on the prepared surface, heating bitumen in boiler and spraying the bitumen with sprayset fitted on bitumen boiler - on granular base such as WBM and WMM surfaces not bitumen primed. Rate of application 10kg/10sqm.	sqm	74.11
6.5G.1.MO	Providing and applying tack coat on the prepared surface, spraying the bitumen emulsion with spray set at 2.50kg/10sqm.As per clause 503 of Most specification.	sqm	23.89
6.5H.1.MO	Providing and applying tack coat on the prepared surface, spraying the bitumen emulsion with spray set at 4.00kg/10sqm.As per clause 503 of Most specification.	sqm	40.84
6.11A.MO	Providing and laying open graded premix carpet with specified graded crushed aggregates for wearing course including loading of aggregates with f.e. loader, heating binder and aggregates in hot mix plant 30 to 40 tonne, transporting the mixed material with tipper and laying with paver finisher to the required level and grade, rolling with power roller 8 to 10 tonne but excluding cost of tack and seal coat with lead for mix of material 1 km. As per clause no 509 of MOST specification.	sqm	179.52
6.11B.MO	Providing and laying open graded premix carpet 20mm thick on prepared surface in a single course as wearing course composed of specified size of stone aggregates premix with a	sqm	252.40

6 . Bituminous Construction

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	bituminous binder in mini hot mix plant 6 to 10 tonne laying manually and rolling with power roller 8 to 10 tonne but excluding cost of primer/tack coat. As per clause no 509 of MOST specification.		
6.11C.MO	Providing and laying open graded premix carpet of 25mm thick on prepared surface in a single course as wearing course composed of specified size of stone aggregates premix with a bituminous binder in mini hot mix plant 6-10 tonne laying manually and rolling with power roller 8-10 tonne but excluding cost of primer/tack coat. As per clause no 509 of MOST specification.	sqm	315.17
6.16.MO	Providing and applying liquid seal coat, type 'A' comprising of a layer of bituminous binder, followed by a cover of stone chipping of specified grading and rolling with power roller 8 to 10 tonne. As per clause no 513 of MOST specification.	sqm	121.76
6.17.MO	Providing and applying premixed seal coat type 'B' comprising of thin application of fine aggregate premix with bitumen binder in mini hot mix plant, carriage manually of mixed material and laying and rolling with power roller 8 to 10 tonne. As per clause no 513 of MOST specification.	sqm	83.95

7 . Culverts

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
7.1A.MO	Cement concrete 1:4:8 mix with stone aggregate 40mm nominal size in foundation upto a depth of 1.5 metres below ground level and upto height of 1.5 above ground/bed level.	cum	7932.87
7.1B.MO	Cement concrete 1:3:6 mix with stone aggregates 20mm nominal size mechanically mixed and vibrated in foundation upto a depth of 1.5 metres below ground level and 1.5 metres ground/bed level.	cum	8396.45
7.2.MO	Plain cement concrete m-15 mix with stone aggregates 20mm nominal size mechanically mixed and vibrated in foundation upto a depth of 1.50 metres below ground level and/or 1.50 metres above ground/bed level.	cum	9186.52
7.3.MO	Plain cement concrete m-15 mix with stone aggregates 20mm nominal size mechanically mixed and vibrated in superstructure upto 4.00 metre above, 1.50 metre from ground/bed level.	cum	9620.39
7.4.MO	Reinforced cement concrete m-20 mix with stone aggregate 20mm nominal size mechanically mixed and vibrated for reinforced concrete work in slab excluding steel reinforcement, but including centering and shuttering, laid in position.	cum	14939.04
7.5.MO	Reinforced cement concrete m-20 mix with stone aggregate 20mm nominal size mechanically mixed and vibrated for bed plates excluding steel reinforcement, but including centering and shuttering, laid in position.	cum	14236.54
7.6C.MO	Steel reinforcement for R.C.C. works including bending, binding and placing in position - Thermo Mechanical Treated Bars Fe - 415 or more	Tonne	33339.94
7.6E.MO	Providing and placing M30 coverblock for all RCC works	no	2.82
7.7.MO	First class brick in cement mortar 1:3 upto a depth of 1.50 metres below ground and above 1.50 from bed/ground level.	cum	10633.99
7.8.MO	Extra for brick work in superstructure upto a height of 4 metres or part thereof above 1.5 metre from bed/ground level.	cum	617.57
7.9.MO	Brick or edge flooring with 1st class bricks including cement slurry in cement fine aggregate mortar 1:4.	sqm	1174.23
7.10.MO	Coursed rubble stone masonry in cement fine aggregate mortar 1:3 in foundation upto a depth of 1.50 metres and also 1.50 metres above ground/bed level.	cum	11625.00
7.11.MO	Extra for coursed rubble stone masonry in superstructure upto a height of 4 metres or part thereof above 1.50 metres from	cum	848.79

7 . Culverts

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	ground/bed level.		
7.12.MO	Randum rubble masonry (coursed) in cement fine aggregate mortar 1:3 in foundation upto a depth of 1.50 metres and 1.50 above ground/bed level.	cum	9690.73
7.13.MO	Extra for random rubble masonry (coursed) in cement fine aggregate mortar 1:3 in superstructure upto a height of 4 metres or part thereof, 1.50 from ground or bed level.	cum	848.79
7.14.MO	Cement pointing 1:2 deep variety (cut or weather) on brick and tile work.	sqm	348.90
7.15.MO	Cement pointing 1:2 flush on brick on edge floor.	sqm	348.48
7.16.MO	Cement plaster 12mm thick in cement mortar 1:3	sqm	349.32
7.17.MO	Laying reinforced cement concrete pipes NP-3 for culverts including pointing ends and fixing collar with cement mortar 1:2 - 900mm dia.	metre	5975.11
7.18.MO	Laying reinforced cement concrete pipes NP-3 for culverts including pointing ends and fixing collar with cement mortar 1:2 - 1200mm dia.	metre	8203.41
7.19.MO	Rubble stone laid in cement fine aggregate mortar 1:3 in flooring.	cum	7214.76
7.20.MO	Dry boulder pitching in flooring.	cum	4293.97
7.21A.MO	Providing and filling in foundation trenches and at the back of abutments, wing walls etc. and below pipe bed in layers not exceeding 150mm thick including watering and compacting including all lead and lifts. - Good local fine aggregate free from earth.	cum	2528.35
7.21B.MO	Providing and filling in foundation trenches and at the back of abutments, wing walls etc. and below pipe bed in layers not exceeding 150mm thick including watering and compacting including all lead and lifts. - Selected granular material in filling.	cum	2669.62
7.21C.MO	Providing and filling in foundation trenches and at the back of abutments, wing walls etc. and below pipe bed in layers not exceeding 150mm thick including watering and compacting including all lead and lifts. - Filter media behind abutment wing and return wall.	cum	4243.26
7.22.MO	Making and filling expansion joints with bitumen filler (bitumen 40 percent, asbestos 5 percent and fine aggregate 55%) 12mm wide.	metre/c	5.97

7 . Culverts

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
7.23A.MO	Providing and fixing premoulded bitumen joint filler, for expansion joints including the cost of sealing compound and priming coat - 12 mm wide	metre/c	7.65
7.23B.MO	Providing and fixing premoulded bitumen joint filler, for expansion joints including the cost of sealing compound and priming coat - 25 mm wide.	metre/c	11.40
7.24.MO	Reinforced cement concrete M30 mix with minimum cement content 450 kg /cum using stone aggregate 20 mm nominal size mechanically mixed and vibrated for reinforced concrete work in slab excluding steel reinforcement, but including centering and shuttering, laid in position.	cum	15162.25
7.28.MO	Boring, providing and installing bored cast -in-situ reinforced cement concrete pile of specified diameter using approved drilling method to the required depth up to the cut off level in pile cap in RCC M20 grade with a minimum cement content of 400 kg / cum using Blue metal of 20mm and down gauge to carry a safe working load not less than the specified, excluding the cost of steel reinforcement but including the cost of boring with casing from Natural / formed ground level, bentonite mud circulation of approved specific gravity and the length of pile to be embedded in the pile cap. The cost shall include the cost of dismantling of laitenance / week concrete as per BIS norms, removal of dismantled debris and the waste bore mug from the site . The rate shall include all machineries required for boring, genset, skilled labour etc. (Length of pile for payment shall be measured upto the bottom of pile cap) -1000 mm dia pile.	metre	15284.74
7.29.MO	Boring, providing and installing bored cast -in-situ reinforced cement concrete pile of specified diameter using approved drilling method to the required depth up to the cut off level in pile cap in RCC M20 grade with a minimum cement content of 400 kg / cum using Blue metal of 20mm and down gauge to carry a safe working load not less than the specified, excluding the cost of steel reinforcement but including the cost of boring with casing from Natural / formed ground level, bentonite mud circulation of approved specific gravity and the length of pile to be embedded in the pile cap. The cost shall include the cost of dismantling of laitenance / week concrete as per BIS norms, removal of dismantled debris and the waste bore mug from the site . The rate shall include all machineries required for boring, genset, skilled labour etc. (Length of pile for payment shall be measured upto the bottom of pile cap) -750 mm dia pile.	metre	8597.67
7.30.MO	Bored/cast-in-situ R.C.C.piles for load test assume: Initial & routine test per tonne.	mt	2.39
7.31.MO	Bored/cast-in-situ R.C.C.piles for load testing assume: lateral load testing	mt	239.45

7 . Culverts

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
7.34.MO	Boring, providing and installing bored cast -in-situ reinforced cement concrete pile of specified diameter using approved drilling method to the required depth up to the cut off level in pile cap in RCC M20 grade with a minimum cement content of 400 kg / cum using Blue metal of 20mm and down gauge to carry a safe working load not less than the specified, excluding the cost of steel reinforcement but including the cost of boring with casing from Natural / formed ground level, bentonite mud circulation of approved specific gravity and the length of pile to be embedded in the pile cap. The cost shall include the cost of dismantling of laitenance / week concrete as per BIS norms, removal of dismantled debris and the waste bore mug from the site . The rate shall include all machineries required for boring, genset, skilled labour etc. (Length of pile for payment shall be measured upto the bottom of pile cap) -1000 mm dia pile.(Using cement SRPC)	metre	15677.31
7.35.MO	Boring, providing and installing bored cast -in-situ reinforced cement concrete pile of specified diameter using approved drilling method to the required depth up to the cut off level in pile cap in RCC M20 grade with a minimum cement content of 400 kg / cum using Blue metal of 20mm and down gauge to carry a safe working load not less than the specified, excluding the cost of steel reinforcement but including the cost of boring with casing from Natural / formed ground level, bentonite mud circulation of approved specific gravity and the length of pile to be embedded in the pile cap. The cost shall include the cost of dismantling of laitenance / week concrete as per BIS norms, removal of dismantled debris and the waste bore mug from the site The rate shall include all machineries required for boring, genset, skilled labour etc. (Length of pile for payment shall be measured upto the bottom of pile cap) -750 mm dia pile.(Using cement SRPC)	metre	8818.49
7.36.MO	Boring, providing and installing bored cast -in-situ reinforced cement concrete pile of specified diameter using approved drilling method to the required depth up to the cut off level in pile cap in RCC M20 grade with a minimum cement content of 400 kg / cum using Blue metal of 20mm and down gauge to carry a safe working load not less than the specified, excluding the cost of steel reinforcement but including the cost of boring with casing from Natural / formed ground level, bentonite mud circulation of approved specific gravity and the length of pile to be embedded in the pile cap. The cost shall include the cost of dismantling of laitenance / week concrete as per BIS norms, removal of dismantled debris and the waste bore mug from the site . The rate shall include all machineries required for boring, genset, skilled labour etc. (Length of pile for payment shall be measured upto the bottom of pile cap) -1000 mm dia pile.- Using Portland Slag Cement	metre	15677.31

7 . Culverts

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
7.37.MO	Boring, providing and installing bored cast -in-situ reinforced cement concrete pile of specified diameter using approved drilling method to the required depth up to the cut off level in pile cap in RCC M20 grade with a minimum cement content of 400 kg / cum using Blue metal of 20mm and down gauge to carry a safe working load not less than the specified, excluding the cost of steel reinforcement but including the cost of boring with casing from Natural / formed ground level, bentonite mud circulation of approved specific gravity and the length of pile to be embedded in the pile cap. The cost shall include the cost of dismantling of laitenance / week concrete as per BIS norms, removal of dismantled debris and the waste bore mug from the site The rate shall include all machineries required for boring, genset, skilled labour etc. (Length of pile for payment shall be measured upto the bottom of pile cap) -750 mm dia pile.- Using Portland Slag Cement	metre	8818.49

ROAD WORK (MORTH)

2 . Site Clearance and Dismantling

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
2.3.1A	Clearing and grubbing road land including uprooting rank vegetation, grass, bushes, shrubs, saplings and trees girth upto 300mm, removal of stumps of trees cut earlier and disposal of unserviceable materials and stacking of serviceable material to be used or auctioned, upto a lead of 1000m including removal and disposal of top organic soil not exceeding 150mm in thickness - by manual means in area of light jungle.	hectare	192524.98
2.3.2B	Clearing and grubbing road land including uprooting rank vegetation, grass, bushes, shrubs, saplings and trees girth upto 300mm, removal of stumps of trees cut earlier and disposal of unserviceable materials and stacking of serviceable material to be used or auctioned, upto a lead of 1000m including removal and disposal of top organic soil not exceeding 150mm in thickness - by manual means in area of thorny jungle.	hectare	257040.85
2.3.2C	Clearing and grubbing road land including uprooting rank vegetation, grass, bushes, shrubs, saplings and trees girth upto 300mm, removal of stumps of trees cut earlier and disposal of unserviceable materials and stacking of serviceable material to be used or auctioned, upto a lead of 1000m including removal and disposal of top organic soil not exceeding 150mm in thickness - by mechanical means in area of light jungle.	hectare	47888.20
2.3.2D	Clearing and grubbing road land including uprooting rank vegetation, grass, bushes, shrubs, saplings and trees girth upto 300mm, removal of stumps of trees cut earlier and disposal of unserviceable materials and stacking of serviceable material to be used or auctioned, upto a lead of 1000m including removal and disposal of top organic soil not exceeding 150mm in thickness - by mechanical means in area of thorny jungle.	hectare	59155.35
2.4.1A	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000m - Lime/Cement Concrete - by manual means (Lime concrete, cement concrete grade M-10 and below.	cum	1134.52

2 . Site Clearance and Dismantling

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
2.4.1B	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000m - Lime/Cement Concrete - by manual means (Cement concrete grade M-15 and M-20).	cum	1390.53
2.4.1C	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000m - Lime/Cement Concrete - by manual means (Prestressed / reinforced cement concrete grade M-20 & above)	cum	4008.46
2.4.1E	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000m - Lime/Cement Concrete - by mechanical means (Cement concrete grade M-15 & M-20).	cum	830.10
2.4.1F	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000m - Lime/Cement Concrete - by mechanical means (Prestressed / RCC grade M-20 and above)	cum	1669.94
2.4.2A	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000m - dismantling brick / tile work in lime mortar	cum	622.49

2 . Site Clearance and Dismantling

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
2.4.2B	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000m - dismantling brick / tile work in cement mortar	cum	878.50
2.4.2C	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000m - dismantling brick / tile work in mud mortar	cum	520.08
2.4.2D	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000m - dismantling brick / tile work - dry brick pitching or brick soling.	cum	468.86
2.4.3A	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000m - dismantling stone masonry - rubble stone masonry in lime mortar.	cum	724.89
2.4.3B	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000m - dismantling stone masonry - rubble stone masonry in cement mortar	cum	878.50
2.4.3C	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of	cum	622.49

2 . Site Clearance and Dismantling

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000m - dismantling stone masonry - rubble stone masonry in mud mortar		
2.4.3D	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000m - dismantling stone masonry - dry rubble masonry.	cum	571.27
2.4.3E	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000m - dismantling stone masonry - dismantling stone pitching / dry stone spalls	cum	520.08
2.4.3F	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000m - dismantling stone masonry - dismantling boulders laid in wire crates including opening of crates and stacking dismantled materials.	cum	622.49
2.4.4A	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000m - wood work wrought framed and fixed in frames of trusses upto a height of 5m. above plinth level.	cum	1747.96
2.4.5A	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of	tonne	4975.24

2 . Site Clearance and Dismantling

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000m - Steel work in all types of sections upto a height of 5m above plinth level excluding cutting of rivet including dismembering		
2.4.5B	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000m - Steel work in all types of sections upto a height of 5m above plinth level excluding cutting of rivet excluding dismembering	tonne	3683.21
2.4.5C	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000m - Steel work in all types of sections upto a height of 5m above plinth level excluding cutting of rivet - Extra for cutting rivet	each	36.98
2.4.6A	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000m - Scraping of bricks dismantled from brick work including stacking in lime/cement mortar	nos	4.48
2.4.7A	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000m - Scraping of stone from dismantled stone masonry - in cement / lime mortar	cum	1797.60
2.4.7B	Dismantling of existing structures like culverts, bridges,	cum	381.30

2 . Site Clearance and Dismantling

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000m - Scraping of stone from dismantled stone masonry in mud mortar		
2.4.8A	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000m - Scraping plaster in lime or cement mortar from brick / stone masonry	sqm	52.84
2.4.9A	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000m - Removing all types of Hume pipes and Stacking within a lead of 1000 metres including earthwork and dismantling of Masonry works - upto 600mm dia	metre	664.55
2.4.9B	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000m - Removing all types of Hume pipes and Stacking within a lead of 1000 metres including earthwork and dismantling of Masonry works - Above 600mm to 900mm dia	metre	898.79
2.4.9C	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000m - Removing all types of Hume pipes and Stacking within a lead of 1000 metres	metre	1538.84

2 . Site Clearance and Dismantling

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	including earthwork and dismantling of Masonry works - Above 900mm dia		
2.5.1A	Dismantling of flexible pavements and disposal of dismantled materials upto a lead of 1000 metres, stacking serviceable and unserviceable materials separately - by manual means - bituminous courses	cum	2114.44
2.5.1B	Dismantling of flexible pavements and disposal of dismantled materials upto a lead of 1000 metres, stacking serviceable and unserviceable materials separately - by manual means - Granular courses	cum	1448.83
2.5.2A	Dismantling of flexible pavements and disposal of dismantled materials upto a lead of 1000 metres, stacking serviceable and unserviceable materials separately - by mechanical means - bituminous courses	cum	584.89
2.6	Dismantling of cement concrete pavements by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at disignated locations and disposal of dismantled materials upto a lead of 1000 metres, stacking serviceable and unserviceable materials separately.	cum	2076.62
2.7	Dismantling guard rails by manual means and disposal of dismantled material with all lifts and upto a lead of 1000 metres, stacking serviceable materials and unserviceable materials separately.	Rmt	217.59
2.8	Dismantling kerb stone by manual means and disposal of dismantled material with all lifts and upto a lead of 1000 metre	Rmt	29.97
2.9	Dismantling kerb stone channel by manual means and disposal of dismantled material with all lifts and upto a lead of 1000 metres	Rmt	44.96
2.10A	Dismantling of kilometre stone including cutting of earth, foundation and disposal of dismantled material with all lifts and lead upto 1000 m and back filling of pit - 5th Kilometre Stone.	each	1173.40
2.10B	Dismantling of kilometre stone including cutting of earth, foundation and disposal of dismantled material with all lifts and lead upto 1000 m and back filling of pit - Hectometre stone	each	138.23

2 . Site Clearance and Dismantling

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
2.10C	Dismantling of kilometre stone including cutting of earth, foundation and disposal of dismantled material with all lifts and lead upto 1000 m and back filling of pit - Ordinary kilometre stone	each	793.44
2.11	Dismantling of barbed wire fencing / wire mesh fencing including posts, foundation concrete, back filling of pit by manual means including disposal of dismantled material with all lifts and upto a lead of 1000 metres, stacking serviceable material and unserviceable material separately.	Rmt	169.79
2.12	Dismantling of CI water pipe line 600mm dia including disposal with all lifts and lead upto 1000 metres and stacking of serviceable material and unserviceable material seperately under supervision of department concerned.	Rmt	337.74
2.13	Removal of cement concrete pipe of sewer gutter 1500mm dia under the supervision of department concerned including disposal with all lifts and upto a lead of 1000 metres and stacking of serviceable and unserviceable material separately but excluding earth excavation and dismantling of masonry works.	Rmt	411.90
2.14	Removal of telephone / electric poles including excavation and dismantling of foundation concrete and lines under the supervision of department concerned, disposal with all lifts and upto a lead of 1000 metres and stacking of serviceable and unserviceable material separately.	each	554.50

3 . Earth Work , Erosion Control and Drainages

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
3.1	Excavation for roadway in soil using manual means including loading in truck for carrying of cut earth to embankment site with all lifts and lead upto 1000 metres.	cum	541.66
3.2	Excavation in ordinary rock using manual means including loading in truck and carrying of excavated materials to embankment site with all lifts and lead upto 1000 metres.	cum	808.34
3.3	Excavation for roadway in soil by mechanical means including cutting and pushing the earth to site of embankment upto a distance of 100 metres (average lead 50 metres) including trimming bottom and side slopes in accordance with requirements of lines, grades and cross sections.	cum	155.08
3.4	Excavation for roadway in ordinary rock by deploying a dozer, 80 HP including cutting and pushing the cut earth to site of embankment upto a distance of 100 metres (average lead 50m), trimming bottom and side slopes in accordance with the requirements to lines, grades and cross sections.	cum	270.32
3.6	Excavation for roadwork in soil with hydraulic excavator of 0.9cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections and transporting to the embankment location with all lifts and lead upto 1000m.	cum	76.37
3.7	Excavation for roadway in ordinary rock with hydraulic excavator of 0.9cum bucket capacity including cutting and loading in tippers, transporting to embankment site with in all lifts and lead upto 1000m, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections.	cum	99.14
3.10	Excavation for roadway in marshy soil with hydraulic excavator of 0.9cum bucket capacity including cutting and loading in tippers and disposal with in all lifts and lead upto 1000m, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections.	cum	85.82
3.11	Removal of unserviceable soil including excavation, loading and disposal upto 1000 m lead but excluding	cum	77.10

3 . Earth Work , Erosion Control and Drainages

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	replacement by suitable soil which shall be paid separately as per Clause 305.		
3.12	Carrying out excavation in hard rock to achieve a specified slope of the rock face by controlled use of explosives and blasting accessories in properly aligned and spaced drill holes, collection of the excavated rock by a 80 HP dozer, loading in tipper by a front end loader and disposing of the material with all lifts and lead upto 1000m, all as specified in Clause No.303.	sqm	340.99
3.13.2A	Earthwork in excavation of foundation of structure as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom, backfilling the excavation earth to the extent required and utilising the remaining earth locally for road work - by manual means - depth upto 3m (Ordinary rock - not requiring blasting)	cum	1280.09
3.13.2B	Earthwork in excavation of foundation of structure as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom, backfilling the excavation earth to the extent required and utilising the remaining earth locally for road work - by mechanical means - Ordinary rock.	cum	96.20
3.13.3A	Earthwork in excavation of foundation of structure as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom, backfilling the excavation earth to the extent required and utilising the remaining earth locally for road work - by manual means - Hard rock - requiring blasting	cum	1910.16
3.13.4A	Earthwork in excavation of foundation of structure as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom, backfilling the excavation earth to the extent required and utilising the remaining earth locally for road work - by mechanical means - Hard rock - blasting prohibited.	cum	1027.40
3.13.5A	Earthwork in excavation of foundation of structure as per	cum	1842.70

3 . Earth Work , Erosion Control and Drainages

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	drawing and technical specification, including setting out, constn. Of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom, backfilling the excavation earth to the extent required and utilising the remaining earth locally for road work - by manual means - depth upto 3m (Marshy soil)		
3.13.5B	Earthwork in excavation of foundation of structure as per drawing and technical specification, including setting out, constn. Of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom, backfilling the excavation earth to the extent required and utilising the remaining earth locally for road work - by mechanical means - depth upto 3m (Marshy soil)	cum	752.50
3.13A	Earthwork in excavation of foundation of structure as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom, backfilling the excavation earth to the extent required and utilising the remaining earth locally for road work - by manual means - depth upto 3m (Ordinary soil)	cum	1024.07
3.13B	Earthwork in excavation of foundation of structure as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom, backfilling the excavation earth to the extent required and utilising the remaining earth locally for road work - by mechanical means - depth upto 3m (Ordinary soil)	cum	77.80
3.14	Scarifying the existing granular road surface to a depth of 50mm and disposal of scarified material within all lifts and leads upto 1000 metres - by manual means.	sqm	72.54
3.15	Scarifying the existing bituminous surface to a depth of 50mm and disposal of scarified material within all lifts and lead upto 1000 metres - by mechanical means.	sqm	8.44
3.16	Construction of embankment with approved material obtained from borrowpits with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement of Table 300-2.	cum	1054.64

3 . Earth Work , Erosion Control and Drainages

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
3.17	Construction of embankment with approved materials deposited at site from roadway cutting and excavation from drain and foundation of other structures graded and compacted to meet requirement of Table 300-2	cum	145.35
3.18	Construction of subgrade and earthen shoulders with approved materials obtained from borrowpits with all lifts and leads, transporting to site, spreading, grading to required slope and compacted to meet requirement of Table 300-2.	cum	1089.12
3.19A	Loosening of the ground upto a level of 500mm below the subgrade level, watered, graded and compacted in layers to meet requirement of table 300-2 for subgrade construction.	cum	83.30
3.19B	Loosening, levelling and compacting original ground supporting embankment to facilitate placement of first layer of embankment, scarified to a depth of 150mm, mixed with water at OMC and then compacted by rolling so as to achieve minimum dry density as given in Table 300-2 for embankment construction	cum	49.77
3.20	Stripping, storing of top soil by road side at 15m internal and re-application on embankment slopes, cut slopes and other areas in localities where the available embankment material is not conducive to plant growth.	cum	682.30
3.21	Stripping of top soil from borrow areas located in agriculture fields, storing at a suitable place, spreading and re-laying after taking the borrow earth to maintain fertility of the agricultural field, finishing to the required levels and satisfaction of the farmer.	cum	93.05
3.22	Furnishing and laying of the live sods of perennial turf forming grass on embankment slop, verges or other locations shown on the drawing or including preparation of ground, fetching of sods and watering.	sqm	76.86
3.23	Preparation of seed bed on previously laid top soil, furnishing and placing of seeds, fertilizer, mulching material, applying bituminous emulsion at the rate of 0.23 litres per sqm and laying and fixing jute netting, including watering for 3 months all as per Clause 308.	sqm	194.65
3.24A	Construction of unlined surface drains of average cross sectional area 0.40 sqm in soil to specified lines, grades,	Metre	104.05

3 . Earth Work , Erosion Control and Drainages

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	levels and dimensions to the requirement of class 301 and 309. Excavated material to be used in embankment within a lead of 50 metres (average lead 25 metres) - by mechanical means.		
3.24B	Construction of unlined surface drains of average cross sectional area 0.40 sqm in soil to specified lines, grades, levels and dimensions to the requirement of class 301 and 309. Excavated material to be used in embankment within a lead of 50 metres (average lead 25 metres) - by manual means.	metre	256.02
3.25A	Construction of unlined surface drains of average cross sectional area 0.40 sqm in ordinary rock to specified lines, grades, levels and dimensions to the requirement of class 301 to 309. Excavated material to be used in embankment at site - by mechanical means.	metre	210.28
3.25B	Construction of unlined surface drains of average cross sectional area 0.40 sqm in ordinary rock to specified lines, grades, levels and dimensions as per approved design and to the requirement of class 301 to 309. Excavated material to be used in embankment at site - by manual means.	metre	384.03
3.27	Construction of sub surface drain with perforated pipe of 100mm internal dia of metal / asbestos cement / cement concrete / PVC closely jointed, perforations ranging from 3mm to 6mm depending upon size of material surrounding the pipe, with 150mm bedding below the pipe and 300mm cushion above the pipe cross section of excavation 450x550mm. Excavated material to be utilised in roadway at site.	metre	839.33
3.28	Construction of aggregate sub-surface drain 300x450mm with aggregates conforming to Table 300-4, excavated material to be utilised in roadway.	metre	414.73
3.30	Preparation and surface treatment of formation by removing mud and slurry, watering to the extent needed to maintain the desired moisture content, trimming to the required line, grade, profile and rolling with 8-10 tonne smooth wheeled roller, complete as per clause 310.	sqm	4.90
3.31	Construction of rockfill, embankment with broken hard rock fragments of size not exceeding 300mm laid in layers not exceeding 500mm thick including filling of	cum	96.26

3 . Earth Work , Erosion Control and Drainages

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	surface voids with stone spalls, binding top layer with granular material, rolled with vibratory road roller, all complete as per Clause 313		
3.32	Excavation in soil in hilly area by mechanical means including cutting and trimming of side slopes and disposing of excavated earth with all lifts and lead upto 1000 metres.	cum	196.94
3.33	Excavation in hilly area in ordinary rock not requiring blasting by mechanical means including cutting and trimming of slopes and disposal of cut material with all lifts and lead upto 1000 metres.	cum	303.63
3.34	Excavation in hilly area in hard rock requiring blasting by mechanical means including trimming of slopes and disposal of cut material with all lifts and lead upto 1000 metres.	cum	458.38
3.36	Construction of embankment with flyash conforming to table 1 of IRC:SP58-2001 obtained from coal or lignite burning thermal power stations as waste material, spread and compacted in layer of 200mm thickness each at OMC, all as specified in IRC:SP:58-2001 and as per approved plans.	cum	999.29

4 . Granular Sub-base

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
4.1A.1	Construction of granular sub-base by providing close graded material, mixing in a mechanical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layer with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per clause 401 of MoRTH specification, 4th Revision - by plant mix method for grading I material.	cum	2846.11
4.1A.2	Construction of granular sub-base by providing close graded material, mixing in a mechanical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layer with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per clause 401 of MoRTH specification, 4th Revision - by plant mix method - for grading II material.	cum	2941.00
4.1A.3	Construction of granular sub-base by providing close graded material, mixing in a mechanical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layer with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per clause 401 of MoRTH specification, 4th Revision - by plant mix method - for grading III material.	cum	2820.29
4.1B.1	Construction of granular sub-base by providing close graded material, spreading in uniform layer with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC and compacting with vibratory roller to achieve the desired density, complete as per clause 401 of MoRTH specification, 4th Revision - by mix in place method - for grading I material.	cum	2652.73
4.1B.2	Construction of granular sub-base by providing close graded material, spreading in uniform layer with motor grader on prepared surface, by mixing place method with rotavator at OMC and compacting with vibratory roller to achieve the desired density, complete as per clause 401 of MoRTH specification, 4th Revision - By mix in place method - For grading II material.	cum	2747.62
4.1B.3	Construction of granular sub-base by providing close graded material, spreading in uniform layer with motor	cum	2626.90

4 . Granular Sub-base

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	grader on prepared surface, by mixing place method with rotavator at OMC and compacting with vibratory roller to achieve the desired density, complete as per clause 401 of MoRTH specification, 4th Revision - By mix in place method - For grading III material.		
4.2.1	Construction of granular sub-base by providing coarse graded material, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC and compacting with vibratory roller to achieve the desired density, complete as per clause 401 of MoRTH specification, 4th Revision - For grading I material.	cum	2940.79
4.2.2	Construction of granular sub-base by providing coarse graded material, spreading in uniform layer with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC and compacting with vibratory roller to achieve the desired density, complete as per clause 401 of MoRTH specification, 4th Revision - For grading II material.	cum	2926.82
4.2.3	Construction of granular sub-base by providing coarse graded material, spreading in uniform layer with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC and compacting with vibratory roller to achieve the desired density, complete as per clause 401 of MoRTH specification, 4th Revision - For grading III material.	cum	2789.72
4.3A	Laying and spreading available soil in the sub-grade on a prepared surface, pulverising, mixing the spread soil in place with rotavator with 3 percent slaked lime having minimum content of 70 percent CaO, grading with motor grader and compacting with the road roller at OMC to the desired density to form a layer of improved sub-grade - by mechanical means. (As per MoRTH specification, 4th Revision)	cum	267.95
4.3B	Laying and spreading available soil in the sub-grade on a prepared surface, pulverising, mixing the spread soil in place with rotavator with 3 percent slaked lime having minimum content of 70 percent CaO, grading with motor grader and compacting with the road roller at OMC to the desired density to form a layer of improved sub-grade - by manual means. (As per MoRTH specification, 4th Revision)	cum	466.25

4 . Granular Sub-base

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
4.4	Providing, Laying and spreading soil on a prepared sub-grade, pulverising, mixing the spread soil in place with rotavator with 3 percent slaked lime with minimum content of 70 percent of CaO, grading with motor grader and compacting with the road roller at OMC to achieve atleast 98 percent of the maximum dry density to form a layer of sub-base. (As per MoRTH specification, 4th Revision)	cum	356.54
4.5	Providing, Laying and spreading soil on a prepared sub-grade, pulverising, adding the designed quantity of cement to the spread soil ,mixing in place with rotavator, grading with the motor grader and compacting with the road roller at OMC to achieve the desired unconfined compressive strength and to form a layer of sub-base / base. (As per MoRTH specification, 4th Revision)	cum	896.42
4.6.1	Providing, Laying and spreading material on a prepared sub-grade, adding the designed quantity of cement to the spread material, mixing in place with rotavator, grading with the motor grader and compacting with the road roller at OMC to achieve the desired unconfined compressive strength and to form a layer of sub-base. Grading of material for sub-base course. (As per MoRTH specification, 4th Revision)	cum	3618.24
4.6.2	Providing, Laying and spreading material on a prepared sub-grade, adding the designed quantity of cement to the spread material, mixing in place with rotavator, grading with the motor grader and compacting with the road roller at OMC to achieve the desired unconfined compressive strength and to form a layer of base. Grading of material for base course. (As per MoRTH specification, 4th Revision)	cum	3226.07
4.7	Making 50 x 50mm furrows, 25mm deep 45 degree to the centre line of the road and at one metre interval in the existing thin bituminous wearing coarse including sweeping and disposal of excavated material within 1000 metres lead. (As per MoRTH specification, 4th Revision)	sqm	12.68
4.8	Construction of inverted choke by providing, laying, spreading and compacting screening B type / fine aggregate of specified grade in uniform layer on a prepared surface with motorgrader and compacting with power roller etc. (As per MoRTH specification, 4th Revision)	cum	3193.03

4 . Granular Sub-base

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
4.9.1.1A	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type A 13.2mm stone for screening and gravel for binding to fill up the interstices of coarse aggregate, watering and compacting to the required density - by mechanical means - Water bound macadam Gr-I with stone screening. (As per MoRTH specification, 4th Revision)	Cum	3238.33
4.9.1.1B	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite Crushable type such as moorum/gravel for screening and gravel for binding to fill up the interstices of coarse aggregate, watering and compacting to the required density - by mechanical means - Water bound macadam Gr-I with Gravel screening. (As per MoRTH specification, 4th Revision)	Cum	2915.07
4.9.1A	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type A 13.2mm stone for screening and gravel for binding to fill up the interstices of coarse aggregate, watering and compacting to the required density - by manual means - Water bound macadam Gr-I with stone screening. (As per MoRTH specification, 4th Revision)	cum	4016.62
4.9.1B	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite Crushable type such as moorum/gravel for screening and gravel for binding to fill up the interstices of coarse aggregate, watering and compacting to the required density - by manual means - Water bound macadam Gr-I with Gravel screening. (As	cum	3693.36

4 . Granular Sub-base

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	per MoRTH specification, 4th Revision)		
4.9.2.1A	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type A 13.2mm stone for screening and gravel for binding to fill up the interstices of coarse aggregate, watering and compacting to the required density - by mechanical means - Water bound macadam Gr-II with stone screening 13.2mm metal. (As per MoRTH specification, 4th Revision)	Cum	3114.63
4.9.2.1B	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type B 11.2mm stone for screening and gravel for binding to fill up the interstices of coarse aggregate, watering and compacting to the required density - by mechanical means - Water bound macadam Gr-II with stone screening 11.2mm metal. (As per MoRTH specification, 4th Revision)	Cum	3364.10
4.9.2.1C	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite Crushable type such as moorum or gravel for screening and gravel for binding to fill up the interstices of coarse aggregate, watering and compacting to the required density - by mechanical means - Water bound macadam Gr-II with moorum or gravel screening. (As per MoRTH specification, 4th Revision)	Cum	3041.70
4.9.2A	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type A 13.2mm stone for screening and gravel for binding to fill up the interstices of coarse aggregate, watering and compacting to the required density - by manual means - Water bound macadam Gr-II	cum	3892.92

4 . Granular Sub-base

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	with stone screening 13.2mm metal. (As per MoRTH specification, 4th Revision)		
4.9.2B	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type B 11.2mm stone for screening and gravel for binding to fill up the interstices of coarse aggregate, watering and compacting to the required density - by manual means - Water bound macadam Gr-II with stone screening 11.2mm metal. (As per MoRTH specification, 4th Revision)	cum	4142.39
4.9.2C	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite Crushable type such as moorum or gravel for screening and gravel for binding to fill up the interstices of coarse aggregate, watering and compacting to the required density - by manual means - Water bound macadam Gr-II with moorum or gravel screening. (As per MoRTH specification, 4th Revision)	Cum	3819.98
4.9.3.1A	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type B screening and binding materials to fill up the interstices of coarse aggregate, watering and compacting to the required density - by mechanical means - Water bound macadam Gr-III with type B 11.2mm screening. (As per MoRTH specification, 4th Revision)	Cum	3670.97
4.9.3.1C	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite Crushable type such as moorum or gravel for screening and gravel for binding to fill up the interstices of coarse aggregate, watering and compacting	Cum	3410.98

4 . Granular Sub-base

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	to the required density - by mechanical means - Water bound macadam Gr-III with moorum or gravel screening. (As per MoRTH specification, 4th Revision)		
4.9.3A	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type B screening and binding materials to fill up the interstices of coarse aggregate, watering and compacting to the required density - by manual means - Water bound macadam Gr-III with type B 11.2mm screening. (As per MoRTH specification, 4th Revision)	Cum	4449.26
4.9.3C	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite Crushable type such as moorum or gravel for screening and gravel for binding to fill up the interstices of coarse aggregate, watering and compacting to the required density - by manual means - Water bound macadam Gr-III with moorum or gravel screening. (As per MoRTH specification, 4th Revision)	Cum	4189.27
4.10A	Breaking and crushing of material obtained by breaking damaged cement concrete slabs to size range not exceeding 75mm as specified in table 400.7 transporting the aggregates obtained from breaking of cement concrete slabs at a lead of L km, laying and compacting the same as sub-base course, constructed as WBM to Clause 404 except the use of screening or binding material - using Vibratory roller. (As per MoRTH specification, 4th Revision)	cum	550.86
4.10B	Breaking and crushing of material obtained by breaking damaged cement concrete slabs to size range not exceeding 75mm as specified in table 400.7 transporting the aggregates obtained from breaking of cement concrete slabs at a lead of L km, laying and compacting the same as sub-base course, constructed as WBM to Clause 404 except the use of screening or binding material - using smooth 3 wheeled steel roller. (As per MoRTH specification, 4th Revision)	cum	547.62

4 . Granular Sub-base

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
4.11	Spraying of bitumen over cleaned dry surface of crushed cement concrete base at the rate of 25kg per 10 sqm by a bitumen pressure distributor, spreading of key aggregates at the rate of 0.13 cum per 10 sqm by a mechanical gritter and rolling the surface as per Clause 506.3.8. of MoRTH specification, 4th Revision	sqm	40.99
4.12A	Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the material with water at OMC in mechanical mix plant carriage of mixed material by tipper to site, laying in uniform layers with paver in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density - Using vibratory roller. (As per MoRTH specification, 4th Revision)	cum	3170.18
4.12A.1	Providing , laying , spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the material with water at OMC in mechanical mix plant carriage of mixed material by tipper to site , laying in uniform layer by manual means in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density - Using vibratory roller	cum	3548.63
4.12A.2	Providing,laying,spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the material with water at OMC using with concrete mixer at site , laying in uniform layer by manual means in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density - Using vibratory roller	cum	3620.71
4.12A.3	Providing, laying ,spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the material with water at OMC using with concrete mixer at site , laying in uniform layer by manual means in sub-base / base course on well prepared surface and compacting with rammer by manual means to achive the desired density.	cum	3580.43
4.12B	Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the material with water at OMC in mechanical mix plant carriage of mixed material by tipper to site, laying in uniform layers with paver in sub-	cum	3183.92

4 . Granular Sub-base

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	base / base course on well prepared surface and compacting with smooth 3 wheeled steel roller to achieve the desired density (As per MoRTH specification, 4th Revision)		
4.12B.1	Providing,laying , spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the material with water at OMC in mechanical mix plant carriage of mixed material by tipper to site , laying in uniform layer by manual means in sub-base / base course on well prepared surface and compacting with smooth 3 wheeled steel roller to achieve the desired density.	cum	3562.37
4.12B.2	Providing , laying , spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the material with water at OMC using with concrete mixer at site,laying in uniform layer by manual means in sub-base / base course on well prepared surface and compacting with smooth 3 wheeled steel roller to achive the desired density.	cum	3637.22
4.13	Construction of Median and island above road level with approved material deposited at site from roadway cutting and excavation for drain and foundation of other structures, spread, graded and compacted as per clause 407 of MoRTH specification, 4th Revision	cum	472.39
4.14	Construction of Median and island above road level with approved material brought from borrowpits, spread, sloped and compacted as per clause 407 of MoRTH specification, 4th Revision.	cum	422.75
4.16	Construction of footpath / separator by providing a 150mm compacted granular sub-base as per clause 401 and 25mm thick cement concrete grade M15, overlaid with precast concrete tiles in cement mortar 1:3 including provision of all drainage arrangements but excluding kerb channel. (As per MoRTH specification, 4th Revision)	sqm	1528.54
4.17A.1	Providing crushed stone aggregates, depositing on a prepared surface by hauling vehicles, spreading and mixing with a motor grader, watering and compacting with a vibratory roller to clause 410 of MoRTH specification, 4th Revision to form a layer of sub-base / base - by mix in place method - For 53mm maximum	cum	2798.00

4 . Granular Sub-base

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	size.		
4.17A.2	Providing crushed stone aggregates, depositing on a prepared surface by hauling vehicles, spreading and mixing with a motor grader, watering and compacting with a vibratory roller to clause 410 of MoRTH specification, 4th Revision, to form a layer of sub-base / base - by mix in place method - For 45mm maximum size.	cum	2870.49
4.17B.1	Providing crushed stone aggregates, depositing on a prepared surface by hauling vehicles, spreading and mixing with a motor grader, watering and compacting with a vibratory roller to clause 410 of MoRTH specification, 4th Revision to form a layer of sub-base / base - by mixing plant - For 53mm maximum size.	cum	2981.49
4.17B.2	Providing crushed stone aggregates, depositing on a prepared surface by hauling vehicles, spreading and mixing with a motor grader, watering and compacting with a vibratory roller to clause 410 of MoRTH specification, 4th Revision, to form a layer of sub-base / base - by mixing plant - For 45mm maximum size.	cum	3053.96
4.18	Construction of sub-base using lime - flyash admixture with granular soil, free from organic matter/deleterious material or clayey silts and low plasticity clays having PI between 5 and 20 and liquid limit less than 25 and commercial dry lime, slaked at site or pre-slaked with CaO content not less than 50 percent, flyash to conform to gradation as per clause 4.3 of IRC:88-1984, lime + flyash content ranging between 10 to 30 percent, the minimum unconfined compressive strength and CBR value after 28 days curing and 4 days soaking to be 7.5 kg/sq.cm. and 25 percent respectively, all as specified in IRC:88-1984. (As per MoRTH specification, 4th Revision)	cum	566.59
4.91.1A	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with smooth 3 wheeled steel roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type A 13.2mm stone for screening and gravel for binding to fill up the interstices of coarse aggregate, watering and compacting to the required density - by mechanical means - Water	Cum	3235.09

4 . Granular Sub-base

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	bound macadam Gr-I with stone screening. (As per MoRTH specification, 4th Revision)		
4.91.1B	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with smooth three wheeled steel roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite Crushable type such as moorum/gravel for screening and gravel for binding to fill up the interstices of coarse aggregate, watering and compacting to the required density - by mechanical means - Water bound macadam Gr-I with Gravel screening. (As per MoRTH specification, 4th Revision)	Cum	2911.83
4.91A	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with smooth three wheeld steel roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type A 13.2mm stone for screening and gravel for binding to fill up the interstices of coarse aggregate, watering and compacting to the required density - by manual means - Water bound macadam Gr-I with stone screening. (As per MoRTH specification, 4th Revision)	Cum	4013.38
4.91B	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with smooth three wheeled steel roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite Crushable type such as moorum / gravel for screening and gravel for binding to fill up the interstices of coarse aggregate, watering and compacting to the required density - by manual means - Water bound macadam Gr-I with Gravel screening. (As per MoRTH specification, 4th Revision)	Cum	3690.12
4.92.1A	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with smooth 3 wheeled steel roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type A 13.2mm stone for screening and gravel for binding to fill up the interstices of coarse aggregate, watering and compacting	Cum	3111.39

4 . Granular Sub-base

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	to the required density - by mechanical means - Water bound macadam Gr-II with stone screening 13.2mm metal. (As per MoRTH specification, 4th Revision)		
4.92.1B	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with smooth 3 wheeled steel roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type B 11.2mm stone for screening and gravel for binding to fill up the interstices of coarse aggregate, watering and compacting to the required density - by mechanical means - Water bound macadam Gr-II with stone screening 11.2mm metal. (As per MoRTH specification, 4th Revision)	Cum	3360.87
4.92.1C	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with smooth 3 wheeled steel roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite Crushable type such as moorum or gravel for screening and gravel for binding to fill up the interstices of coarse aggregate, watering and compacting to the required density - by mechanical means - Water bound macadam Gr-II with moorum or gravel screening. (As per MoRTH specification, 4th Revision)	Cum	3038.46
4.92A	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with smooth 3 wheeled steel roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type A 13.2mm stone for screening and gravel for binding to fill up the interstices of coarse aggregate, watering and compacting to the required density - by manual means - Water bound macadam Gr-II with stone screening 13.2mm metal. (As per MoRTH specification, 4th Revision)	Cum	3889.68
4.92B	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with smooth 3 wheeled steel roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type B 11.2mm stone	Cum	4139.15

4 . Granular Sub-base

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	for screening / gravel for binding to fill up the interstices of coarse aggregate, watering and compacting to the required density - by manual means - Water bound macadam Gr-II with stone screening 11.2mm metal. (As per MoRTH specification, 4th Revision)		
4.92C	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with smooth 3 wheeld steel roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite Crushable type such as moorum or gravel for screening and gravel for binding to fill up the interstices of coarse aggregate, watering and compacting to the required density - by manual means - Water bound macadam Gr-II with moorum or gravel screening. (As per MoRTH specification, 4th Revision)	Cum	3816.74
4.93.1A	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with smooth 3 wheeled steel roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type B screening and binding materials to fill up the interstices of coarse aggregate, watering and compacting to the required density - by mechanical means - Water bound macadam Gr-III with type B 11.2mm screening. (As per MoRTH specification, 4th Revision)	Cum	3667.73
4.93.1C	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with smooth 3 wheeled steel roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite Crushable type such as moorum or gravel for screening and gravel for binding to fill up the interstices of coarse aggregate, watering and compacting to the required density - by mechanical means - Water bound macadam Gr-III with moorum or gravel screening. (As per MoRTH specification, 4th Revision)	Cum	3407.74
4.93A	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with smooth 3 wheeled steel roller	Cum	4446.02

4 . Granular Sub-base

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type B screening and binding materials to fill up the interstices of coarse aggregate, watering and compacting to the required density - by manual means - Water bound macadam Gr-III with type B 11.2mm screening. (As per MoRTH specification, 4th Revision)		
4.93B	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with smooth 3 wheeled steel roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type B screening and binding materials to fill up the interstices of coarse aggregate, watering and compacting to the required density - by manual means - Water bound macadam Gr-III with moorum or gravel screening. (As per MoRTH specification, 4th Revision)	cum	4186.03

5 . Base & Bituminous Construction

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
5.1	Providing and applying primer coat with bitumen emulsion on prepared surface of granular base including clearing of road surface and spraying primer at the rate of 0.60 kg/sqm using mechanical means. (As per MoRTH specification, 4th Revision)	sqm	42.56
5.2	Providing and applying tack coat with bitumen emulsion using emulsion pressure distributor at the rate of 0.20 kg. per sqm. on the prepared bituminous / granular surface cleaned with mechanical broom. (As per MoRTH specification, 4th Revision)	sqm	15.32
5.3A	Providing and laying bituminous macadam with hot mix plant of capacity not less than 40 to 60 TPH using crushed aggregates of specified grading premixed with bituminous binder, transported to site, laid over a previously prepared surface with paver finisher to the required grade, level and alignment and rolled as per clauses 501.6 and 507.7 of MoRTH specification, 4th Revision, to achieve the desired compaction.- Using grade I metal and bitumen - VG30 .	cum	8724.71
5.3B	Providing and laying bituminous macadam with hot mix plant of capacity not less than 40 -60 TPH using crushed aggregates of specified grading premixed with bituminous binder, transported to site, laid over a previously prepared surface with paver finisher to the required grade, level and alignment and rolled as per clauses 501.6 and 507.7 of MoRTH specification, 4th Revision, to achieve the desired compaction. - using grade II metal and bitumen - VG30	cum	8614.36
5.4A	Construction of penetration macadam over prepared base by providing a layer of compacted crushed coarse aggregate using chips spreader with alternate applications of bituminous binder and key aggregates and rolling with a smooth wheeled steel roller 8-10 tonne capacity to achieve the desired degree of compaction - 50mm thick (As per MoRTH specification, 4th Revision)	sqm	479.41
5.4B	Construction of penetration macadam over prepared base by providing a layer of compacted crushed coarse aggregate using chips spreader with alternate applications of bituminous binder and key aggregates and rolling with a smooth wheeled steel roller 8-10 tonne capacity to achieve the desired degree of compaction -	sqm	675.26

5 . Base & Bituminous Construction

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	75mm thick (As per MoRTH specification, 4th Revision)		
5.5	Providing, laying and rolling of built-up spray grout layer over prepared base consisting of a two layer composite construction of compacted crushed coarse aggregates using motor grader for aggregates. Key stone chips spreader may be used with application of bituminous binder after each layer and with key aggregates placed on top of the second layer to serve as a base conforming to the line, grades and cross-section specified ,the compacted layer thickness being 75mm. (As per MoRTH specification, 4th Revision)	sqm	474.30
5.6A	Providing and laying dense graded bituminous macadam with HMP of capacity not less than 40 to 60 TPH using crushed aggregates of specified grading, premixed with bituminouse binder @ 4.0 to 4.5 per cent by weight of total mix and filler, tranporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achive the desired compaction as per Clause 507 of MoRTH specification, 4th Revision, complete in all respects - Using grade-I materials.	cum	9856.08
5.6B	Providing and laying dense graded bituminous macadam with HMP of capacity not less than 40 to 60 TPH using crushed aggregates of specified grading, premixed with bituminouse binder @ 4.0 to 4.5 per cent by weight of total mix and filler, tranporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achive the desired compaction as per Clause 507 of MoRTH specification, 4th Revision, complete in all respects - Using grade-II materials.	Cum	9855.57
5.7A	Providing and laying semi-dense bituminous concrete with HMP of capacity not less than 40 - 60 TPH using crushed aggregates of specified grading, premixed with bituminous binder @ 4.5 to 5 percent of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per clause 508 of MoRTH specification, 4th Revision, complete in all respects -	Cum	10564.76

5 . Base & Bituminous Construction

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	Using grade-I material and bitumen- VG30		
5.7A.1	Providing and laying semi-dense bituminous concrete with HMP of capacity not less than 40 - 60 TPH using crushed aggregates of specified grading, premixed with bituminous binder @ 4.5 to 5 percent of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per clause 508 of MoRTH specification, 4th Revision, complete in all respects - Using grade-I material and bitumen CRMB	Cum	10807.01
5.7B	Providing and laying semi-dense bituminous concrete with HMP of capacity not less than 40 - 60 TPH using crushed aggregates of specified grading, premixed with bituminous binder @ 4.5 to 5 percent of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per clause 508 of MoRTH specification, 4th Revision, complete in all respects - Using grade-II material and using bitumen - VG30	Cum	10952.51
5.7B.1	Providing and laying semi-dense bituminous concrete with HMP of capacity not less than 40 - 60 TPH using crushed aggregates of specified grading, premixed with bituminous binder @ 4.5 to 5 percent of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per clause 508 of MoRTH specification, 4th Revision, complete in all respects - Using grade-II material and using bitumen CRMB	Cum	11207.52
5.8A.1	Providing and laying bituminous concrete with HMP of capacity not less than 40 to 60 TPH using crushed aggregates of specified grading, premixed with bituminous binder @ 5.4 to 5.6 percent of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per clause 509 of MoRTH	Cum	11198.59

5 . Base & Bituminous Construction

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	specification, 4th Revision, complete in all respects - Using grade-I material Using bitumen - VG30		
5.8B.1	Providing and laying bituminous concrete with HMP of capacity not less than 40 to 60 TPH using crushed aggregates of specified grading, premixed with bituminous binder @ 5.4 to 5.6 percent of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per clause 509 of MoRTH specification, 4th Revision, complete in all respects - Using grade-II material.-Bitumen -VG30	Cum	11150.57
5.8C.1	Extra for adding 5% of PMB cubes (Bitumen Quantity) for Bituminous Concrete gr.II mix in addition to bituminous requirement (5.40 to 5.60%) weight of total mix PMB cubes contains 31% of Waste Plastic (Plastomeric Thermo Plastics) in concentrated semi liquid form, including cost of loading, unloading and transportation charges, heating in separate boiler, labour charges for handling as per MoRTH modified bitumen specification	cum	1041.06
5.9A	Providing and laying surface dressing as wearing course in single coat using crushed stone aggregate of specified size on a layer of bituminous binder laid on prepared surface and rolling with 8-10 tonne smooth wheeled steel roller - Using 19mm nominal chipping size. (As per as per clause 510 of MoRTH specification, 4th Revision)	Sqm	114.55
5.9B	Providing and laying surface dressing as wearing course in single coat using crushed stone aggregate of specified size on a layer of bituminous binder laid on prepared surface and rolling with 8-10 tonne smooth wheeled steel roller - Using 13mm nominal chipping size. (As per as per clause 510 of MoRTH specification, 4th Revision)	Sqm	91.09
5.10A	Providing, laying and rolling of open graded premix surfacing of 20mm thickness composed of 13.2mm to 5.6mm aggregates either using penetration grade bitumen or cut-back or emulsion to required line, grade and level to serve as wearing course on a previously prepared base, including mixing in a suitable plant, laying and rolling with a smooth wheeled roller 8-10 tonne capacity, finished to required level and grades - Mechanical	Sqm	167.50

5 . Base & Bituminous Construction

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	method using penetration grade bitumen and HMP of appropriate capacity not less than 40 to 60 tonne/hour. (As per as per clause 511 of MoRTH specification, 4th Revision)		
5.10B	Providing, laying and rolling of open graded premix surfacing of 20mm thickness composed of 13.2mm to 5.6mm aggregates either using penetration grade bitumen or cut-back or emulsion to required line, grade and level to serve as wearing course on a previously prepared base, including mixing in a suitable plant, laying and rolling with a smooth wheeled roller 8-10 tonne capacity, finished to required level and grades - Open graded premix surfacing using cationic bitumen emulsion. (As per as per clause 511 of MoRTH specification, 4th Revision)	Sqm	246.82
5.11A	Providing, laying and rolling of close-graded premix surfacing materials of 20mm thickness composed of 11.2mm to 0.09mm (Type-A) aggregates using penetration grade bitumen to the required line, grade and level to serve as wearing course on a previously prepared base, including mixing in a suitable plant, laying and rolling with a smooth wheeled roller 8-10 tonne capacity, and finishing to required level and grade - Using Type A materials. (As per as per clause 512 of MoRTH specification, 4th Revision)	Sqm	203.09
5.11B	Providing, laying and rolling of close-graded premix surfacing materials of 20mm thickness composed of 13.2mm to 0.09mm (Type-B) aggregates using penetration grade bitumen to the required line, grade and level to serve as wearing course on a previously prepared base, including mixing in a suitable plant, laying and rolling with a smooth wheeled roller 8-10 tonne capacity, and finishing to required level and grade - Using Type B materials. (As per as per clause 512 of MoRTH specification, 4th Revision)	Sqm	186.79
5.12A	Providing and laying seal coat sealing the voids in a bituminous surface laid to the specified levels, grades and cross fall using Type A seal coat. (As per as per clause 513 of MoRTH specification, 4th Revision)	Sqm	82.08
5.12B	Providing and laying of premix fine aggregate seal coat with HMP of appropriate capacity not less than 40 to 60 tonne/hour using crushed stone chipping 6.7 mm size and	Sqm	68.21

5 . Base & Bituminous Construction

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	penetration bitumen of suitable grade - Type B (As per as per clause 513 of MoRTH specification, 4th Revision)		
5.12C	Extra for supply & mixing of waste plastic chips of 4.35mm nominal size (Plastic chips cut from used carry bags tea cups and other plastic covers etc. including cost of material charges, loading, unloading weighing in electronic weigh bridge etc. complete .	Kg	30.99
5.14	Providing and laying 25mm thick mastic asphalt wearing course with paving grade bitumen meeting the requirements given in Table 500-29, prepared by using mastic cooker and laid to required level and slope after cleaning the surface, including providing anti skid surface with bitumen precoated fine grained hard stone chipping of 13.2mm nominal size at the rate of 0.005 cum per 10sqmand at an approximate spacing of 10cm centre to centre in both directions, pressed into surface when the temperature of surface is not less than 100 degree centigrade , protruding 1mm to 4mm over mastic surface, all complete as per Clause 515 of MoRTH specification, 4th Revision.	Sqm	1765.91

6 . Cement Concrete Pavement

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
6.1	Construction of dry lean cement concrete Sub-base over a prepared sub - grade with coarse and fine aggregate conforming to IS:383, the size of coarse aggregates not exceeding 25 mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per Table 600-1, cement content not to be less than 150 kg /cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site , laid with a paver with electronic sensor, compacting with 8-10 tonne vibratory roller, finishing and curing.	cum	4867.17
6.2	Construction of un-reinforced, dowel jointed, plain cement concrete pavement over a prepared sub-base with 43 grade cement @ 400 kg per cum, coarse and fine aggregate conforming to IS 383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a batching and mixing plant as per approved mix design, transported to site, laid with a fixed form or slip form paver, spread, compacted and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, dowel bar, tie rod, admixtures as approved, curing compound, finishing to lines and grades as per drawing.	cum	8884.37
6.3	Construction of rolled cement concrete base course with coarse and fine aggregate conforming to IS :383, the size of coarse aggregate not exceeding 25mm with minimum, aggregate cement ratio 15:1 and minimum cement content of 200 kg/cum, aggregate gradation to be as per Table 600-4 after blending, mixing in batching plant at optimum moisture content, transporting to site, laying with a paver with electronic sensor, compacting with 8-10 tonnes smooth wheeled vibratory roller to achieve, the designed flexural strength finishing and curing.	cum	5296.62
6.5	Construction of base/sub-base using cement, fine aggregate, flyash and coarse aggregates proportioned as per table 4 of IRC:74-1979 and with water content ratio, slump and compressive strength as defined in the said table, mix prepared in a batching and mixing plant and compacted with a vibratory roller 8-10 tonnes capacity within the time limit laid down vide Clause 7.6.3 of	cum	4492.78

6 . Cement Concrete Pavement

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	IRC:74-1979, construction joints properly formed at the end of day's work, cured for 14 days, all as specified in IRC:74-1979 and as per approved plans.		
6.6	Construction of un-reinforced, dowel jointed, plain cement concrete pavement over a prepared sub-base with 43 grade cement, coarse and fine aggregate conforming to IS:383, maximum size of coarse aggregate not exceeding 25mm, replacing cement by flyash to the extent of 15% and fine aggregate by 10%, mixed in a batching and mixing plant as per approved mix design, transported to site, laid with a fixed form or slip form paver spread, compacted and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, dowel bar, tie rod, admixtures as approved, curing compound, finishing to lines and grades as per drawing.	cum	8506.19

8 . Traffic Signs, Markings & Other Road Appurtenances

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
8.1A	Construction of cement concrete kerb with top and bottom width 115 & 165 mm respectively, 250mm high in M20 Grade PCC on M10 grade foundation 150mm thick, foundation having 50mm projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually, all complete as per Clause 408 (Using concrete mixer)	Rmt	474.14
8.1B	Construction of cement concrete kerb with top and bottom width 115 & 165 mm respectively, 250mm high in M20 Grade PCC on M10 grade foundation 150mm thick, foundation having 50mm projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually, all complete as per Clause 408 (Using concrete batching and mixing plant)	Rmt	419.71
8.2A	Construction of cement concrete kerb with channel with top and bottom width 115 & 165 mm respectively, 250mm high in M20 Grade PCC on M10 grade foundation 150mm thick, kerb channel 300mm wide, 50 mm thick in PCC M20 grade, sloped towards the kerb, kerb stone with channel laid with kerb laying machine, foundation concrete laid manually, all complete as per Clause 408 (Using concrete mixer)	Rmt	857.60
8.2B	Construction of cement concrete kerb with channel with top and bottom width 115 & 165 mm respectively, 250mm high in M20 Grade PCC on M10 grade foundation 150mm thick, kerb channel 300mm wide, 50 mm thick in PCC M20 grade, sloped towards the kerb, kerb stone with channel laid with kerb laying machine, foundation concrete laid manually, all complete as per Clause 408 (Using concrete batching and mixing plant)	Rmt	791.87
8.3A	Printing new letters and figures of any shade with synthetic enamel paint black or any other approved colour to give an even shade - Hindi	per cm ht per letter	2.73
8.3B	Printing new letters and figures of any shade with synthetic enamel paint black or any other approved colour to give an even shade - English and Roman	per cm ht per letter	1.62
8.4A	Providing and fixing of retro - reflectorised cautionary, mandatory & informatory sign as per IRC:67 made of aluminium sheet encapsulated lens with high intensity grade sheeting vide Clause 801.3, fixed over aluminium	each	7927.84

8 . Traffic Signs, Markings & Other Road Appurtenances

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	sheeting, 1.5 mm thick supported on a mild steel angle iron post 75 mm X 75 mm X 6 mm (3.8 mtrs height - 6.8kg/mtr = 25.84kg , with board support angle 35x35x6mm - 3.5 mtrs 3kg/mtr = 10.5kg and anchor flats 0.5kg) firmly fixed to the ground by means of properly designed foundation with M15 Grade cement concrete 45 cm X 45 cm X 60 cm , 60cm below ground level as per approved drawing. - 90 cm equilateral triangle . (including cost of angle iron towards cost of drilling holes , nuts , bolts etc.,)		
8.4B	Providing and fixing of retro - reflectorised cautionary, mandatory & informatory sign as per IRC:67 made of aluminium sheet encapsulated lens with high intensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 75 mm X 75 mm X 6 mm (3.5 mtrs height - 6.8kg/mtr = 23.8kg , with board support angle 35x35x6mm-2.30 mtrs - 3kg/mtr = 6.9kg and anchor flat - 0.5kg) firmly fixed to the ground by means of properly designed foundation with M15 Grade cement concrete 45 cm X 45 cm X 60 cm , 60cm below ground level as per approved drawing. - 60 cm equilateral triangle . (including cost of angle iron towards cost of drilling holes , nuts , bolts etc.,)	each	5770.92
8.4C	Providing and fixing of retro - reflectorised cautionary, mandatory & informatory sign as per IRC:67 made of aluminium sheet encapsulated lens with high intensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 75 mm X 75 mm X 6 mm (3.6 mtrs height - 6.8kg/mtr = 24.48 kg with board support angle 35x35x6mm - 2.49 mtrs - 3kg/mtr = 7.47kg and anchor flat -0.50kg) firmly fixed to the ground by means of properly designed foundation with M15 Grade cement concrete 45 cm X 45 cm X 60 cm , 60cm below ground level as per approved drawing. - 60cm Circular .(including cost of angle iron towards cost of drilling holes , nuts , bolts etc.,)	each	6923.67
8.4D	Providing and fixing of retro - reflectorised cautionary, mandatory & informatory sign as per IRC:67 made of aluminium sheet encapsulated lens with high intensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 75 mm X 75 mm X 6 mm (3.8 mtrs height -	each	7199.70

8 . Traffic Signs, Markings & Other Road Appurtenances

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	6.8kg/mtr = 25.84 kg with board support angle 35x35x6mm - 2.8 mtrs - 3kg/mtr = 8.4kg and anchor flats - 0.5kg) firmly fixed to the ground by means of properly designed foundation with M15 Grade cement concrete 45 cm X 45 cm X 60 cm , 60cm below ground level as per approved drawing. - 80cm X 60cm rectangular . (including cost of angle iron towards cost of drilling holes , nuts , bolts etc.,)		
8.4E	Providing and fixing of retro - reflectorised cautionary, mandatory & informatory sign as per IRC:67 made of aluminium sheet encapsulated lens with high intensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 75 mm X 75 mm X 6 mm (3.6 mtrs height - 6.8kg/mtr = 24.48kg , with board support angle 2.10 mtrs - 3kg/mtr = 6.3 kg and anchor flat 0.50kg) firmly fixed to the ground by means of properly designed foundation with M15 Grade cement concrete 45 cm X 45 cm X 60 cm , 60cm below ground level as per approved drawing. - 60 cm X 45cm rectangular . (including cost of angle iron towards cost of drilling holes , nuts , bolts etc.,)	each	6711.63
8.4F	Providing and fixing of retro - reflectorised cautionary, mandatory & informatory sign as per IRC:67 made of aluminium sheet encapsulated lens with high intensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 75 mm X 75 mm X 6 mm (3.6 mtrs - 6.8kg/mtr = 24.48kg , with board support angle 35x35x6mm 2.4mtrs - 3kg / mtr =7.2kg and anchor flat 0.50kg) firmly fixed to the ground by means of properly designed foundation with M15 Grade cement concrete 45 cm X 45 cm X 60 cm , 60cm below ground level as per approved drawing. - 60 cm X 60cm square . (including cost of angle iron towards cost of drilling holes , nuts , bolts etc.,)	each	7588.41
8.4G	Providing and fixing of retro - reflectorised cautionary, mandatory & informatory sign as per IRC:67 made of aluminium sheet encapsulated lens with high intensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 75 mm X 75 mm X 6 mm (3.90 mtrs height - 6.8kg / mtr = 26.52kg , with board support angle 35x35x6mm 2.88 mtrs - 3kg/mtr = 8.64kg and anchor	each	10555.60

8 . Traffic Signs,Markings & Other Road Appurtenances

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	flat - 0.50 kg)firmly fixed to the ground by means of properly designed foundation with M15 Grade cement concrete 45 cm X 45 cm X 60 cm , 60cm below ground level as per approved drawing. - 90 cm high octagon . (including cost of angle iron towards cost of drilling holes , nuts , bolts etc.,)		
8.5	Providing and erecting direction and place identification retro-reflectorised sign as per IRC:67 made of aluminium sheet encapsulated lens reflective (diamond grade sheet) with high intensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 2mm thick with area not exceeding 0.9sqm supported on a mild steel single angle iron post 75 X 75 X 6mm (3.9mtrs height - 6.8kg/mtr = 26.52kg ,with board support angle 35x35x6mm - 3.8mtrs - 3kg/mtr = 11.40kg and anchor flat 0.50kg)firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 45 X 45 X 60 cm, 60cm below ground level.	sqm	20466.54
8.6	Providing and erecting direction and place identification retro-reflectorised sign as per IRC:67 made of aluminium sheet encapsulated lens reflective sheet (diamond grade) with high intensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 2mm thick with area exceeding 0.9sqm supported on a mild steel angle iron post 75 X 75 X 6mm , (3.5 mtrs height x2 mtrs) = 7mtrs x 6.8kg/mtr =47.60kg, with board support angle 35x35x6mm 3mtrs-3.5kg/mtr = 10.50kg with anchor flats -0.50kg)2 nos firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 45 X 45 X 60 cm, 60cm below ground level.	sqm	20408.17
8.7A	Providing and erecting overhead signs with a corrosion resistant 2mm thick aluminium alloy sheet with high intensity grade retro-reflective sheeting of encapsulated lens type with vertical and lateral clearance given in Clauses 802.2 and 802.3 and installed as per Clause 802.7 over a designed support system of aluminium alloy or galvanised steel trestles and trusses of sections and type as per structural design requirements and approved plans -Truss and vertical support.(including cost of wastage ,nuts and fabrication charges)	tonne	77578.49
8.7B	Providing and erecting overhead signs with a corrosion resistant 2mm thick aluminium alloy sheet with high intensity grade retro-reflective sheeting of encapsulated	sqm	10761.01

8 . Traffic Signs, Markings & Other Road Appurtenances

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	lens type with vertical and lateral clearance given in Clauses 802.2 and 802.3 and installed as per Clause 802.7 over a designed support system of aluminium alloy or galvanised steel trestles and trusses of sections and type as per structural design requirements and approved plans-Aluminium alloy plate for over head sign.		
8.8	Painting two coats after filling the surface with synthetic enamel paint in all shades on new plastered concrete surfaces.	sqm	146.43
8.9	Providing and applying two coats of ready mix paint of approved brand on steel surface after thorough cleaning of surface to give an even shade.	sqm	135.83
8.10	Providing and applying two coats of ready mix paint of approved brand on wood surface after thorough cleaning of surface to give an even shade.	sqm	144.74
8.11.3A	Supplying and fixing of cantilever type destination sign boards with diamond graded reflective sheeting in rectangular shape of size 1.20 m x 0.9 m of double sided board including the cost and conveyance of reflective sheeting and providing symbols and letterings by high intensity grade reflective white sheeting fixed over the aluminium plates of all sizes not less than 2 mm thick suitably framed and supported by M.S. angles of size 40 mm X 40 mm X 6 mm with required bolt and nuts. The rectangular board is fixed in the post pipe of 100 mm dia M.S. Heavy vertically 4.8 mts height and horizontally 1.2 m and both the vertical and horizontal are connected by a 100 mm dia M.S. heavy bend with inner support sleeves welded firmly and a base plate of size 30 cm X 30 cm welded at the bottom with necessary anchoring supports. The board and the post pipe are connected by 32 mm dia M.S. pipe with suitable bolts and clamps of 12 cm length by horizontally 3 places and vertically 2 places and a cross tie flat is provided at the bottom of the board with pipe post to hold the hanging strength. Finally the board frame and the post pipe are painted by Zinc chromate primer and aluminium paint and embedded in ground pit of size 0.8m X 0.8 m X 0.9 m with PCC 1:2:4 complete	each	65595.00
8.11.3B	Fabrication, supply and fixing of informatory board of size 1.2 m X 0.6 m of diamond graded reflective sheeting encapsulated on aluminium sheets of not less than 2 mm	each	22437.83

8 . Traffic Signs,Markings & Other Road Appurtenances

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	thick suitably supported and framed by M.S angles of size 40 mm X 40 mm X 6mm. The informatory lettering and the symbols will be provided by high intensity white grade white sheeting. The board is supported by a post pipe of size 80 mm dia M.S. heavy for a height of 3.6 m and extended and supported to the extreme width of the board on the rear side. This board frames and post pipes will be painted by Zinc chromate primer and white colour enamel paint and embedded in ground pit of size 0.6m X 0.6 m X 0.6 m with PCC 1:2:4. Rate includes all materials, labour charges conveyance concreting, painting		
8.11A	Painting lines,dashes, arrows,etc., on roads in two coats on new work with ready mixed road marking paint conforming to IS:164 on bituminous surface,including cleaning the surface,including cleaning the surface of all dirt, dust and other foreign matter,demarcation at site and control-over 10cm in width.	sqm	330.84
8.11B	Painting lines,dashes, arrows,etc., on roads in two coats on new work with ready mixed road marking paint conforming to IS:164 on bituminous surface,including cleaning the surface,including cleaning the surface of all dirt, dust and other foreign matter,demarcation at site and control-upto 10cm in width.	sqm	277.68
8.12A	Painting lines,dashes, arrows,etc., on roads in two coats on old work with ready mixed road marking paint conforming to IS:164 on bituminous surface,including cleaning the surface,including cleaning the surface of all dirt, dust and other foreign matter,demarcation at site and control-over 10cm in width.	sqm	237.23
8.12B	Painting lines,dashes, arrows,etc., on roads in two coats on old work with ready mixed road marking paint conforming to IS:164 on bituminous surface,including cleaning the surface,including cleaning the surface of all dirt, dust and other foreign matter,demarcation at site and control-upto 10cm in width.	sqm	257.68
8.13	Providing and laying of hot applied thermoplastic compound 2.5mm thick including reflectorising glass beads @ 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes.	sqm	587.16

8 . Traffic Signs,Markings & Other Road Appurtenances

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
8.14A	Reinforced cement concrete M15 grade kilometre stone of standard design as per IRC:8-1980,fixing in position including painting and printing etc-5th kilometre stone(precast)	Nos	7821.29
8.14B	Reinforced cement concrete M15 grade kilometre stone of standard design as per IRC:8-1980,fixing in position including painting and printing etc-ordinary kilometre stone(precast)	Nos	4506.59
8.14C	Reinforced cement concrete M15 grade kilometre stone of standard design as per IRC:8-1980,fixing in position including painting and printing etc-Hectometre stone(precast)	Nos	1224.85
8.15	Supplying and installation of delineators (road way indicators, hazard markers,object markers),80-100cm high above ground level, painted black and white in 15cm wide strips, fitted with 80X100 mm rectangular or 75mm dia circular reflectorised panels at the top, buried or pressed into the ground and conforming to IRC:79	each	1486.44
8.16	Reinforced cement concrete M15 grade boundary pillars of standard design as per IRC:25-1967, fixed in position including finishing and lettering but excluding painting.	each	1341.80
8.17	Providing and fixing 1.2metres high GI barbed wire fencing with 1.8m angle iron posts 40 mmX40mmX6mm placed every 3 metres center to center founded in M15 grade cement concrete,0.6metre below ground level,every 15th post,last but one end post and corner post shall be strutted on both sides and end post on one side only and provided with 9 horizontal lines and 2 diagonals interwoven with horizontal wires, fixed with GI staples, turn buckles etc. complete as per Clause 807.	Rmt	484.32
8.18	Providing and fixing 1.8m high GI barbed wire fencing with 2.4m iron posts 50mmX50mmX6mm placed every 3 metre center to center founded in M15 grade cement concrete 0.6 metre below ground level,every 15th post last but one end post and corner post on one side only and provided with 12 horizontal lines and 2 diagonals inetwoven with horizontal wires, fixed with GI staples, turn buckles etc., complete as per Clause 807.	Rmt	779.77
8.19	Providing 1.2m high fencing with angle iron posts 50mmX50mmX6mm at 3 metre center to centerwith 0.40	Rmt	1042.01

8 . Traffic Signs,Markings & Other Road Appurtenances

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	metre embedded in M15 grade cement concrete, corner,end and every 10th post to be strutted, provided with welded steel wire fabric of 75mmX50mm mesh or 75mmX25mm mesh and fixed to iron posts by flat iron 50X5mm and bolts etc,. Complete in all respects.		
8.20	Providing, fixing and erecting 50mm dia steel pipe railing in 3 rows duly painted on medium weight steel channels (ISMC series) 100 mmX 50 mm, 1.2 metre high above ground, 2m center to centre, complete as per approved drawings.	Rmt	2684.25
8.21	Providing, fencing and erecting 50mm dia painted steel pipe railing in 3 rows on precast M20 grade RCC vertical posts 1.8 metre high (1.2 m above GL) with 3 holes 50 mm dia pipe, fixed 2 metre centre to, complete as per approved drawing.	Rmt	1761.40
8.22	Provision of an reinforced cement concrete crash barrier at the edges of the road, approaches to bridge structures and medians, constructed with M20 grade concrete with HYSD reinforcement conforming to IRC:21 and dowel bars 25 mm dia,450mm long at expansion joints filled with pre-moulded asphalt filler board, keyed to the structure on which it is built and installed as per design given in the enclosure to MOST circular No.RW/NH-33022/1/94-DO III dated 24th June 1994 as per dimensions in the approved drawing and at locations .	Linear metre	2713.60
8.23A	Providing and erecting a "W" metal beam crash barrier comprising of 3mm thick corrugated sheet metal beam rail,70 cm above road/ ground level, fixed on ISMC series channel vertical post,150X75X5 mm spaced 2 m centre-to-centre,1.8 m high,1.1m below ground/road level, all steel parts and fittings to be galvanised by hot dip process , all fittings to conform to IS:1367 and IS:1364, metal beam rail to be fixed on the vertical post with a spacer of channel section 150X75X5mm, 330m long complete as per Clause 810.	Rmt	3800.48
8.23B	Providing and erecting a "Thrie" metal beam crash barrier comprising of 3mm thick corrugated sheet metal beam rail,85 cm above road/ ground level, fixed on ISMC series channel vertical post,150X75X5 mm spaced 2 m centre-to-centre,2 m high with 1.15m below ground level, all steel parts and fittings to be galvanised by hot dip process, all fittings to conform to IS:1367 and	Rmt	5019.48

8 . Traffic Signs,Markings & Other Road Appurtenances

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	IS:1364, metal beam rail to be fixed on the vertical post with a spacer of channel section 150X75X5mm, 546mm long complete as per Clause 810.		
8.24	Supplying and fixing of plastic speed bump made out of ABS material. It can bear a load of 80 Tons (Approx).Two highly reflective reflectors moulded in PMMA materials are welded with ABS base plate through ultra sonic welding process and then fixed on to the speed bump so that dust and water cannot touch reflector's inside area and this it maintains its reflectivity for a long time. The speed bump is designed so dynamically and compact that it can bear maximum load on it. Size of the speed bump; Length-750 mm, Width-250mm, Height- 75mm. It is available in yellow/black combination. It is also available in White/Black combination.	Rum	5849.71
8.25	Supply and installation of solar powered LED Amber blinkers 24 hours operation with Ultra bright Amber/ Red Solid State LED's. the operating voltage is 24 V and the battery and the LED's array enclosure is 300 mm dia with protection glass. The system shall blink 30 blinks per minute. Battery shall be of SMF and expected life shall be 2 years and panel life shall be expected 10 years. The visibility shall be 800 mts. The blinker shall be fixed in G.I. pipe class B of 4" dia reduced to 3" dia G.I.pipe class B. the rate shall include fixing below ground level of 1.20mts depth embedded in CC 1:2:4 of size 50 cm X 50 cm, pipe painted with primer and two or more coat enamel paint of required colour all as directed	each	74597.61
8.30	Tile work in skirting raising of steps and dado (upto 2m height) over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 fine aggregate) and jointed with grey cement slurry at 3.3kg / 1sqm, including grooves joints 10mm wide and 10mm deep on all sides of tiles etc., complete flamed granite tiles 10mm thick.	Sqm	3667.16
8.31	Fabrication , supply and fixing of informatory board of high intensity grade reflection sheeting encapsulated on aluminium sheets of not less than 2mm thick suitably supported and framed by M.S angles of size 40mm x40mmx6mm .(not less than 25.2kg) The informatory lettering and the symbols will be provided by high intensity white graded white sheeting . The board is supported by a post pipe or channel whichever required	nos	20352.03

8 . Traffic Signs,Markings & Other Road Appurtenances

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	for the required height. The board frames shall be painted with enamel paint two coats on rear side and fixed in the ground pit of required size. Rate includes all materials , labour charges ,conveyance, painting except the cost of post and fixing with P.C.C.works		
8.32	Fabrication,supply and fixing of informatory board of diamond graded reflective sheeting encapsulated on aluminium sheets of not less than 2mm thick suitably supported and framed by M.S.angles of size 40mm x 40mm x 6mm (not less than 25.2 kg). The informatory lettering and the symbols will be provided by high intensity white graded white sheeting. The board is supported by a post pipe or channel whichever required for the required height. The board frames shall be painted with enamel paint two coats on rear side and fixed in the ground pit of required size. Rate includes all materials, labour charges,conveyance, painting except the cost of post and fixing with P.C.C. works	nos	28465.29

9 . Pipe Culverts

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
9.1	Plain cement concrete 1:3:6 mix with crushed stone aggregate 40mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days.	cum	7613.63
9.2A	Laying reinforced cement concrete pipe Np4/ prestressed concrete pipe for culverts on first class bedding of granular material in single row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets-1000mm dia.	metre	8400.53
9.2B	Laying reinforced cement concrete pipe Np4/ prestressed concrete pipe for culverts on first class bedding of granular material in single row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets-1200mm dia.	metre	8722.56
9.3A	Laying reinforced cement concrete pipe Np4/ prestressed concrete pipe for culverts on first class bedding of granular material in double row including fixing collar with cement mortar 1:2 but excluding excavation, protection works back filling, concrete and masonry works in head walls and parapets - 1000mm. Dia .	metre	17088.57
9.3B	Laying reinforced cement concrete pipe Np4/ prestressed concrete pipe for culverts on first class bedding of granular material in double row including fixing collar with cement mortar 1:2 but excluding excavation, protection works back filling, concrete and masonry works in head walls and parapets - 1200mm. Dia.	metre	17753.17

10 . Maintenance of Roads

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
10.1	Restoration of rain cuts with soil, murram gravel or a mixture of these clearing the loose soil benching for 300mm width, laying fresh material in layers not exceeding 250mm and compacting with plate compactor or power rammers, to restore the original alignment, levels and slopes.	cum	946.84
10.2	Making up loss of material/irregularities on shoulder to the design level by adding fresh approved soil and compacting it with appropriate equipment.	sqm	281.78
10.3	Stripping excess soil from shoulder surface to achieve the approved level and compacting it with plate compactor.	sqm	35.95
10.4	Removal of all failed material, trimming of completed excavation to provide firm vertical faces, cleaning of surface, painting of tack coat on the sides and the base of excavation as per Clause 503, backfilling the pot - holes with hot bituminous material as per clause 511, compacting trimming and finishing the surface to form a smooth continuous surface, all as per Clause 3004.2.	sqm	185.47
10.5A	Removal of all failed material, trimming of completed excavation to provide firm vertical faces, cleaning of surface, painting of tack coat on the sides and the base of excavation as per Clause 503, backfilling the pot - holes with hot bituminous material as per clause 504, compacting trimming and finishing the surface to form a smooth continuous surface, all as per Clause 3004.2 - Grading I - 19mm (Nominal Size)	sqm	445.40
10.5B	Removal of all failed material, trimming of completed excavation to provide firm vertical faces, cleaning of surface, painting of tack coat on the sides and the base of excavation as per Clause 503, backfilling the pot - holes with hot bituminous material as per clause 504, compacting trimming and finishing the surface to form a smooth continuous surface, all as per Clause 3004.2 - Grading II - 13mm (Nominal Size)	sqm	443.53
10.6	Filling of crack using slow curing bitumen emulsion and applying crusher dust in case cracks are wider than 3 mm.	Rmt	7.05
10.7	Applying crusher dust to areas of road where bleeding of excess bitumen has occurred.	sqm	3.75

10 . Maintenance of Roads

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
10.9	Repair of spalled joint grooves of contraction joints, longitudinal joints and expansion joints in concrete pavements using epoxy mortar or epoxy concrete.	Rmt	595.12
10.10	Removal of existing sealant and re-sealing of contraction, longitudinal or expansion joints in concrete pavement with fresh sealant material.	Rmt	86.32
10.11	Removal of earth from the choked hill side drain and disposing it on the valley side manually.	Rmt	133.47
10.12	Clearance of landslides in soil and ordinary rock by a bull-dozer D 80 A-12 180HP and disposal of the same on the valley side.	cum	83.37
10.13	Clearing of landslide in hard rock requiring blasting for 50 percent of the boulders and disposal of the same on the valley side.	cum	204.57

11 . Horticulture

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
11.1	Spreading of sludge farm yard manure or/ and good earth in required thickness(cost of sludge, farm-yard manure or/and good earth to be paid for separately)	cum	256.02
11.2A	Grassing with 'Doob' grass including watering and maintenance of the lawn for 30 days or more till the grass forms a thick lawn free from weeds and fit for moving including supplying good earth if needed-in rows 15cm apart in either direction.	sqm	31.16
11.2B	Grassing with 'Doob' grass including watering and maintenance of the lawn for 30 days or more till the grass forms a thick lawn free from weeds and fit for moving including supplying good earth if needed-in rows 7.5 cm apart in either direction.	sqm	43.78
11.3	Making lawns including ploughing and breaking of clod, removal of rubbish, dressing and supplying doobs grass roots and planting at 15 cm apart, including supplying and spreading of farm yard manure at rate of 0.18 cum per 100 sqm.	sqm	28.26
11.4	Maintenance of lawns or Turfing of slopes (rough grassing) for a period of one year including watering,etc.	sqm	369.74
11.5	Turfing lawns with fine grassing including ploughing, dressing including breaking of clods, removal of rubbish, dressing and supplying doob grass roots at 10 cm apart, including supplying and spreading of farmyard manure at rate of 0.6 cum per 100 sqm.	sqm	42.76
11.6	Maintenance of lawns with fine grassing for the first year including watering, etc.,	sqm	350.73
11.7A	Planting permanent hedges including digging of trenches, 60 cm wide and 45 cm deep, refilling the excavated earth mixed with farmyard manure, supplied at the rate of 4.65 cum per 100 metre and supplying and planting two rows of hedge plants at 30 cm apart.	Rmt	304.75
11.7B	Maintenance of hedge for one year	Rmt	505.18
11.8A	Planting flowering plants and shrubs in central verge - 200 plants and 800 shrubs in two rows in one km length of road where width of verge is 3m and above.	Rmt	60.84
11.8B	Maintenance of flowering plants and shrubs in central	km	588274.30

11 . Horticulture

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	verge for one year - 200 plants and 800 shrubs in two rows in one km length of road where width of verge is 3m and above.		
11.9	Planting of trees by the roadside (Avenue trees) in 0.60 m dia holes, 1 m deep dug in the ground, mixing the soil with decayed farmyard/ sludge manure, planting the saplings, backfilling the trench, watering, fixing the tree guard and maintaining the plants for one year.	each	2703.72
11.10	Renovation lawns including weeding forking the ground, top dressing with forked soil, watering and maintenance the lawns, for 30 days or more, till the grass forms a thick lawn, free from weeds, and fit for moving and disposal of rubbish as directed, including supplying good earth, if needed but excluding the cost of well decayed farmyard manure.	sqm	46.64
11.11	Supply at site of work well decayed farm yard manure, from any available source, approved , screening and stacking.	cum	211.29
11.12	Supply at site of work / store - deoiled neem cake duly packed in used gunny bags.	quintal	1133.88
11.13	Supplying sludge duly stacked at site/store	cum	50.71
11.14	Half brick circular tree guard in 2nd class brick internal diameter 1.25 m and height 1.2 m above ground and 0.20 m below ground, bottom two courses laid dry and top three courses in cement mortar 1:6 (1 cement: 6 fine aggregate) and the intermediate courses being in dry honey comb masonry as per design complete.	each	3530.83
11.15	Edging with 2nd class bricks, laid dry lengthwise, including excavation, refilling, consolidation, with a hand packing and spreading nearly surplus earth within a lead of 50 metre.	metre	71.17
11.16	Making tree guard 53 cm dia and 1.3 m high as per Design from empty bitumen drum, slit suitably to permit sun and air, (supplied by the department at stock issue rate) including providing and fixing 2 nos. MS sheet rings 50 x 0.5 mm with rivets, complete in all respect.	each	2720.10
11.17	Maing tree guard 53 cm dia 2 metre high as per design from empty bitumen drums, slit suitably to permit sun	each	5876.74

11 . Horticulture

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	and air, (supplied by the department at stock issue rate) including providing and fixing four legs 40 cm long of 30 x 3 mm MS riveted to tree guard and providing and fixing 2 nos. MS sheet rings 50 x 0.5 mm with rivets complete in all respects.		
11.18	Wrought iron and mild steel welded work (using angles, square bars, tees and channel grills, grating frames, gates and treeguards of any size and design etc. including cost of screens and welding rods or bolts and nuts complete fixed in position but without the cost of excavation and concrete for fixing which will be paid separately.	quintal	16397.89
11.19	Providing and fixing MS iron tree guard 60 cm dia and 2 metre high above ground level formed of 4 Nos. (25 x 6 mm) and 8 Nos. (25 x 3 mm) vertical MS riveted to 3 Nos. (25 x 6 mm) iron rings in two halves, bolted together with 8 mm dia and 30 mm long bolts including painting two coats with paint of approved brand over a coat of priming complete in all respects.	each	3672.24
11.20	Providing and fixing tree guard 0.60 metre square, 2 metre high fabricated with MS angle iron 30 x 30 x 3 mm, MS iron 25 x 3 mm and steel wire 3 mm dia welded and fabricated as per design in two halves bolted together.	each	4812.22
11.21	Planting trees as compensatory afforestation at the rate of 290 trees per hectare at a spacing of 6 m by grubbing and levelling the ground upto a depth of 150 mm , digging holes 0.9 m dia, 1 m deep, mixing farm yard / sludge manure with soil, planting of sapling 2 m high with 25 cm dia stem, backfilling the hole and watering.	hectare	188041.57
11.29A	Supply of circular shaped steel tree guard of 45 cm dia and 1.5m height, which includes leg height of 15 cm. The tree guard circular frame is made out of 3 nos of horizontal rings using 20mm X 6mm, M.S. flats and vertical legs of 3 nos using 10 mm rod, intermediate gaps are welded with 9 nos of 6 mm rod verticals. The tree guard will be painted in green colour and required lettering will be provided in the name boards of size 23 cm X 51 cm at center and 15 cm X 51cm at the top using 20 gauge thick sheet, supported with 20 mm X 6mm M.S.flats at rear side all complete.	sqm	1070.80
11.30	Providing and laying soft Korean grass turfing including	sqm	981.76

11 . Horticulture

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	supplying red earth, manure, river fine aggregate, labour charges for ground preparation spreading earth and manure transportation of all and maintaining the lawn for initial three months etc. complete.		

12 . RBI grade 81

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
12.1.MR	Providing , laying , spreading and compacting available soil (excluding clay soils) in Sub - grade course including premixing 2% of RBI 81 product in a mechanical mixer, carriage of mixed material up to 1KM spreading in uniform layers with motor grader on a prepared base including watering and compacting with 8 to 10 tonne vibratory power roller to achieve the desired density including all materials , labour , HOM of machinery , etc complete as per specifications.	cum	2332.05
12.2.MR	Providing , laying , spreading and compacting available clay soil in Sub - grade course including premixing 4% of RBI Additive & 2 % of RBI 81 product in a mechanical mixer, carriage of mixed material up to 1KM spreading in uniform layers with motor grader on a prepared base including watering and compacting with 8 to 10 tonne vibratory power roller to achieve the desired density including all materials , labour , HOM of machinery , etc complete as per specifications.	cum	3289.87
12.3.MR	Providing , laying , spreading and compacting available soil (excluding clay soils) in Sub - base course including premixing 3% of RBI 81 product in a mechanical mixer, carriage of mixed material up to 1KM spreading in uniform layers with motor grader on a prepared base including watering and compacting with 8 to 10 tonne vibratory power roller to achieve the desired density including all materials , labour , HOM of machinery , etc complete as per specifications.	cum	3368.75
12.4.MR	Providing , laying , spreading and compacting available clay soil in Sub - base course including premixing 25% Stone dust, 4% of RBI Additive & 4 % of RBI 81 product in a mechanical mixer, carriage of mixed material up to 1KM spreading in uniform layers with motor grader on a prepared base including watering and compacting with 8 to 10 tonne vibratory power roller to achieve the desired density including all materials , labour , HOM of machinery , etc complete as per specifications.	cum	5675.95
12.5.MR	Providing , laying , spreading and compacting available soil (excluding clay soil) in base course including premixing 25% 10 mm Aggregate, 25% 20 mm Aggregate & 4 % of RBI 81 product in a mechanical mixer, carriage of mixed material up to 1KM spreading	cum	5731.06

12 . RBI grade 81

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	in uniform layers with motor grader on a prepared base including watering and compacting with 8 to 10 tonne vibratory power roller to achieve the desired density including all materials , labour , HOM of machinery , etc complete as per specifications.		
12.6.MR	Providing , laying , spreading and compacting stabilized aggregate in base course including premixing 25% 10 mm Aggregate, 25% 20 mm Aggregate , 50% of stone dust & 4% of RBI 81 product in a mechanical mixer, carriage of mixed material up to 1KM spreading in uniform layers with motor grader on a prepared base including watering and compacting with 8 to 10 tonne vibratory power roller to achieve the desired density including all materials , labour , HOM of machinery , etc complete as per specifications.	cum	6852.27

BRIDGE WORK (MORTH)

12 . Foundation

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
12.1.1A.1	Earth work in excavation for foundation of structures as per drawings and technical specifications, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material - Ordinary Soil - Manual Means - Depth upto 3 metres including the cost of labour and overhead charges.	cum	523.52
12.1.1A.2	Earth work in excavation for foundation of structures as per drawings and technical specifications, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material - Ordinary Soil - Manual Means - 3 metres to 6 metres depth including the cost of labour and overhead charges.	cum	673.09
12.1.1A.3	Earth work in excavation for foundation of structures as per drawings and technical specifications, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material - Ordinary Soil - Manual Means - Depth above 6 metres including the cost of labour and overhead charges.	cum	897.46
12.1.1B.1	Earth work in excavation for foundation of structures as per drawings and technical specifications, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material - Ordinary Soil - Mechanical Means - Depth upto 3 metres including the cost of labour hire charge of hydraulic excavator and overhead charges.	cum	113.64
12.1.1B.2	Earth work in excavation for foundation of structures as per drawings and technical specifications, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material - Ordinary Soil - Mechanical Means - 3 metres to 6 metres depth including the cost of labour, hire charge of hydraulic excavator and overhead charges.	cum	129.87
12.1.1B.3	Earth work in excavation for foundation of structures as per drawings and technical specifications, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material - Ordinary Soil - Mechanical Means - above 6 metres depth including the cost of labour, hire charge of hydraulic excavator and overhead charges.	cum	168.13
12.1.2A	Earth work in excavation for foundation of structures as per	cum	747.88

12 . Foundation

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	drawings and technical specifications, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material - Ordinary rock (not requiring blasting) - Manual Means - depth upto 3 metres including the cost of labour and overhead charges.		
12.1.2B	Earth work in excavation for foundation of structures as per drawings and technical specifications, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material - Ordinary rock (not requiring blasting)- Mechanical Means - depth upto 3 metres including the cost of labour, hire charge of hydraulic excavator and overhead charges.	cum	134.89
12.1.3A	Earth work in excavation for foundation of structures as per drawings and technical specifications, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material - Hard rock (Requiring Blasting) - Manual Means including the cost of labour, blasting material, detonators, hire charge for air compressor and overhead charges.	cum	1563.73
12.1.4A	Earth work in excavation for foundation of structures as per drawings and technical specifications, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material - Hard rock (Blasting prohibited) - Mechanical Means - depth upto 3 metres - including the cost of labour, hire charge for air compressor and overhead charges.	cum	1019.45
12.1.5A	Earth work in excavation for foundation of structures as per drawings and technical specifications, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material - Marshy soil - Manual Means - upto 3 metres depth - including the cost of labour, hire charge of tractor and overhead charges.	cum	1651.09
12.1.5B	Earth work in excavation for foundation of structures as per drawings and technical specifications, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material - Marshy soil - Mechanical Means - upto 3 metre depth including the cost of labour, hire charge for tipper, hydraulic excavator and overhead charges.	cum	381.40
12.1.6	Earth work in excavation for foundation of structures as per	cum	947.03

12 . Foundation

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	drawings and technical specifications, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material - Backfilling in Marshy Foundation Pits including the cost of labour, hire charge for tractor and overhead charges.		
12.3	Fine aggregate filling in foundation trenches as per drawing and technical specification including the cost of labour, material and overhead charges.	cum	4000.60
12.4	Plain Cement Concrete 1:3:6 nominal mix in foundation with crushed stone aggregate 40 mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including the cost of labour, material, hire charge for concrete mixer, electric gen set, water tanker and overhead charges.	cum	8799.51
12.5	Brick Masonry in Cement Mortar 1:3 in foundation complete excluding Pointing and Plastering, as per drawing and technical specifications including the cost of labour, material and overhead charges.	cum	12789.60
12.6	Cement Mortar 1:3 (1 Cement : 3 fine aggregate) including the cost of labour, material and overhead charges.	cum	9512.71
12.7A	Stone Masonry work in cement mortar 1:3 in foundation complete as per drawing and Technical specifications - Square rubble coursed rubble masonry (First sort) including the cost of labour, material and overhead charges.	cum	10616.06
12.7B	Stone Masonry work in cement mortar 1:3 in foundation complete as per drawing and Technical specifications - Random rubble masonry (coursed / uncoursed) including the cost of labour, material and overhead charges.	cum	10204.65
12.8A	Plain cement concrete in open foundation complete as per drawing and technical specifications - PCC Grade M15 with a minimum cement content of 275 kg / cum including the cost of labour, material hire charge for concrete mixer, electric gen set, form work and overhead charges.	cum	9901.85
12.8B	Plain cement concrete in open foundation complete as per drawing and technical specifications - PCC Grade M20 with a minimum cement content of 344 kg / cum including the cost of labour, material, hire charge for concrete mixer, electric gen set, form work and overhead charges.	cum	10613.52
12.8C.1	Reinforced cement concrete in open foundation complete as per drawing and technical specifications - RCC Grade M20 with a minimum cement content 347 kg / cum - Using concrete	cum	10657.09

12 . Foundation

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	mixer including the cost of labour, material, hire charge for electric genset, formwork and overhead charges.		
12.8C.2	Reinforced cement concrete in open foundation complete as per drawing and technical specifications - RCC Grade M20 with a minimum cement content of 347 kg / cum - With Batching Plant, Transit Mixer and Concrete Pump, electric gen set, front end loader including the cost of labour, material, formwork and overhead charges.	cum	8385.09
12.8D.1	Plain cement concrete in open foundation complete as per drawing and technical specifications - PCC Grade M25 with a minimum cement content of 400 kg / cum - Using Concrete Mixer and electric genset including the cost of labour and material, formwork and overhead charges.	cum	11156.40
12.8D.2	Plain cement concrete in open foundation complete as per drawing and technical specifications - PCC Grade M25 with a minimum cement content of 400 kg / cum - With Batching Plant, Transit Mixer and Concrete Pump, front end loader, electric gen set including the cost of labour, material, formwork and overhead charges.	cum	8894.15
12.8E.1	Reinforced cement concrete in open foundation complete as per drawing and technical specifications - RCC Grade M25 with a minimum cement content of 403 kg / cum - Using Concrete Mixer and electric gen set including the cost of labour, material, form work and overhead charges.	cum	11206.71
12.8E.2	Reinforced cement concrete in open foundation complete as per drawing and technical specifications - RCC Grade M25 with a minimum cement content of 403 kg / cum - With Batching Plant, Transit Mixer and Concrete Pump, front end loader, electric gen set including the cost of labour, material, formwork and overhead charges.	cum	8940.18
12.8F.1	Plain cement concrete in open foundation complete as per drawing and technical specifications - PCC Grade M30 with a minimum cement content of 405 kg / cum - using Concrete Mixer and electric gen set including the cost of labour, material, formwork and overhead charges.	cum	11191.01
12.8F.2	Plain cement concrete in open foundation complete as per drawing and technical specifications - PCC Grade M30 with a minimum cement content of 405 kg / cum - Using Batching Plant, Transit Mixer and Concrete Pump, front end loader, electric gen set including the cost of labour, material, formwork and overhead charges.	cum	8946.85
12.8G.1	Reinforced Cement Concrete in open foundation complete as per drawing and technical specifications - RCC Grade M30	cum	11213.87

12 . Foundation

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	with a minimum cement content of 407 kg / cum - Using Concrete Mixer and electric gen set including the cost of labour, material, formwork and overhead charges.		
12.8G.2	Reinforced Cement Concrete in open foundation complete as per drawing and technical specifications - RCC Grade M30 with a minimum cement content of 407 kg / cum - Using Batching Plant, Transit Mixer and Concrete Pump, front end loader, electric gen set including the cost of labour material, formwork and overhead charges.	cum	8954.50
12.8H.1	Reinforced Cement Concrete in open foundation complete as per drawing and technical specifications - RCC Grade M35 with a minimum cement content of 422 kg / cum - Using Concrete Mixer and electric gen set including the cost of labour, material, formwork and overhead charges.	cum	11316.06
12.8H.2	Reinforced Cement Concrete in open foundation complete as per drawing and technical specifications - RCC Grade M35 with a minimum cement content of 422 kg / cum - Using Batching Plant, Transit Mixer and Concrete Pump, front end loader, electric gen set including the cost of labour, material, formwork and overhead charges.	cum	9067.61
12.11C.4.1	Plain Cement Concrete, in Well Foundation complete as per Drawing and Technical Specifications - Bottom Plug - PCC Grade M35 with a minimum cement content of 419 kg / cum - Using Concrete Mixer	cum	11421.67
12.11C.4.2	Plain Cement Concrete, in Well Foundation complete as per Drawing and Technical Specifications - Bottom Plug - PCC Grade M35 with a minimum cement content of 419 kg / cum - Using Batching Plant, Transit Mixer and Crane / Concrete Pump, front end loader, electric gen set including the cost of labour, material, admixtures and overhead charges.	cum	9016.08
12.11F.4.1	Reinforced cement concrete, in well foundation complete as per drawing and technical specifications - well cap - RCC grade M35 with a minimum cement content of 422 kg / cum - Using concrete mixer and electric gen set including the cost of labour, material, formwork and overhead charges.	cum	11316.06
12.11F.4.2	Reinforced cement concrete, in well foundation complete as per drawing and technical specifications - well cap - RCC grade M35 with a minimum cement content of 422 kg / cum - Using Batching plant , transit mixer and concrete pump, front end loader, electric gen set including the cost of labour, material, formwork and overhead charges.	cum	8920.76
12.22	Providing steel liner 10mm thick for curbs and 6mm thick for steining of wells including fabricating and setting out as per	MT	165193.35

12 . Foundation

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	detailed drawing		
12.22.1	Boring, providing and installing bored cast - in - situ reinforced cement concrete pile of specified diameter using approved drilling method to the required depth up to the cut off level in pile cap in RCC M35 grade with a minimum cement content of 419 kg / cum using Blue metal of 20mm and down gauge to carry a safe working load not less than the specified, excluding the cost of steel reinforcement but including the cost of boring with casing from Natural / formed ground level, bentonite mud circulation of approved specific gravity and the length of pile to be embedded in the pile cap. The cost shall include the cost of dismantling of laitenance / week concrete as per BIS norms, removal of dismantled debries and the waste bore mug from the site with all lifts and lead upto 1000m - as directed by the Engineer - in - charge. The rate shall include all machineries required for boring, genset, skilled labour etc. (Length of pile for payment shall be measured upto the bottom of pile cap) - pile diameter - 450mm (Using concrete mixer)	metre	2757.02
12.23.1	Boring, providing and installing bored cast - in - situ reinforced cement concrete pile of specified diameter using approved drilling method to the required depth up to the cut off level in pile cap in RCC M35 grade with a minimum cement content of 419 kg / cum using Blue metal of 20mm and down gauge to carry a safe working load not less than the specified, excluding the cost of steel reinforcement but including the cost of boring with casing from Natural / formed ground level, bentonite mud circulation of approved specific gravity and the length of pile to be embedded in the pile cap. The cost shall include the cost of dismantling of laitenance / week concrete as per BIS norms, removal of dismantled debries and the waste bore mug from the site with all lifts and lead upto 1000m - as directed by the Engineer - in - charge. The rate shall include all machineries required for boring, genset, skilled labour etc. (Length of pile for payment shall be measured upto the bottom of pile cap) - pile diameter - 750mm (Using concrete mixer)	metre	8029.52
12.24.1	Boring, providing and installing bored cast - in - situ reinforced cement concrete pile of specified diameter using approved drilling method to the required depth up to the cut off level in pile cap in RCC M35 grade with a minimum cement content of 419 kg / cum using Blue metal of 20mm and down gauge to carry a safe working load not less than the specified, excluding the cost of steel reinforcement but including the cost of boring with casing from Natural / formed ground level, bentonite mud circulation of approved specific gravity and the length of pile to be embedded in the pile cap. The cost shall include the cost of dismantling of laitenance / week concrete as per BIS norms, removal of dismantled debries and the waste bore mug from the site with all lifts and lead upto 1000m - as directed by the Engineer - in - charge. The rate shall include all machineries	metre	13612.39

12 . Foundation

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	required for boring, genset, skilled labour etc. (Length of pile for payment shall be measured upto the bottom of pile cap) - pile diameter - 1000mm (Using concrete mixer)		
12.25.1	Boring, providing and installing bored cast - in - situ reinforced cement concrete pile of specified diameter using approved drilling method to the required depth up to the cut off level in pile cap in RCC M35 grade with a minimum cement content of 419 kg / cum using Blue metal of 20mm and down gauge to carry a safe working load not less than the specified, excluding the cost of steel reinforcement but including the cost of boring with casing from Natural / formed ground level, bentonite mud circulation of approved specific gravity and the length of pile to be embedded in the pile cap. The cost shall include the cost of dismantling of laitenance / week concrete as per BIS norms, removal of dismantled debries and the waste bore mug from the site with all lifts and lead upto 1000m - as directed by the Engineer - in - charge. The rate shall include all machineries required for boring, genset, skilled labour etc. (Length of pile for payment shall be measured upto the bottom of pile cap) - pile diameter -1200mm (Using concrete mixer)	metre	18229.95
12.26.1	Driven cast -in -place vertical M35 grade with a minimum cement content of 419 kg / cum R.C.C. pile excluding reinforcement complete as per drawing and technical specifications - 750 mm diameter (Using concrete mixer)	metre	6852.57
12.27.1	Driven cast -in -place vertical M35 grade with a minimum cement content of 419 kg / cum R.C.C. pile excluding reinforcement complete as per drawing and technical specifications - 1000 mm diameter (Using concrete mixer)	metre	11515.33
12.28.1	Driven cast -in -place vertical M35 grade with a minimum cement content of 419 kg / cum R.C.C. pile excluding reinforcement complete as per drawing and technical specifications - 1200 mm diameter (Using concrete mixer)	metre	16758.39
12.29.1	Driven precast vertical M 35 grade with a minimum cement content of 419 kg / cum R.C.C piles excluding reinforcement complete as per drawing and technical specifications - 500 mm diameter pile (using crane, vibrating pile driving hammer with power unit) including the cost of materials, labour and transportation cost @ 1% of material and machinery.	metre	3716.26
12.30.1	Driven precast vertical M 35 grade with a minimum cement content of 419 kg / cum RCC piles excluding reinforcement complete as per drawing and technical specifications - 750mm diameter pile (Using crane, vibrating pile drawing hammer with power unit) including the cost of materials, labour and transportation cost @ 1% of materials and machinery.	metre	6685.98

12 . Foundation

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
12.31.1	Driven precast vertical M 35 grade with a minimum cement content of 419 kg / cum RCC piles excluding reinforcement complete as per drawing and technical specifications - 1000mm diameter pile.(using crane and vibrating pile driving hammer with power unit including the cost of materials, labour and transportation cost @ 1% of material and machinery.	metre	11108.10
12.32.1	Driven precast vertical M35 grade with a minimum cement content of 419 kg / cum RCC piles excluding reinforcement complete as per drawing and technical specifications - size of pile 300mm x 300mm.(Using crane and vibrating pile driving hammer with power unit including the cost of materials, labour and transportation cost @ 1% of material and machinery.	metre	2506.80
12.33.1	Driven precast vertical M 35 grade with a minimum cement content of 419 kg / cum RCC piles excluding reinforcement complete as per drawing and technical specifications - size of pile 500 mm x 500 mm (Using crane and vibrating pile driving hammer with power unit including the cost of materials, labour and transportation cost @ 1% of material and machinery.	metre	4456.80
12.34.1	Driven precast vertical M 35 grade with a minimum cement content of 419 kg / cum RCC piles excluding reinforcement complete as per drawing and technical specifications - size of pile 750 mm x 750mm.(Using crane, vibrating pile driving hammer with power unit) including the cost of materials, labour and transportation cost @ 1% of material and machinery.	metre	8433.27
12.37A	Pile load test on single vertical pile in accordance with IS:2911 (Part -IV) - Initial and routine load test	MT	1152.10
12.37B	Pile load test on single vertical pile in accordance with IS:2911 (Part -IV) - lateral load test	MT	1152.10
12.38A.1	Cement concrete for reinforced concrete in pile cap complete as per drawing and technical specifications - RCC grade M20 with a minimum cement content of 341 kg / cum (Using Concrete mixer and electric genset) including all machineries and formwork.	cum	10699.02
12.38A.2	Cement concrete for reinforced concrete in pile cap complete as per drawing and technical specifications - RCC grade M20 with a minimum cement content of 341 kg / cum - (Using Batching plant , Transit mixer and Concrete pump) including all machineries and formwork.	cum	8472.15
12.38B.1	Cement concrete for reinforced concrete in pile cap complete as per drawing and technical specifications - RCC grade M25 with a minimum cement content of 399 kg / cum -(Using concrete mixer) including all machineries and formwork.	cum	11296.24

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
12.38B.2	Cement concrete for reinforced concrete in pile cap complete as per drawing and technical specifications - RCC grade M25 with a minimum cement content of 399 kg / cum -(Using Batching plant, Transit Mixer and Concrete Pump) including all machineries and formwork.	cum	9069.37
12.38C.1	Cement concrete for reinforced concrete in pile cap complete as per drawing and technical specifications - RCC grade M30 with a minimum cement content of 407 kg / cum -(Using concrete mixer)including all machineries and formwork.	cum	11371.75
12.38C.2	Cement concrete for reinforced concrete in pile cap complete as per drawing and technical specifications - RCC grade M30 with a minimum cement content of 407 kg / cum -(Using Batching plant, Transit Mixer and Concrete pump) including all machineries and formwork.	cum	9144.88
12.38D.1	Cement concrete for reinforced concrete in pile cap complete as per drawing and technical specifications - RCC grade M35 with a minimum cement content of 422 kg / cum -(Using Concrete mixer) including all machineries and formwork.	cum	11529.63
12.38D.2	Cement concrete for reinforced concrete in pile cap complete as per drawing and technical specifications - RCC grade M35 with a minimum cement content of 422 kg / cum -(Using Batching plant , Transit Mixer and Concrete Pump) including all machineries and formwork.	cum	9302.77
12.39	Providing and laying of PCC M15 with a minimum cement content of 275 kg / cum levelling course 100mm thick below the pile cap (Using concrete mixer and electric genset)	cum	9521.01
12.40	Supplying, fitting and placing uncoated Thermo Mechanical Treated bars reinforcement in foundation complete as per drawing and technical specifications	MT	126792.00
12.40.1	Boring, providing and installing bored cast - in - situ reinforced cement concrete pile of specified diameter using approved drilling method to the required depth up to the cut off level in pile cap in RCC M35 grade with a minimum cement content of 419 kg / cum using Blue metal of 20mm and down gauge to carry a safe working load not less than the specified, excluding the cost of steel reinforcement but including the cost of boring with casing from Natural / formed ground level, bentonite mud circulation of approved specific gravity and the length of pile to be embedded in the pile cap. The cost shall include the cost of dismantling of laitenance / week concrete as per BIS norms, removal of dismantled debries and the waste bore mug from the site with all lifts and lead upto 1000m - as directed by the Engineer - in - charge. The rate shall include all machineries required for boring, genset, skilled labour etc. (Length of pile	metre	2930.88

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	for payment shall be measured upto the bottom of pile cap) - pile diameter - 450mm (Using concrete mixer & Cement SRPC)		
12.40.2	Boring, providing and installing bored cast - in - situ reinforced cement concrete pile of specified diameter using approved drilling method to the required depth up to the cut off level in pile cap in RCC M35 grade with a minimum cement content of 419 kg / cum using Blue metal of 20mm and down gauge to carry a safe working load not less than the specified, excluding the cost of steel reinforcement but including the cost of boring with casing from Natural / formed ground level, bentonite mud circulation of approved specific gravity and the length of pile to be embedded in the pile cap. The cost shall include the cost of dismantling of laitenance / week concrete as per BIS norms, removal of dismantled debries and the waste bore mug from the site with all lifts and lead upto 1000m - as directed by the Engineer - in - charge. The rate shall include all machineries required for boring, genset, skilled labour etc. (Length of pile for payment shall be measured upto the bottom of pile cap) - pile diameter - 450mm (Using concrete mixer & Portland Slag Cement)	metre	2930.88
12.41.1	Boring, providing and installing bored cast - in - situ reinforced cement concrete pile of specified diameter using approved drilling method to the required depth up to the cut off level in pile cap in RCC M35 grade with a minimum cement content of 419 kg / cum using Blue metal of 20mm and down gauge to carry a safe working load not less than the specified, excluding the cost of steel reinforcement but including the cost of boring with casing from Natural / formed ground level, bentonite mud circulation of approved specific gravity and the length of pile to be embedded in the pile cap. The cost shall include the cost of dismantling of laitenance / week concrete as per BIS norms, removal of dismantled debries and the waste bore mug from the site with all lifts and lead upto 1000m - as directed by the Engineer - in - charge. The rate shall include all machineries required for boring, genset, skilled labour etc. (Length of pile for payment shall be measured upto the bottom of pile cap) - pile diameter - 750mm (Using concrete mixer & Cement SRPC)	metre	8512.10
12.41.2	Boring, providing and installing bored cast - in - situ reinforced cement concrete pile of specified diameter using approved drilling method to the required depth up to the cut off level in pile cap in RCC M35 grade with a minimum cement content of 419 kg / cum using Blue metal of 20mm and down gauge to carry a safe working load not less than the specified, excluding the cost of steel reinforcement but including the cost of boring with casing from Natural / formed ground level, bentonite mud circulation of approved specific gravity and the length of pile to be embedded in the pile cap. The cost shall include the cost of dismantling of laitenance / week concrete as per BIS norms, removal of dismantled debries and the waste bore mug from	metre	8512.10

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	the site with all lifts and lead upto 1000m - as directed by the Engineer - in - charge. The rate shall include all machineries required for boring, genset, skilled labour etc. (Length of pile for payment shall be measured upto the bottom of pile cap) - pile diameter - 750mm (Using concrete mixer & Portland Slag Cement)		
12.42.1	Boring, providing and installing bored cast - in - situ reinforced cement concrete pile of specified diameter using approved drilling method to the required depth up to the cut off level in pile cap in RCC M35 grade with a minimum cement content of 419 kg / cum using Blue metal of 20mm and down gauge to carry a safe working load not less than the specified, excluding the cost of steel reinforcement but including the cost of boring with casing from Natural / formed ground level, bentonite mud circulation of approved specific gravity and the length of pile to be embedded in the pile cap. The cost shall include the cost of dismantling of laitenance / week concrete as per BIS norms, removal of dismantled debries and the waste bore mug from the site with all lifts and lead upto 1000m - as directed by the Engineer - in - charge. The rate shall include all machineries required for boring, genset, skilled labour etc. (Length of pile for payment shall be measured upto the bottom of pile cap) - pile diameter - 1000mm (Using concrete mixer & Cement SRPC)	metre	14470.77
12.42.2	Boring, providing and installing bored cast - in - situ reinforced cement concrete pile of specified diameter using approved drilling method to the required depth up to the cut off level in pile cap in RCC M35 grade with a minimum cement content of 419 kg / cum using Blue metal of 20mm and down gauge to carry a safe working load not less than the specified, excluding the cost of steel reinforcement but including the cost of boring with casing from Natural / formed ground level, bentonite mud circulation of approved specific gravity and the length of pile to be embedded in the pile cap. The cost shall include the cost of dismantling of laitenance / week concrete as per BIS norms, removal of dismantled debries and the waste bore mug from the site with all lifts and lead upto 1000m - as directed by the Engineer - in - charge. The rate shall include all machineries required for boring, genset, skilled labour etc. (Length of pile for payment shall be measured upto the bottom of pile cap) - pile diameter - 1000mm (Using concrete mixer & Portland Slag Cement)	metre	14470.77
12.43.1	Boring, providing and installing bored cast - in - situ reinforced cement concrete pile of specified diameter using approved drilling method to the required depth up to the cut off level in pile cap in RCC M35 grade with a minimum cement content of 419 kg / cum using Blue metal of 20mm and down gauge to carry a safe working load not less than the specified, excluding the cost of steel reinforcement but including the cost of boring	metre	19465.58

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	with casing from Natural / formed ground level, bentonite mud circulation of approved specific gravity and the length of pile to be embedded in the pile cap. The cost shall include the cost of dismantling of laitenance / week concrete as per BIS norms, removal of dismantled debries and the waste bore mug from the site with all lifts and lead upto 1000m - as directed by the Engineer - in - charge. The rate shall include all machineries required for boring, genset, skilled labour etc. (Length of pile for payment shall be measured upto the bottom of pile cap) - pile diameter -1200mm (Using concrete mixer & Cement SRPC)		
12.43.2	Boring, providing and installing bored cast - in - situ reinforced cement concrete pile of specified diameter using approved drilling method to the required depth up to the cut off level in pile cap in RCC M35 grade with a minimum cement content of 419 kg / cum using Blue metal of 20mm and down gauge to carry a safe working load not less than the specified, excluding the cost of steel reinforcement but including the cost of boring with casing from Natural / formed ground level, bentonite mud circulation of approved specific gravity and the length of pile to be embedded in the pile cap. The cost shall include the cost of dismantling of laitenance / week concrete as per BIS norms, removal of dismantled debries and the waste bore mug from the site with all lifts and lead upto 1000m - as directed by the Engineer - in - charge. The rate shall include all machineries required for boring, genset, skilled labour etc. (Length of pile for payment shall be measured upto the bottom of pile cap) - pile diameter -1200mm (Using concrete mixer & Portland Slag Cement)	metre	19465.58
12.44.1	Driven cast -in -place vertical M35 grade with a minimum cement content of 419 kg / cum R.C.C. pile excluding reinforcement complete as per drawing and technical specifications - 750 mm diametre (Using concrete mixer & Cement SRPC)	metre	7337.66
12.44.2	Driven cast -in -place vertical M35 grade with a minimum cement content of 419 kg / cum R.C.C. pile excluding reinforcement complete as per drawing and technical specifications - 750 mm diametre (Using concrete mixer & Portland Slag Cement)	metre	7337.66
12.45.1	Driven cast -in -place vertical M35 grade with a minimum cement content of 419 kg / cum R.C.C. pile excluding reinforcement complete as per drawing and technical specifications - 1000 mm diametre (Using concrete mixer & Cement SRPC)	metre	12377.90
12.45.2	Driven cast -in -place vertical M35 grade with a minimum cement content of 419 kg / cum R.C.C. pile excluding reinforcement complete as per drawing and technical	metre	12377.90

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	specifications - 1000 mm diameter (Using concrete mixer & Portland Slag Cement)		
12.46.1	Driven cast -in -place vertical M35 grade with a minimum cement content of 419 kg / cum R.C.C. pile excluding reinforcement complete as per drawing and technical specifications - 1200 mm diameter (Using concrete mixer & Cement SRPC)	metre	18000.74
12.46.2	Driven cast -in -place vertical M35 grade with a minimum cement content of 419 kg / cum R.C.C. pile excluding reinforcement complete as per drawing and technical specifications - 1200 mm diameter (Using concrete mixer & Portland Slag Cement)	metre	18000.74
12.47.1	Driven precast vertical M 35 grade with a minimum cement content of 419 kg / cum R.C.C piles excluding reinforcement complete as per drawing and technical specifications - 500 mm diameter pile (using crane, vibrating pile driving hammer with power unit) including the cost of materials, labour and transportation cost @ 1% of material and machinery.(Using Cement SRPC)	metre	3867.60
12.47.2	Driven precast vertical M 35 grade with a minimum cement content of 419 kg / cum R.C.C piles excluding reinforcement complete as per drawing and technical specifications - 500 mm diameter pile (using crane, vibrating pile driving hammer with power unit) including the cost of materials, labour and transportation cost @ 1% of material and machinery. - Using Portland Slag Cement	metre	3867.60
12.48.1	Driven precast vertical M 35 grade with a minimum cement content of 419 kg / cum RCC piles excluding reinforcement complete as per drawing and technical specifications - 750mm diameter pile (Using crane, vibrating pile drawing hammer with power unit) including the cost of materials, labour and transportation cost @ 1% of materials and machinery & Cement SRPC)	metre	7026.38
12.48.2	Driven precast vertical M 35 grade with a minimum cement content of 419 kg / cum RCC piles excluding reinforcement complete as per drawing and technical specifications - 750mm diameter pile (Using crane, vibrating pile drawing hammer with power unit) including the cost of materials, labour and transportation cost @ 1% of materials and machinery & Using Portland Slag Cement	metre	7026.38
12.49.1	Driven precast vertical M 35 grade with a minimum cement content of 419 kg / cum RCC piles excluding reinforcement complete as per drawing and technical specifications - 1000mm diameter pile.(using crane and vibrating pile driving hammer	metre	13627.74

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	with power unit including the cost of materials, labour and transportation cost @ 1% of material and machinery. (Using Cement SRPC)		
12.49.2	Driven precast vertical M 35 grade with a minimum cement content of 419 kg / cum RCC piles excluding reinforcement complete as per drawing and technical specifications - 1000mm diameter pile.(using crane and vibrating pile driving hammer with power unit including the cost of materials, labour and transportation cost @ 1% of material and machinery. - Using Portland Slag Cement	metre	13627.74
12.50.1	Driven precast vertical M35 grade with a minimum cement content of 419 kg / cum RCC piles excluding reinforcement complete as per drawing and technical specifications - size of pile 300mm x 300mm.(Using crane and vibrating pile driving hammer with power unit including the cost of materials, labour and transportation cost @ 1% of material and machinery. (Using Cement SRPC)	metre	2576.17
12.50.2	Driven precast vertical M35 grade with a minimum cement content of 419 kg / cum RCC piles excluding reinforcement complete as per drawing and technical specifications - size of pile 300mm x 300mm.(Using crane and vibrating pile driving hammer with power unit including the cost of materials, labour and transportation cost @ 1% of material and machinery. Using Portland Slag cement	metre	2576.17
12.51.1	Driven precast vertical M 35 grade with a minimum cement content of 419 kg / cum RCC piles excluding reinforcement complete as per drawing and technical specifications - size of pile 500 mm x 500 mm (Using crane and vibrating pile driving hammer with power unit including the cost of materials, labour and transportation cost @ 1% of material and machinery. (Using Cement SRPC)	metre	4649.51
12.51.2	Driven precast vertical M 35 grade with a minimum cement content of 419 kg / cum RCC piles excluding reinforcement complete as per drawing and technical specifications - size of pile 500 mm x 500 mm (Using crane and vibrating pile driving hammer with power unit including the cost of materials, labour and transportation cost @ 1% of material and machinery. Using Portland Slag Cement	metre	4649.51
12.52.1	Driven precast vertical M 35 grade with a minimum cement content of 419 kg / cum RCC piles excluding reinforcement complete as per drawing and technical specifications - size of pile 750 mm x 750mm.(Using crane, vibrating pile driving hammer with power unit) including the cost of materials, labour and transportation cost @ 1% of material and machinery. (Using Cement SRPC)	metre	8866.86

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
12.52.2	Driven precast vertical M 35 grade with a minimum cement content of 419 kg / cum RCC piles excluding reinforcement complete as per drawing and technical specifications - size of pile 750 mm x 750mm.(Using crane, vibrating pile driving hammer with power unit) including the cost of materials, labour and transportation cost @ 1% of material and machinery. Using Portland Slag Cement	metre	8866.86
12.59A.1	Cement concrete for reinforced concrete in pile cap complete as per drawing and technical specifications - RCC grade M20 with a minimum cement content of 341 kg / cum (Using Concrete mixer and electric genset) including all machineries and formwork. (Using Cement SRPC)	cum	11177.59
12.59A.1.1	Cement concrete for reinforced concrete in pile cap complete as per drawing and technical specifications - RCC grade M20 with a minimum cement content of 341 kg / cum (Using Concrete mixer and electric genset) including all machineries and formwork. Using Portland Slag Cement	cum	11177.59
12.59A.2	Cement concrete for reinforced concrete in pile cap complete as per drawing and technical specifications - RCC grade M20 with a minimum cement content of 341 kg / cum - (Using Batching plant , Transit mixer and Concrete pump) including all machineries and formwork. (Using Cement SRPC)	cum	9036.38
12.59A.2.1	Cement concrete for reinforced concrete in pile cap complete as per drawing and technical specifications - RCC grade M20 with a minimum cement content of 341 kg / cum - (Using Batching plant , Transit mixer and Concrete pump) including all machineries and formwork. Using Portland Slag Cement	cum	9036.38
12.59B.1	Cement concrete for reinforced concrete in pile cap complete as per drawing and technical specifications - RCC grade M25 with a minimum cement content of 399 kg / cum -(Using concrete mixer) including all machineries and formwork. (Using Cement SRPC)	cum	11903.09
12.59B.1.1	Cement concrete for reinforced concrete in pile cap complete as per drawing and technical specifications - RCC grade M25 with a minimum cement content of 399 kg / cum -(Using concrete mixer) including all machineries and formwork. Using Portland Slag Cement	cum	11903.09
12.59B.2	Cement concrete for reinforced concrete in pile cap complete as per drawing and technical specifications - RCC grade M25 with a minimum cement content of 399 kg / cum -(Using Batching plant, Transit Mixer and Concrete Pump) including all machineries and formwork.(Using Cement SRPC)	cum	9761.87
12.59B.2.1	Cement concrete for reinforced concrete in pile cap complete	cum	9761.87

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	as per drawing and technical specifications - RCC grade M25 with a minimum cement content of 399 kg / cum -(Using Batching plant, Transit Mixer and Concrete Pump) including all machineries and formwork.Using Portland Slag Cement		
12.59C.1	Cement concrete for reinforced concrete in pile cap complete as per drawing and technical specifications - RCC grade M30 with a minimum cement content of 407 kg / cum -(Using concrete mixer)including all machineries and formwork. (Using Cement SRPC)	cum	11994.82
12.59C.1.1	Cement concrete for reinforced concrete in pile cap complete as per drawing and technical specifications - RCC grade M30 with a minimum cement content of 407 kg / cum -(Using concrete mixer)including all machineries and formwork. Using Portland Slag Cement	cum	11994.82
12.59C.2	Cement concrete for reinforced concrete in pile cap complete as per drawing and technical specifications - RCC grade M30 with a minimum cement content of 407 kg / cum -(Using Batching plant, Transit Mixer and Concrete pump) including all machineries and formwork.(Using Cement SRPC)	cum	9853.60
12.59C.2.1	Cement concrete for reinforced concrete in pile cap complete as per drawing and technical specifications - RCC grade M30 with a minimum cement content of 407 kg / cum -(Using Batching plant, Transit Mixer and Concrete pump) including all machineries and formwork. Using Portland Slag Cement	cum	9853.60
12.59D.1	Cement concrete for reinforced concrete in pile cap complete as per drawing and technical specifications - RCC grade M35 with a minimum cement content of 422 kg / cum -(Using Concrete mixer) including all machineries and formwork.(Using Cement SRPC)	cum	12186.62
12.59D.1.1	Cement concrete for reinforced concrete in pile cap complete as per drawing and technical specifications - RCC grade M35 with a minimum cement content of 422 kg / cum -(Using Concrete mixer) including all machineries and formwork. Using Portland Slag Cement	cum	12186.62
12.59D.2	Cement concrete for reinforced concrete in pile cap complete as per drawing and technical specifications - RCC grade M35 with a minimum cement content of 422 kg / cum -(Using Batching plant , Transit Mixer and Concrete Pump) including all machineries and formwork.(Using Cement SRPC)	cum	10045.40
12.59D.2.1	Cement concrete for reinforced concrete in pile cap complete as per drawing and technical specifications - RCC grade M35 with a minimum cement content of 422 kg / cum -(Using Batching plant , Transit Mixer and Concrete Pump) including	cum	10045.40

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	all machineries and formwork. Using Portland Slag Cement		
12.60	Providing and laying of PCC M15 with a minimum cement content of 275 kg / cum levelling course 100mm thick below the pile cap (Using concrete mixer , electric genset and Cement SRPC)	cum	10238.98
12.61	Providing and laying of PCC M15 with a minimum cement content of 275 kg / cum levelling course 100mm thick below the pile cap (Using concrete mixer , electric genset and Portland Slag Cement)	cum	10238.98

13 . Substructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
13.1	Brick masonry work in cement mortar 1:3 (One cement and three fine aggregate) in substructure complete excluding pointing and plastering, as per drawing and technical specification- including the cost of labour, material and formwork	cum	12165.92
13.2	Pointing with cement mortar 1:3 (one cement and three fine aggregate) on brick work in substructure as per technical specification-including the cost of labour, material.	sqm	188.81
13.3	Plastering with cement mortar 1:3 (one cement and three fine aggregate) on brick work in substructure as per Technical specifications-including the cost of labour and material.	sqm	297.26
13.4A	Stone masonry work in cement mortar 1:3 (one cement and three fine aggregate) for substructure complete as per drawing and technical specifications) - Random rubble masonry-including the cost of labour, material and formwork.	cum	9767.40
13.4B	Stone masonry work in cement mortar 1:3 (one cement and three fine aggregate) for substructure complete complete as per drawing and technical specifications) - Coursed rubble masonry (first sort)-including the cost of labour, material and formwork.	cum	10679.88
13.4C	Stone masonry work in cement mortar 1:3 (one cement and three fine aggregate) for substructure complete complete as per drawing and technical specifications) - Ashlar masonry (first sort)-including the cost of labour ,material and formwork.	cum	14366.19
13.5A	Plain Cement Concrete in substructure complete as per drawing and technical specification - PCC Grade M15 with a minimum cement content 275 kg / cum upto 5 metre height-including the cost of labour, material, machinery and formwork.	cum	10473.10
13.5B	Plaing Cement Concrete in substructure complete as per drawing and technical specification - PCC Grade M20 with a minimum cement content 344 kg / cum upto 5 metre height-including the cost of labour ,material,machinery and formwork.	cum	11225.84
13.5C.1.1	Plaing Cement Concrete in substructure complete as per drawing and technical specification - PCC Grade M25 with a minimum cement content 399 kg / cum upto 5 metre height-Using concrete mixer(Formwork-10%).	cum	11828.47
13.5C.1.2	Plain Cement Concrete in substructure complete as per drawing and technical specification - PCC Grade M25 with a minimum cement content 400 kg / cum up to 5m height- Using batching plant(Formwork-10%).	cum	9429.94

13 . Substructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
13.5C.2.1	Plain Cement Concrete in substructure complete as per drawing and technical specification - PCC Grade M25 with a minimum cement content 399 kg / cum - For height above 5m height and upto 10m - Using concrete mixer (Form work 12 % + Extra lift 2 %)	cum	12258.59
13.5C.2.2	Plain Cement Concrete in substructure complete as per drawing and technical specification - PCC Grade M25 with a minimum cement content 400 kg / cum for height above 5m and upto 10m using batching plant (Form work 12% + Extra lift 2%)	cum	9772.85
13.5C.3.1	Plain Cement Concrete in substructure complete as per drawing and technical specification - PCC Grade M25 with a minimum cement content 399 kg / cum for height above 10m using concrete mixer (Form work 15% + Extra lift 4%)	cum	12796.26
13.5C.3.2	Plain Cement Concrete in substructure complete as per drawing and technical specification - PCC Grade M25 with a minimum cement content 400 kg / cum for height above 10m using batching plant (Form work 15% + Extra lift 4%)	cum	10201.47
13.5D.1.1	Plain Cement Concrete in substructure complete as per drawing and technical specification - PCC Grade M30 with a minimum cement content 405 kg / cum upto 5m height - using concrete mixer (Formwork-10%).	cum	11893.84
13.5D.1.2	Plain Cement Concrete in substructure complete as per drawing and technical specification - PCC Grade M30 with a minimum cement content 405 kg / cum upto 5m height- Using batching plant (Formwork-10%).	cum	9508.76
13.5D.2.1	Plain Cement Concrete in substructure complete as per drawing and technical specification - PCC Grade M30 with a minimum cement content 405 kg / cum for height above 5m and upto 10m using concrete mixer (Formwork 12% + Extra lift 2%)	cum	12326.33
13.5D.2.2	Plain Cement Concrete in substructure complete as per drawing and technical specification - PCC Grade M30 with a minimum cement content 405 kg / cum For height above 5m and upto 10m height using batching plant (Form work 12% + Extra lift 2%)	cum	9854.52
13.5D.3.1	Plain Cement Concrete in substructure complete as per drawing and technical specification - PCC Grade M30 with a minimum cement content 405 kg / cum for height above 10m -Using concrete mixer (Form work 15% + Extra lift 4%)	cum	12866.96
13.5D.3.2	Plain Cement Concrete in substructure complete as per drawing and technical specification - PCC Grade M30 with a minimum cement content 405 kg / cum for height above 10m -Using batching plant (Form work 15% + Extra lift 4%)	cum	10286.73

13 . Substructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
13.5E.1.1	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M20 with a minimum cement content 347 kg / cum up to 5m height - Using concrete mixer	cum	11271.92
13.5E.1.2	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M20 with a minimum cement content 347 kg / cum up to 5m height - Using batching plant	cum	8868.84
13.5E.2.1	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M20 with a minimum cement content 347 kg / cum for height above 5m and upto 10m -Using concrete mixer (Form work 12% + Extra lift 2%)	cum	11681.81
13.5E.2.2	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M20 with a minimum cement content 347 kg / cum for height above 5m and upto 10m -Using batching plant (Form work 12% + Extra lift 2%)	cum	9191.35
13.5E.3.1	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M20 with a minimum cement content 347 kg / cum for height above 10m - Using concrete mixer (Form work 15% + Extra lift 4%)	cum	12194.16
13.5E.3.2	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M20 with a minimum cement content 347 kg / cum for height above 10m - Using batching plant (Form work 15% + Extra lift 4%)	cum	9594.45
13.5F.1.1	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M25 with a minimum cement content 403 kg / cum for upto height 5m - Using concrete mixer	cum	11881.83
13.5F.1.2	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M25 with a minimum cement content 403 kg / cum for upto height 5m - Using batching plant	cum	9478.75
13.5F.2.1	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M25 with a minimum cement content 403 kg / cum for height above 5m and upto 10m height - Using concrete mixer (Form work 11.8% + Extra lift 1.8%)	cum	12270.69
13.5F.2.2	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M25 with a minimum cement content 403 kg / cum for height above 5m	cum	9788.96

13 . Substructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	and upto 10m height - Using batching plant (Form work 11.8% + Extra lift 1.8)		
13.5F.3.1	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M25 with a minimum cement content 405 kg / cum for height above 10m - Using concrete mixer (Form work 15% + Extra lift 4%)	cum	12866.96
13.5F.3.2	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M25 with a minimum cement content 403 kg / cum for height above 10m - Using batching plant (Form work 15% + Extra lift 4%)	cum	10254.27
13.5G.1.1	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M30 with a minimum cement content 407 kg / cum upto 5m height - Using concrete mixer (Formwork-10%)	cum	11918.12
13.5G.1.2	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M30 with a minimum cement content 407 kg / cum upto 5m height - Using batching plant (Formwork-10%).	cum	9516.85
13.5G.2.1	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M30 with a minimum cement content 407 kg / cum for height above 5m and upto 10m height - Using concrete mixer (Form work 11.5% + Extra lift 1.6%)	cum	12254.00
13.5G.2.2	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M30 with a minimum cement content 407 kg / cum for height above 5m and upto 10m height - Using batching plant (Form work 11.5% + Extra lift 1.6 %)	cum	12254.00
13.5G.3.1	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M30 with a minimum cement content 407 kg / cum for height above 10m - Using concrete mixer (Form work 14% + Extra lift 3.5%)	cum	12730.73
13.5G.3.2	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M30 with a minimum cement content 407 kg / cum for height above 10m - Using batching plant (Form work 14% + Extra lift 3.5%)	cum	10165.72
13.5H.1.1	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M35 with a minimum cement content 422 kg / cum for height upto 5m - Using concrete mixer (Formwork-10%).	cum	12085.11

13 . Substructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
13.5H.1.2	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M35 with a minimum cement content 422 kg / cum for height upto 5m - Using batching plant (Formwork-10%).	cum	9683.86
13.5H.2.1	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M35 with a minimum cement content 422 kg / cum for height above 5m and upto 10m - Using concrete mixer (Form work 11% + Extra lift 1.4%)	cum	12348.81
13.5H.2.2	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M35 with a minimum cement content 422 kg / cum for height above 5m and upto 10m - Using batching plant (Form work 11% + Extra lift 1.4%)	cum	9895.13
13.5H.3.1	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M35 with a minimum cement content 422 kg / cum for height above 10m - Using concrete mixer (Form work 13% + Extra lift 3%)	cum	12744.30
13.5H.3.2	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M35 with a minimum cement content 422 kg / cum for height above 10m - Using batching plant (Form work 13% + Extra lift 3%)	cum	10212.07
13.6	Supplying, fitting and placing Thermo Mechanical Treated bars reinforcement in substructure complete as per drawing and technical specifications.	tonne	127412.17
13.6B	Providing and placing M30 grade cover block for RCC works	no	3.30
13.7	Supplying, fitting and placing mild steel reinforcement complete in substructure as per drawing and technical specifications including material and labour for straightening, cutting,bending, shifting to site,tying and placing in position.	tonne	124979.25
13.8	Providing weep holes in brick masonry /plain/reinforced concrete abutment, wing wall / return wall with 100 mm dia AC pipe, extending through the full width of the structure with slope of 1V:20H towards drawing face. Complete as per drawing and technical specifications.	nos	166.13
13.9	Providing weep holes in brick masonry / plain / reinforced concrete abutment , wing wall / return wall with 110 mm dia PVC pipe, 6kg/sq.cm extending through the full width of the structure with slope of 1V:20H towards drawing face.Complete as per drawing and technical specifications	metre	395.23
13.10	Providing and laying of filter media with granular materials /	cum	4484.54

13 . Substructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	stone crushed aggregates satisfying the requirements laid down Clause 2504.2.2. of MoRT&H specifications to a thickness of not less than 600 mm with smaller size towards the soil and bigger size towards the wall and provided over the entire surface behind abutment, wing wall and return wall to the full height compacted to a firm condition complete as per drawing and technical specifications.		
13.11.1	Providing and fixing tapered / parallel threaded couplers conforming to IS code on " Reinforcement Couplers for Mechanical Splices of Bars fpr Concrete Reinforcement Specifications" , to reinforcement bars including threading , enlargement at connections by forging , protecting the prepared reinforcement bars and related operations as requiured to complete the works. (The length of the bars in which coupler is to be provided should not be less than 4 metre, no deduction for labour and binding wire saved for not providing lap length shall be made) - Coupler for 16 mm diametre reinforcement bar	no	197.78
13.11.2	Providing and fixing tapered / parallel threaded couplers conforming to IS code on " Reinforcement Couplers for Mechanical Splices of Bars fpr Concrete Reinforcement Specifications" , to reinforcement bars including threading , enlargement at connections by forging , protecting the prepared reinforcement bars and related operations as requiured to complete the works. (The length of the bars in which coupler is to be provided should not be less than 4 metre, no deduction for labour and binding wire saved for not providing lap length shall be made) - Coupler for 20 mm diametre reinforcement bar	no	266.09
13.11.3	Providing and fixing tapered / parallel threaded couplers conforming to IS code on " Reinforcement Couplers for Mechanical Splices of Bars fpr Concrete Reinforcement Specifications" , to reinforcement bars including threading , enlargement at connections by forging , protecting the prepared reinforcement bars and related operations as requiured to complete the works. (The length of the bars in which coupler is to be provided should not be less than 4 metre, no deduction for labour and binding wire saved for not providing lap length shall be made) - Coupler for 25 mm diametre reinforcement bar	no	375.83
13.11.5	Providing and fixing tapered / parallel threaded couplers conforming to IS code on " Reinforcement Couplers for Mechanical Splices of Bars fpr Concrete Reinforcement Specifications" , to reinforcement bars including threading , enlargement at connections by forging , protecting the prepared reinforcement bars and related operations as requiured to complete the works. (The length of the bars in which coupler is to be provided should not be less than 4 metre, no deduction for labour and binding wire saved for not providing lap length shall be made) - Coupler for 32 mm diametre reinforcement bar	no	622.39

14 . Superstructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
14.1A.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M20 with a minimum cement content 341kg / cum - Using concrete mixer - for solid slab superstructure - height upto 5m including all machineries and formwork etc.	cum	11832.72
14.1A.1.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M20 with a minimum cement content 341 kg / cum - Using concrete mixer - for T-beam & slab superstructure - height upto 5m including all machineries and formwork, etc.	cum	12325.75
14.1A.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M20 with a minimum cement content 341 kg / cum - Using concrete mixer -for solid slab superstructure - for height above 5m upto 10m-including all machineries and formwork etc.	cum	12325.75
14.1A.2.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M20 with a minimum cement content 341 kg / cum - Using concrete mixer -for T-beam & slab superstructure -for height above 5m upto 10m-including all machineries and formwork etc.	cum	12818.78
14.1A.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M20 with a minimum cement content 341kg / cum - Using concrete mixer -for solid slab superstructure - for height above 10m-including all machineries and formwork etc.	cum	12818.78
14.1A.3.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M20 with a minimum cement content 341 kg / cum - Using concrete mixer -for T-beam & slab superstructure -for height above 10m-including all machineries and formwork etc.	cum	13311.81
14.1B.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M25 with a minimum cement content 399 kg / cum - Using concrete mixer - for solid slab superstructure - height upto 5m including all machineries and formwork, etc.	cum	12521.82
14.1B.1.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M25 with a minimum cement content 399 kg / cum - Using concrete mixer and electric gen set - for T-beam & slab superstructure - height upto 5m including all	cum	13043.56

14 . Superstructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	machineries and formwork, etc.		
14.1B.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M25 with a minimum cement content 399 kg / cum - Using concrete mixer -for solid slab superstructure - height above 5m and upto 10m including all machineries and formwork, etc.	cum	13043.56
14.1B.2.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M25 with a minimum cement content 399 kg / cum - Using concrete mixer -for T-beam & slab superstructure - height above 5m and upto 10m- including all machineries and formwork, etc.,	cum	13565.31
14.1B.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M25 with a minimum cement content 399 kg / cum - Using concrete mixer -for solid slab superstructure - height above 10m- including all machineries and formwork, etc.,	cum	13565.31
14.1B.3.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M25 with a minimum cement content 399 kg / cum - Using concrete mixer -for T-beam & slab superstructure - height above 10m- including all machineries and formwork, etc.,	cum	14087.05
14.1C.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M30 with a minimum cement content 407 kg / cum - Using concrete mixer - for solid slab superstructure - height upto 5m including all machineries and formwork, etc.	cum	12728.61
14.1C.1.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M30 with a minimum cement content 407 kg / cum - Using concrete mixer - for T-beam & slab superstructure - height upto 5m including all machineries and formwork, etc.	cum	13258.97
14.1C.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M30 with a minimum cement content 407 kg / cum - Using concrete mixer -for solid slab superstructure - height above 5m to 10m-including all machineries and formwork, etc.,	cum	13258.97
14.1C.2.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications -	cum	13789.33

14 . Superstructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	RCC grade M30 with a minimum cement content 407 kg / cum - Using concrete mixer -forT-beam & slab superstructure - height above 5m to 10m-including all machineries and formwork,etc.,		
14.1C.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M30 with a minimum cement content 407 kg / cum - Using concrete mixer -for solid slab superstructure - height above 10m-including all machineries and formwork,etc.,	cum	13789.33
14.1C.3.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M30 with a minimum cement content 407 kg / cum - Using concrete mixer -forT-beam & slab superstructure - height above10m-including all machineries and formwork,etc.,	cum	14319.69
14.1D.1.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using concrete mixer - for solid slab superstructure - height upto 5m including all machineries and formwork, etc.	cum	12695.61
14.1D.1.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using concrete mixer -for T-beam & slab superstructure - height upto 5m-including all machineries and formwork,etc.,	cum	13233.56
14.1D.1.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using concrete mixer -for box girder and balanced cantilever - height upto 5m-including all machineries and formwork,etc.,	cum	14847.41
14.1D.2.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using concrete mixer -for solid slab superstructure - height above 5m and upto 10m-including all machineries and formwork,etc.,	cum	13233.56
14.1D.2.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using concrete mixer -for T-beam & slab superstructure - height above 5m to 10m-including all	cum	13771.51

14 . Superstructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	machineries and formwork,etc.,		
14.1D.2.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using concrete mixer -for box girder and balanced cantilever - height above 5m and upto 10m-including all machineries and formwork,etc.,	cum	15923.30
14.1D.3.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using concrete mixer -for solid slab superstructure - height above 10m-including all machineries and formwork,etc.,	cum	13771.51
14.1D.3.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using concrete mixer -for T-beam & slab superstructure - height above 10m-including all machineries and formwork,etc.,	cum	14309.45
14.1D.3.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using concrete mixer -for box girder and balanced cantilever - height above 10m-including all machineries and formwork,etc.,	cum	16999.20
14.1E.1.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M40 with a minimum cement content 430 kg / cum - Using concrete mixer - for solid slab superstructure-height upto 5m including all machineries and formwork, etc.	cum	13540.38
14.1E.1.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M40 with a minimum cement content 430 kg / cum - Using concrete mixer -for T-beam & slab superstructure- height upto 5m-including all machineries and formwork,etc.,	cum	14104.57
14.1E.2.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M40 with a minimum cement content 430 kg / cum - Using concrete mixer -for solid slab superstructure-height above 5m and upto 10m-including all machineries and formwork,etc.,	cum	14104.57
14.1E.2.2	Furnishing and placing reinforced cement concrete in	cum	14668.75

14 . Superstructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	superstructure as per drawing and technical specifications - PSC grade M40 with a minimum cement content 430 kg / cum - Using concrete mixer -for T-beam & slab superstructure- height above 5m and upto 10m-including all machineries and formwork,etc.,		
14.1E.3.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M40 with a minimum cement content 430 kg / cum - Using concrete mixer -for solid slab superstructure- height above 10m-including all machineries and formwork,etc.,	cum	14668.75
14.1E.3.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M40 with a minimum cement content 430 kg / cum - Using concrete mixer -for T-beam & slab superstructure- height above 10m-including all machineries and formwork,etc.,	cum	15232.93
14.1F.1.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M45 with a minimum cement content 465 kg / cum - Using batching plant, transit mixer and concrete pump - for solid slab superstructure - height upto 5m- including all machineries and formwork, etc.,	cum	11098.80
14.1F.1.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M45 with a minimum cement content 465 kg / cum - Using batching plant, transit mixer and concrete pump - for I - beam and slab including launching of precast girders by launching truss upto 40m span - height upto 5m-including all machineries and formwork, etc.,	cum	11577.20
14.1F.1.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M45 with a minimum cement content 465 kg / cum - Using batching plant, transit mixer and concrete pump - for cast - in - situ box girder, segmental construction and balanced cantilever - height upto 5m-including all machineries and formwork, etc.,	cum	13012.39
14.1F.2.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M45 with a minimum cement content 465 kg / cum - Using batching plant, transit mixer and concrete pump - for solid slab superstructure - height above 5m and upto 10m- including all machineries and formwork, etc.,	cum	11577.20
14.1F.2.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications -	cum	12055.59

14 . Superstructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	PSC grade M45 with a minimum cement content 465 kg / cum - Using batching plant,transit mixer and concrete pump - for I - beam and slab including launching of precast girders by launching truss upto 40m span - height above 5m and upto 10m-including all machineries and formwork, etc.,		
14.1F.2.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M45 with a minimum cement content 465 kg / cum - Using batching plant, transit mixer and concrete pump - for cast - in - situ box girder, segmental construction and balanced cantilever - height above 5m and upto 10m-including all machineries and formwork, etc.,	cum	13969.18
14.1F.3.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M45 with a minimum cement content 465 kg / cum - Using batching plant, transit mixer and concrete pump - for solid slab superstructure - height above 10m-including all machineries and formwork, etc.,	cum	11678.65
14.1F.3.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M45 with a minimum cement content 465 kg / cum - Using batching plant, transit mixer and concrete pump - for I - beam and slab including launching of precast girders by launching truss upto 40m span - height above 10m-including all machineries and formwork, etc.,	cum	12533.99
14.1F.3.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M45 with a minimum cement content 465 kg / cum - Using batching plant,transit mixer and concrete pump - for cast - in - situ box girder, segmental construction and balanced cantilever - height above 10m-including all machineries and formwork, etc.,	cum	14925.97
14.1G.1.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M50 with a minimum cement content 490 kg / cum - Using batching plant, transit mixer and concrete pump - for cast - in - situ box girder, segmental construction and balanced cantilever - height upto 5m-including all machineries and formwork, etc.,	cum	13273.53
14.1G.2.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M50 with a minimum cement content 490 kg / cum - Using batching plant, transit mixer and concrete pump - for cast - in - situ box girder, segmental construction and balanced cantilever - height above 5m to 10m-including all	cum	14256.75

14 . Superstructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	machineries and formwork, etc.,		
14.1G.3.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M50 with a minimum cement content 490 kg / cum - Using batching plant, transit mixer and concrete pump - for cast - in - situ box girder, segmental construction and balanced cantilever - height above 10m-including all machineries and formwork, etc.,	cum	15239.97
14.1H.1.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M55 with a minimum cement content 529 kg / cum - Using batching plant, transit mixer and concrete pump - for cast - in - situ box girder, segmental construction and balanced cantilever - height upto 5 m-including all machineries and formwork, etc.,	cum	13832.54
14.1H.2.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M55 with a minimum cement content 529 kg / cum - Using batching plant, transit mixer and concrete pump - for cast - in - situ box girder, segmental construction and balanced cantilever - height above 5m to 10m- including all machineries and formwork, etc.,	cum	14819.04
14.1H.3.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M55 with a minimum cement content 529 kg / cum - Using batching plant, transit mixer and concrete pump - for cast - in - situ box girder, segmental construction and balanced cantilever - height above 10m-including all machineries and formwork, etc.,	cum	15881.81
14.2	Supplying, fitting and placing Thermo Mechanical Treated bars reinforcement in superstructure complete as per drawing and technical specifications	tonne	131764.48
14.2A.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M20 with a minimum cement content 341kg / cum - Using batching plant, transit mixer and concrete pump- for solid slab superstructure -for height upto 5m- including all mahineries and formwork,etc.,	cum	9595.10
14.2A.1.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M20 with a minimum cement content 341kg / cum - Using batching plant, transit mixer and concrete pump- for T-beam & slab superstructure -for height upto 5m- including all machineries and formwork.	cum	9994.89

14 . Superstructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
14.2A.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M20 with a minimum cement content 341kg / cum - Using batching plant , transit mixer and concrete pump- for solid slab superstructure -for height above 5m and upto 10m-including all machineries and formwork,etc.,	cum	9994.89
14.2A.2.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M20 with a minimum cement content 341 kg / cum - Using batching plant, transit mixer and concrete pump- for T-beam & slab superstructure -for height above 5m and upto 10m-including all machineries and formwork, etc.,	cum	10394.69
14.2A.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M20 with a minimum cement content 341kg / cum - Using batching plant, transit mixer and concrete pump - for solid slab superstructure -for height above 10m	cum	10394.69
14.2A.3.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M20 with a minimum cement content 341kg / cum - Using batching plant , transit mixer and concrete pump- for T-beam & slab superstructure -for height above 10m- including all machineries and formwork etc.,	cum	10794.48
14.2B.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M25 with a minimum cement content 400 kg / cum - Using batching plant,transit mixer an concrete pump - for solid slab superstructure - height upto 5m- including all machineries and formwork, etc.,	cum	10297.06
14.2B.1.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M25 with a minimum cement content 400 kg / cum - Using batching plant, transit mixer and concrete pump - for T-beam & slab superstructure - height upto 5m- including all machineries and formwork,etc.,	cum	10726.10
14.2B.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M25 with a minimum cement content 400 kg / cum - Using batching plant, transit mixer and concrete pump- for solid slab superstructure - height above 5m and upto 10m- including all machineries and formwork, etc.,	cum	10726.10
14.2B.2.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M25 with a minimum cement content 400 kg /	cum	11155.14

14 . Superstructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
	cum - Using batching plant, transit mixer and concrete pump - for T-beam & slab superstructure - height above 5m and upto 10m-including all machineries and formwork,etc.,		
14.2B.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M25 with a minimum cement content 400 kg / cum - Using batching plant, transit mixer and concrete pump - for solid slab superstructure - height above 10m- including all machineries and formwork,etc.,	cum	11155.14
14.2B.3.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M25 with a minimum cement content 400 kg / cum - Using batching plant, transit mixer and concrete pump - for T-beam & slab superstructure - height above 10m - including all machineries and formwork, etc.,	cum	11263.40
14.2C.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M30 with a minimum cement content 407 kg / cum - Using batching plant, transit mixer and concrete pump - for solid slab superstructure - height upto 5m- including all machineries and formwork, etc.,	cum	10407.03
14.2C.1.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M30 with a minimum cement content 407 kg / cum - Using batching plant -for T-beam & slab superstructure - height upto 5m	cum	10840.66
14.2C.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M30 with a minimum cement content 407 kg / cum - Using batching plant,transit mixer and concrete pump - for solid slab superstructure - height above 5m to 10m-including all machineries and formwork, etc.,	cum	10840.66
14.2C.2.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M30 with a minimum cement content 407 kg / cum - Using batching plant, transit mixer and concrete pump - for T-beam & slab superstructure - height above 5m and upto 10m-including all machineries and formwork,etc.,	cum	11274.28
14.2C.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M30 with a minimum cement content 407 kg / cum - Using batching plant, transit mixer and concrete pump - for solid slab superstructure - height above 10m-including all machineries and formwork, etc.,	cum	11274.28

14 . Superstructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
14.2C.3.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M30 with a minimum cement content 407 kg / cum - Using batching plant, transit mixer and concrete pump - for T-beam & slab superstructure - height above 10m-including all machineries and formwork, etc.,	cum	11707.91
14.2D.1.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using batching plant, transit mixer and concrete pump - for solid slab superstructure - height upto 5m-including all machineries and formwork,etc.,	cum	10396.22
14.2D.1.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using batching plant, transit mixer and concrete pump -for T-beam & slab superstructure - height upto 5m-including all machineries and formwork,etc.,	cum	10836.73
14.2D.1.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using batching plant, transit mixer and concrete pump -for box girder and balanced cantilever- height upto 5m-including all machineries and formwork,etc.,	cum	12158.29
14.2D.2.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using batching plant, transit mixer and concrete pump - for solid slab superstructure - height above 5m to 10m-including all machineries and formwork,etc.,	cum	10836.73
14.2D.2.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using batching plant,transit mixer and concrete pump -for T-beam & slab superstructure - height above 5m and upto 10m-including all machineries and formwork,etc.,	cum	11277.25
14.2D.2.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using batching plant, transit mixer and concrete pump -for box girder and balanced cantilever- height above 5m and upto 10m-including all machineries and formwork,etc.,	cum	13039.32

14 . Superstructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
14.2D.3.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using batching plant, transit mixer and concrete pump, etc., - for solid slab superstructure - height above 10m-including all machineries and formwork,etc.,	cum	11277.25
14.2D.3.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using batching plant, transit mixer and concrete pump -for T-beam & slab superstructure - height above 10m- including all machineries and formwork,etc.,	cum	11717.77
14.2D.3.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using batching plant, transit mixer and concrete pump -for box girder and balanced cantilever- height above 10m-including all machineries and formwork,etc.,	cum	13920.36
14.2E.1.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M40 with a minimum cement content 430 kg / cum - Using batching plant, transit mixer and concrete pump - for solid slab superstructure- height upto 5m-including all machineries and formwork,etc.,	cum	10853.52
14.2E.1.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M40 with a minimum cement content 430 kg / cum - Using batching plant, transit mixer and concrete pump - for I - beam and slab superstructure including launching of precast girders by launching truss upto 40m span- height upto 5m-including all machineries and formwork,etc.,	cum	11313.41
14.2E.1.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M40 with a minimum cement content 430 kg / cum - Using batching plant, transit mixer and concrete pump - for cast - in-situ box girder, segmental construction and balanced cantilever - height upto 5m- including all machineries and formwork, etc.,	cum	12693.10
14.2E.2.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M40 with a minimum cement content 430 kg / cum - Using batching plant,transit mixer and concrete pump - for solid slab superstructure- height above 5m and upto 10m-including all machineries and formwork, etc.,	cum	11002.65

14 . Superstructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
14.2E.2.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M40 with a minimum cement content 430 kg / cum - Using batching plant, transit mixer and concrete pump - for I - beam and slab superstructure including launching of precast girders by launching truss upto 40m span- height above 5m and upto 10m- including all machineries and formwork,etc.,	cum	11773.31
14.2E.2.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M40 with a minimum cement content 430 kg / cum - Using batching plant, transit mixer and concrete pump - for cast - in-situ box girder, segmental construction and balanced cantilever - height above 5m and upto 10m-including all machineries and formwork,etc.,	cum	13612.89
14.2E.3.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M40 with a minimum cement content 430 kg / cum - Using batching plant -for solid slab superstructure- height above 10m	cum	11773.31
14.2E.3.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M40 with a minimum cement content 430 kg / cum - Using batching plant, transit mixer and concrete pump - for I - beam and slab superstructure including launching of precast girders by launching truss upto 40m span- height above 10m- including all machineries and formwork,etc.,	cum	12233.20
14.2E.3.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M40 with a minimum cement content 430 kg / cum - Using batching plant, transit mixer and concrete pump - for cast - in-situ box girder, segmental construction and balanced cantilever - height above 10m- including all machineries and formwork,etc.,	cum	14532.68
14.4	Providing and laying cement concrete wearing coat M30 grade with a minimum cement content 405 kg / cum including reinforcement complete as per drawing and technical specification	cum	20587.57
14.6	Construction of precast RCC railing of M30 grade with a minimum cement content 407 kg / cum , aggregate size not exceeding 12mm, true to line and grade, tolerance of vertical RCC post not to exceed 1 in 500, centre to centre spacing between vertical post not to exceed 2000 mm, leaving adequate space between vertical post for expansion, complete as per approved drawings and technical specifications	Rmt	3269.82

14 . Superstructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
14.7	Construction of RCC railing of M30 grade with a minimum cement content 407 kg / cum cast- in-situ with 20mm nominal size aggregate, true to line and grade, tolerance of vertical RCC post not to exceed 1 in 500, centre to centre spacing between vertical post not to exceed 2000mm, leaving adequate space between vertical post for expansion, complete as per approved drawings and technical specifications	Rmt	3662.20
14.9	Drainage spouts complete as per drawing and Technical Specifications. (Including 5 percent cost of material and labour for electrodes, cutting gas , sealant, anticorrosive bituminous paint, mild steel grating etc.)	each	3066.97
14.10	PCC M15 with a minimum cement content 275 kg / cum grade levelling course below approach slab complete as per drawing and technical specifications	cum	9212.87
14.11A	Reinforced cement concrete M30 grade with a minimum cement content 407 kg / cum approach slab including reinforcement and formwork complete as per drawing and technical specifications - Using concrete mixer	cum	17771.34
14.11B	Reinforced cement concrete M30 grade with a minimum cement content 407 kg / cum approach slab including reinforcement and formwork complete as per drawing and technical specifications - Using batching plant, transit mixer and concrete pump.	cum	15544.70
14.16	Providing and applying 2 coats of water based cement paint to unplastered concrete surface after cleaning the surface of dirt, dust, oil, grease, efflorescence and applying paint @ of 1 litre for 2 sqm.	sqm	304.85
14.18.1	Providing and fixing 2mm thick corrugated copper plate in expansion joint complete as per drawing and technical specifications	Rmt	1597.69
14.18.2	Providing and fixing 20mm thick compressible fibre board in expansion joint complete as per drawing and technical specifications	Rmt	108.72
14.18.3	Providing and fixing in position 20mm thick premoulded joint filler in expansion joint for fixed ends of simply supported spans not exceeding 10m to cater for a horizontal movement upto 20mm, covered with sealant complete as per drawing and technical specifications	Rmt	51.37
14.18.4	Providing and filling joint sealing compound as per drawings and technical specification with coarse fine aggregate and 6 percent bitumen by weight	Rmt	83.46

15 . River Training and Protection Works

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
15.1	Providing and laying boulders apron on river bed for protection against scour with stone boulders weighing not less than 40 kg each complete as per drawing and technical specifications- Boulder laid dry without wire crates.	cum	3958.80
15.2	Providing and laying of boulder apron laid in wire crates made with 4 mm dia GI wire conforming to IS:280 & IS 4826 in 100 mm x 100 mm mesh (weaved diagonally) including 10 percent extra for laps and joints laid with stone boulders weighing not less than 40 kg each-Boulder apron laid in wire crates.	cum	5009.79
15.3	Providing and laying of apron with cement concrete blocks of size 0.5x0.5x0.5 m cast-in-situ and made with nominal mix of M15 grade cement concrete with a minimum cement content of 250kg/cum as per IRC:21-2000 (add 2 percent of cost to account for excavation for preparation of bed,nominal surface reinforcement and filling of granular material in recesses between blocks)	cum	9711.43
15.4A	Providing and laying pitching on slopes laid over prepared filter media including boulder apron laid dry in front of toe of embankment complete as per drawing and technical specifications - stone	cum	3958.80
15.4B	Providing and laying pitching on slopes laid over prepared filter media including boulder apron laid dry in front of toe of embankment complete as per drawing and technical specifications - Cement concrete blocks of size 0.3 x 0.3 x 0.3 m cast in cement concrete of grade M15 (add 2 percent of cost to account for excavation for preparation of bed,nominal surface reinforcement and filling of granular material in recesses between blocks)	cum	9711.43
15.5	Providing and laying filter material underneath pitching in slopes complete as per drawing and technical specifications	cum	5160.61
15.9	Construction of dry rubble flooring at cross drainage works for relatively less important works (including trimming and preparation of base)	cum	5429.14
15.10A	Curtain wall complete as per drawing and technical specifications - Stone masonry in cement mortar 1:3	cum	10616.06
15.10B	Curtain wall complete as per drawing and technical specifications - cement concrete grade M15	cum	9521.01
15.11	Flexible apron: Construction of flexible apron 1m thick comprising of loose stone boulders weighing not less than 40kg beyond curtain wall (including trimming and preparation of bed)	cum	4209.83

15 . River Training and Protection Works

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
15.12	Providing and construction of a gabian structure for retaining earth with segments of wire crates of size 7 m x 3 m x 0.6 m each divided into 1.5m compartments by cross netting, made from 4mm galvanised steel wire @ 32 kg per 10 sqm having minimum tensile strength of 300 Mpa conforming to IS :280 and galvanizing coating conforming to IS:4826, woven into mesh with double twist, mesh size not exceeding 100x100mm, filled with boulders with least dimension of 200mm, all loose ends to be tied with 4mm galvanised steel wire	cum	4956.26
15.13	Providing and construction gabian structures for erosion control, river training works and protection works with wire crates of size 2m x 1mx 0.3m each divided into 1m compartments by cross netting, made from 4 mm galvanised steel wire @ 32 kg per 10 sqm having minimum tensile strength of 300Mpa conforming to IS:280 and galvanizing coating conforming to IS:4826, woven into mesh with double twist, mesh size not exceeding 100mm x 100mm, filled with boulders with least dimension of 200mm , all loose ends to be securely tied with 4mm galvanised steel wire.	cum	7315.80

16 . Repair and Rehabilitation

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate Rs.</i>
16.1	Removal of existing cement concrete wearing coat including its disposal complete as per technical specification without causing any detrimental effect to any part of the bridge structure and removal of dismantled material with all lifts and lead upto 1000m	sqm	241.23
16.2	Removal of existing asphaltic wearing coat comprising of 50 mm thick asphaltic concrete laid over 12mm thick mastic asphalt including disposal with all lift and lead upto 1000m	sqm	180.69
16.5A	Sealing of cracks / porous concrete by injection process through nipples/ grouting complete as per technical specifications- Cement grout	kg	436.21
16.5B	Sealing of cracks / porous concrete by injection process through nipples / grouting complete as per technical specifications - cement mortar (1:1) grouting	kg	467.86
16.7	Sealing of crack / porous concrete with epoxy grout by injection through nipples complete as per clause 2803.1.	sqm	103.33
16.9	Removal of defective concrete , cleaning the surface thoroughly, applying the shotcrete mixture mechanically with compressed air under pressure, comprising of cement, fine aggregate, coarse aggregates, water and quick setting compound in the proportion as per clause 2807.1, fine aggregate and coarse aggregates conforming to IS: 383 and Table 1 of IS: 9012 respectively, water cement ratio ranging from 0.35 to 0.50, density of gunite not less than 2000 kg / cum, strength not less than 25 Mpa and workmanship conforming to clause 2807.6.	sqm	500.70
16.11	Epoxy bonding of new concrete to old concrete	sqm	728.89
16.17	Replacement of expansion joints complete as per drawings	Rmt	4499.75
16.18	Replacement of damaged concrete railing	Rmt	834.29
16.19	Replacement of crash barrier	Rmt	1582.17
16.20	Replacement of damaged mild steel railing	Rmt	684.71
16.21	Repair of concrete crash barrier with cement concrete of M30 grade by cutting and trimming the damaged portion to a regular shape, cleaning the area to be repaired thoroughly, applying cement concrete after erection of proper formwork	Rmt	473.96
16.22	Repair of RCC railing (Carrying out repair of RCC railing to bring it to the original shape)	Rmt	308.56

CEMENT CONSUMPTION STATEMENT

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
4.1.2	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20mm nominal size)	cum	400.00
4.1.2A	Providing and laying cement concrete of specified grade excluding the cost of centering and shuttering - All work upto plinth level 1:1.5:3 (1 cement: 1.5 coarse sand (zone -III) including manufactured sand dervied from recycled concrete aggregate (RCA) upto 25% : 3 graded stone aggregate 20mm nominal size including recycled concrete aggregate (RCA) upto 25%)	cum	400.00
4.1.3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20mm nominal size)	cum	320.00
4.1.3A	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:2:4 (1 cement : 2 coarse sand including manufactured sand derived from recycled concrete aggregate (RCA) upto 25% : 4 graded stone aggregate 20mm nominal size including recycled concrete aggregate (RCA) upto 25%)	cum	320.00
4.1.4	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 40mm nominal size)	cum	320.00
4.1.5	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:3:6 (1 cement : 3 fine aggregate : 6 graded stone aggregate 20mm nominal size)	cum	220.00
4.1.5A	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:3:6 (1 cement : 3 manufactured sand derived from recycled concrete aggregate (RCA) : 6 graded stone aggregate 20 mm nominal size recycled concrete aggregate (RCA)	cum	220.00
4.1.5B	Providing and laying in position cement concrete of	cum	220.00

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:3:6 (1 cement : 3 manufactured sand derived from recycled concrete aggregate (RCA) : 6 graded stone aggregate 20 mm nominal size recycled concrete aggregate (RA)		
4.1.6	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:3:6 (1 cement : 3 fine aggregate : 6 graded stone aggregate 40mm nominal size)	cum	220.00
4.1.6A	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:3:6 (1 cement : 3 manufactured sand derived from recycled concrete aggregate (RCA) : 6 graded stone aggregate 40 mm nominal size recycled aggregate (RA)	cum	220.00
4.1.8	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:4:8 (1 cement : 4 fine aggregate : 8 graded stone aggregate 40mm nominal size)	cum	170.00
4.1.8A	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:4:8 (1 cement : 4 manufactured sand derived from recycled concrete aggregate (RCA) ; 8 graded stone aggregate 40 mm nominal size recycled aggregate (RA)	cum	170.00
4.1.10	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40mm nominal size)	cum	130.00
4.1.10A	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:5:10 (1 cement : 5 manufactured sand derived from Recycled Concrete Aggregate (RCA) : 10 graded stone aggregate 40 mm nominal size Recycled Aggregate(RA))	cum	130.00
4.1.11	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :1:5:10	cum	130.00

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	(1cement:5 fine sand :10 graded stone aggregate 40mm nominal size)		
4.1.11A	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:5:10 (1 cement : 5 fine aggregate : 10 graded brick aggregate 40mm nominal size)	cum	130.00
4.1.12	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:2:3.5:9 (1 ordinary portland cement :2 fly ash :3.5 fine aggregate : 9 graded stone aggregate 40mm nominal size)	cum	170.00
4.1.12A	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:2:3.5:9 (1 cement : 2 fly ash: 3.5 manufactured sand derived from recycled concrete aggregate (RCA) : 9 graded stone aggregate 40mm nominal size recycled aggregate (RA)	cum	210.00
4.1.13	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:2.5:4:11 (1 ordinary portland cement : 2.5 fly ash : 4 fine aggregate : 11 graded stone aggregate 40mm nominal size)	cum	130.00
4.1.13A	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:2.5:4:11 (1 ordinary portland cement : 2.5 fly ash : 4 manufactured sand from recycled concrete aggregate (RCA) : 11 graded stone aggregate 40mm nominal size recycled aggregate (RA))	cum	130.00
4.2.2	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns,piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc. upto floor five level, excluding the cost of centering ,shuttering and finishing - 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20mm nominal size)	cum	400.00
4.2.2A	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including	cum	400.00

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	attached pilasters, columns,piers, abutments, pillars, posts,struts, buttresses, string or lacing courses, parapets, coping,bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc. upto floor five level, excluding the cost of centering ,shuttering and finishing - 1:1.5:3 (1 cement : 1.5 fine aggregate including manufactured sand from recycled concrete (RCA) upto 25% : 3 graded stone aggregate 20mm nominal size including recycled concrete aggregate (RCA) upto 25%)		
4.2.3	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns,piers, abutments, pillars, posts,struts, buttresses, string or lacing courses, parapets, coping,bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc. upto floor five level, excluding the cost of centering ,shuttering and finishing - 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20mm nominal size)	cum	320.00
4.2.3A	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns,piers, abutments, pillars, posts,struts, buttresses, string or lacing courses, parapets, coping,bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc. upto floor five level, excluding the cost of centering ,shuttering and finishing - 1:2:4 (1 cement : 2 fine aggregate including manufactured sand recycled concrete (RCA) upto 25% : 4 graded stone aggregate 20mm nominal size including recycled concrete aggregate (RCA) upto 25%)	cum	320.00
4.2.5	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns,piers, abutments, pillars, posts,struts, buttresses, string or lacing courses, parapets, coping,bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc. upto floor five level, excluding the cost of centering ,shuttering and finishing - 1:3:6 (1 cement : 3 fine aggregate : 6 graded stone aggregate 20mm nominal size)	cum	220.00
4.2.5A	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns,piers, abutments, pillars, posts,struts, buttresses, string or lacing courses, parapets, coping,bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc.	cum	220.00

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	upto floor five level, excluding the cost of centering ,shuttering and finishing - 1:3:6 (1 cement : 3 manufactured sand derived from recycled concrete aggregate (RCA) : 6 graded stone aggregate 20mm nominal size recycled concrete aggregate (RCA)		
4.2.5B	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns,piers, abutments, pillars, posts,struts, buttresses, string or lacing courses, parapets, coping,bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc. upto floor five level, excluding the cost of centering ,shuttering and finishing - 1:3:6 (1 cement : 3 manufactured sand derived from recycled concrete aggregate (RCA) : 6 graded stone aggregate 20mm nominal size recycled aggregate (RA)	cum	220.00
4.2.8	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns,piers, abutments, pillars, posts,struts, buttresses, string or lacing courses, parapets, coping,bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc. upto floor five level, excluding the cost of centering ,shuttering and finishing - 1:5:10 (1 cement : 5 fine aggregate :10 graded stone aggregate 40 mm nominal size)	cum	130.00
4.2.8A	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns,piers, abutments, pillars, posts,struts, buttresses, string or lacing courses, parapets, coping,bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc. upto floor five level, excluding the cost of centering ,shuttering and finishing - 1:5:10 (1 cement : 5 manufactured sand from recycled concrete aggregate (RCA) :10 graded stone aggregate 40 mm nominal size recycled aggregate (RA)	cum	130.00
4.4.1	Providing and laying cement concrete in kerbs, steps and the like at or near ground level excluding the cost of centering, shuttering and finishing - 1:1.5:3 (1cement : 1.5 fine aggregate : 3 graded stone aggregate 20 mm nominal size)	cum	400.00
4.4.1A	Providing and laying cement concrete in kerbs, steps and the like at or near ground level excluding the cost of centering, shuttering and finishing - 1:1.5:3 (1cement : 1.5 coarse sand including manufactured sand from recycled concrete	cum	400.00

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	aggregate (RCA) upto 25% : 3 graded stone aggregate 20 mm nominal size including recycled concrete aggregate (RCA) upto 25%)		
4.5.1	Providing and fixing upto floor five level precast cement concrete string or lacing courses , copings, bed plates, anchor blocks, plain window sills, shelves , louvers, steps, stair cases, etc. including hoisting and setting in position with cement mortar 1:3 (1 cement : 3 fine aggregate), cost of required centering , shuttering complete - 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20mm nominal size)	cum	404.63
4.5.1A	Providing and fixing upto floor five level precast cement concrete string or lacing courses , copings, bed plates, anchor blocks, plain window sills, shelves , louvers, steps, stair cases, etc. including hoisting and setting in position with cement mortar 1:3 (1 cement : 3 fine aggregate), cost of required centering , shuttering complete - 1:1.5:3 (1 cement : 1.5 coarse sand including manufactured sand from recycled concrete aggregate (RCA) upto 25% : 3 graded stone aggregate 20mm nominal size including recycled concrete aggregate (RCA) upto 25%)	cum	404.63
4.6.1	Providing and fixing at or near ground level precast cement concrete in kerbs, edgings etc. as per approved pattern and setting in position with cement mortar 1:3 (1 cement : 3 fine aggregate), including the cost of required centering , shuttering complete - 1:1.5:3 (1 cement :1.5 fine aggregate: 3 graded stone aggregate 20 mm nominal size)	cum	403.48
4.6.1A	Providing and fixing at or near ground level precast cement concrete in kerbs, edgings etc. as per approved pattern and setting in position with cement mortar 1:3 (1 cement : 3 fine aggregate), including the cost of required centering , shuttering complete - 1:1.5:3 (1 cement :1.5 coarse sand including manufactured sand from recycled concrete aggregate (RCA) upto 25%: 3 graded stone aggregate 20 mm nominal size including recycled concrete aggregate (RCA) upto 25%)	cum	403.48
4.7.1	Providing and fixing upto floor five level precast cement concrete solid block, including hoisting and setting in position with cement mortar 1:3 (1 cement : 3 fine aggregate) cost of required centering,shuttering complete - 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate	cum	446.83

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	20mm nominal size)		
4.7.1A	Providing and fixing upto floor five level precast cement concrete solid block, including hoisting and setting in position with cement mortar 1:3 (1 cement : 3 fine aggregate) cost of required centering,shuttering complete - 1:1.5:3 (1 cement : 1.5 coarse sand including manufactured sand from recycled concrete aggregate (RCA) upto 25% : 3 graded stone aggregate 20mm nominal size including (Recycled Concrete Aggregate (RCA) upto 25%)	cum	446.83
4.8.1	Providing and fixing upto floor five level precast cement concrete hollow block,including hoisting and setting in position with cement mortar 1:3 (1 cement :3 fine aggregate) cost of required centering,shuttering complete - 1:1.5:3 (1 cement :1.5 fine aggregate : 3 graded stone aggregate 20mm nominal size)	cum	211.20
4.8.1A	Providing and fixing upto floor five level precast cement concrete hollow block,including hoisting and setting in position with cement mortar 1:3 (1 cement :3 fine aggregate) cost of required centering,shuttering complete - 1:1.5:3 (1 cement :1.5 coarse sand including manufactured sand from recycled concrete aggregate (RCA) upto 25% : 3 graded stone aggregate 20mm nominal size including (recycled concrete aggregate (RCA) upto 25%)	cum	211.20
4.9	Precasting and placing in position 125mm dia bollards 600mm high of required shape, including providing M.S.Pipe sleeve 50mm dia 300mm long in the bollard and M.S.pipes 40mm dia and 450 mm long with 150x150x6mm M.S.plate welded at bottom and embedded 150 mm in cement concrete 1:3:6 (1 cement :3 fine aggregate : 6 graded stone aggregate 20 mm nominal size), including necessary excavation of size 250x250x450 mm deep for the same in bitumen / concrete pavement at specified spacing.	each	9.76
4.9A	Precasting and placing in position 125mm dia bollards 600mm high of required shape, including providing M.S.Pipe sleeve 50mm dia 300mm long in the bollard and M.S.pipes 40mm dia and 450 mm long with 150x150x6mm M.S.plate welded at bottom and embedded 150 mm in cement concrete 1:3:6 (1 cement :3 manufactured sand from recycled concrete aggregate (RCA) : 6 graded	each	9.76

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	stone aggregate 20 mm nominal size (Recycled Concrete Aggregate (RCA)), including necessary excavation of size 250x250x450 mm deep for the same in bitumen / concrete pavement at specified spacing.		
4.9B	Precasting and placing in position 125mm dia bollards 600mm high of required shape, including providing M.S.Pipe sleeve 50mm dia 300mm long in the bollard and M.S.pipes 40mm dia and 450 mm long with 150x150x6mm M.S.plate welded at bottom and embedded 150 mm in cement concrete 1:3:6 (1 cement :3 manufactured sand from recycled concrete aggregate (RCA) : 6 graded stone aggregate 20 mm nominal size (Recycled Aggregate (RA)), including necessary excavation of size 250x250x450 mm deep for the same in bitumen / concrete pavement at specified spacing.	each	9.76
4.10	Providing and laying damp - proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size)	sqm	12.80
4.10A	Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand (zone-III) including manufactured sand derived from Recycled Concrete Aggregate (RCA) upto 25% : 4 graded stone aggregate 12.5mm nominal size including (Recycled Concrete Aggregate (RCA) upto 25%)	sqm	12.80
4.11	Providing and laying damp-proof course 50mm thick with cement concrete 1:2:4 (1 cement :2 fine aggregate : 4 graded stone aggregate 20mm nominal size)	sqm	16.00
4.11A	Providing and laying damp-proof course 50mm thick with cement concrete 1:2:4 (1 cement :2 coarse sand including manufactured sand recycled concrete aggregate (RCA) upto 25% : 4 graded stone aggregate 20mm nominal size (recycled concrete aggregate (RCA) upto 25%)	sqm	16.00
4.17	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 fine aggregate : 6 graded stone aggregate 20mm nominal size) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine aggregate, including necessary excavation, levelling and dressing &finishing the top smooth.	sqm	11.00

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
4.17A	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 manufactured sand from recycled concrete aggregate (RCA) : 6 graded stone aggregate 20mm nominal size recycled concrete aggregate (RCA) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine aggregate, including necessary excavation, levelling and dressing & finishing the top smooth.	sqm	11.00
4.17B	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 manufactured sand from recycled concrete aggregate (RCA) : 6 graded stone aggregate 20mm nominal size recycled concrete aggregate (RA) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine aggregate, including necessary excavation, levelling and dressing & finishing the top smooth.	sqm	11.00
4.20.1.1	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate , Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS:9103 to accelerate / retard setting of concrete , to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works upto plinth level - concrete of M10 grade with minimum cement content of 220kg /cum (Note:Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)	cum	220.00
4.20.1.2	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate , Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS:9103 to accelerate / retard setting of concrete , to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost	cum	240.00

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	of centering, shuttering and finishing as per direction of Engineer-in-charge - all works upto plinth level - concrete of M15 grade with minimum cement content of 240kg /cum (Note:Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)		
4.20.1.3	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate , Portland Pozzolana / Ordinary Portland / Portland Slag cement,, admixtures in recommended proportions as per IS:9103 to accelerate / retard setting of concrete , to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works upto plinth level - concrete of M 20 grade with minimum cement content of 270kg /cum (Note:Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)	cum	270.00
4.20.1.4	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate , Portland Pozzolana / Ordinary Portland / Portland Slag cement,t, admixtures in recommended proportions as per IS:9103 to accelerate / retard setting of concrete , to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works upto plinth level - concrete of M 25 grade with minimum cement content of 300 kg /cum (Note:Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement	cum	300.00

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)		
4.20.2.1	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate , Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS:9103 to accelerate / retard setting of concrete , to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works above plinth level - concrete of M 10 grade with minimum cement content of 220 kg /cum (Note:Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)	cum	220.00
4.20.2.2	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate , Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS:9103 to accelerate / retard setting of concrete , to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works above plinth level - concrete of M 15 grade with minimum cement content of 240 kg /cum (Note:Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)	cum	240.00
4.20.2.3	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate , Portland Pozzolana / Ordinary	cum	270.00

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	Portland / Portland Slag cement, admixtures in recommended proportions as per IS:9103 to accelerate / retard setting of concrete , to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works above plinth level - concrete of M 20 grade with minimum cement content of 270 kg /cum (Note:Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)		
4.20.2.4	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate , Portland Pozzolana / Ordinary Portland / Portland Slag cement,, admixtures in recommended proportions as per IS:9103 to accelerate / retard setting of concrete , to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works above plinth level - concrete of M 25 grade with minimum cement content of 300 kg /cum (Note:Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)	cum	300.00
4.20A.1.1	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate and recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate within the permissible utilization, Portland Pozzolana / Ordinary Portland / Portland Slag cement,, admixtures in recommended proportions as per IS:9103 to accelerate/ retard setting of concrete to improve durability and workability without impacting strength; including pumping of concrete to site of laying, curing, carriage of all	cum	220.00

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	leads: but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works upto plinth level - concrete of M10 grade with minimum cement content of 220 kg / cum (Note: The permissible utilization of recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate is 100% each) - (Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)		
4.20A.1.2	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate and recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate within the permissible utilization, Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS:9103 to accelerate/ retard setting of concrete to improve durability and workability without impacting strength; including pumping of concrete to site of laying, curing, carriage of all leads: but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works upto plinth level - concrete of M15 grade with minimum cement content of 240 kg / cum (Note: The permissible utilization of recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate is 25% each) - (Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)	cum	240.00
4.20A.1.3	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate and recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate within the permissible utilization, Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS:9103 to accelerate/ retard setting of concrete to improve durability and workability	cum	270.00

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	without impacting strength; including pumping of concrete to site of laying, curing, carriage of all leads: but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works upto plinth level - concrete of M20 grade with minimum cement content of 270 kg / cum (Note: The permissible utilization of recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate is 25% each) - (Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)		
4.20A.1.4	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate and recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate within the permissible utilization, Portland Pozzolana / Ordinary Portland / Portland Slag cement,, admixtures in recommended proportions as per IS:9103 to accelerate/ retard setting of concrete to improve durability and workability without impacting strength; including pumping of concrete to site of laying, curing, carriage of all leads: but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works upto plinth level - concrete of M25 grade with minimum cement content of 300 kg / cum (Note: The permissible utilization of recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate is 25% each) - (Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)	cum	300.00
4.20A.2.1	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate and recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate within the permissible utilization, Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions	cum	220.00

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	as per IS:9103 to accelerate/ retard setting of concrete to improve durability and workability without impacting strength; including pumping of concrete to site of laying, curing, carriage of all leads: but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works above plinth level and upto floor V level - concrete of M10 grade with minimum cement content of 220 kg / cum (Note: The permissible utilization of recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate is 100% each) - (Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)		
4.20A.2.2	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate and recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate within the permissible utilization, Portland Pozzolana / Ordinary Portland / Portland Slag cement,, admixtures in recommended proportions as per IS:9103 to accelerate/ retard setting of concrete to improve durability and workability without impacting strength; including pumping of concrete to site of laying, curing, carriage of all leads: but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works above plinth level and upto floor V level- concrete of M15 grade with minimum cement content of 240 kg / cum (Note: The permissible utilization of recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate is 25% each) - (Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)	cum	240.00
4.20A.2.3	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate and recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate within the permissible utilization, Portland	cum	270.00

4 . Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS:9103 to accelerate/ retard setting of concrete to improve durability and workability without impacting strength; including pumping of concrete to site of laying, curing, carriage of all leads: but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works above plinth level and upto floor V level- concrete of M20 grade with minimum cement content of 270 kg / cum (Note: The permissible utilization of recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate is 25% each) - (Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)		
4.20A.2.4	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate and recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate within the permissible utilization, Portland Pozzolana / Ordinary Portland / Portland Slag cement,, admixtures in recommended proportions as per IS:9103 to accelerate/ retard setting of concrete to improve durability and workability without impacting strength; including pumping of concrete to site of laying, curing, carriage of all leads: but excluding the cost of centering, shuttering and finishing as per direction of Engineer-in-charge - all works above plinth level upto floor V level - concrete of M25 grade with minimum cement content of 300 kg / cum (Note: The permissible utilization of recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate is 25% each) - (Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)	cum	300.00

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
5.1.2	Providing and laying in position specified grade of reinforced cement concrete , excluding the cost of centering , shuttering , finishing and reinforcement - All work upto plinth level 1:1.5:3 (1cement : 1.5 fine aggregate : 3 graded stone aggregate 20 mm nominal size)	cum	400.00
5.1.2A	Providing and laying in position specified grade of reinforced cement concrete , excluding the cost of centering , shuttering , finishing and reinforcement - All work upto plinth level 1:1.5:3 (1cement : 1.5 coarse sand including manufactured sand from recycled concrete aggregate (RCA) upto 20% : 3 graded stone aggregate 20 mm nominal size of recycled concrete aggregate (RCA) upto 20%)	cum	400.00
5.1.3	Providing and laying in position specified grade of reinforced cement concrete , excluding the cost of centering , shuttering , finishing and reinforcement - All work upto plinth level 1:2:4 (1cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size)	cum	320.00
5.1.3A	Providing and laying in position specified grade of reinforced cement concrete , excluding the cost of centering , shuttering , finishing and reinforcement - All work upto plinth level 1:2:4 (1cement : 2 coarse sand including manufactured sand from recycled concrete aggregate (RCA) upto 20% : 4 graded stone aggregate 20 mm nominal size of recycled concrete aggregate (RCA) upto 20%)	cum	320.00
5.2.2	Reinforced cement concrete work in walls (any thickness) , including attached pilasters, buttresses , plinth and string courses , fillets , columns , pillars , piers , abutments , posts and struts etc. upto floor five level excluding cost of centering , shuttering , finishing and reinforcement - 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20mm nominal size)	cum	400.00
5.2.2A	Reinforced cement concrete work in walls (any thickness) , including attached pilasters, buttresses , plinth and string courses , fillets , columns , pillars , piers , abutments , posts and struts etc. upto floor five level excluding cost of centering , shuttering , finishing and reinforcement - 1:1.5:3 (1 cement : 1.5 coarse sand including manufactured sand from recycled concrete aggregate (RCA) upto 20% : 3	cum	400.00

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	graded stone aggregate 20mm nominal size including recycled concrete aggregate (RCA) upto 20%)		
5.3	Reinforced cement concrete work in beams, suspended floors , roofs having slope up to 15degree landings , balconies , shelves , chajjas , lintels , bands , plain window sills , staircases and spiral stair cases above plinth level up to floor five level excluding the cost of centering ,shuttering, finishing and reinforcement , with 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20mm nominal size)	cum	400.00
5.3A	Reinforced cement concrete work in beams, suspended floors , roofs having slope up to 15degree landings , balconies , shelves , chajjas , lintels , bands , plain window sills , staircases and spiral stair cases above plinth level up to floor five level excluding the cost of centering ,shuttering, finishing and reinforcement , with 1:1.5:3 (1 cement : 1.5 coarse sand including manufactured sand from recycled concrete aggregate (RCA) upto 20% : 3 graded stone aggregate 20mm nominal sizeincluding recycled concrete aggregate (RCA) upto 20%)	cum	400.00
5.4	Providing and laying reinforced cement concrete in kerbs , steps and the like at near ground level excluding the cost of centering , shuttering , finishing and reinforcement with 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20 mm nominal size)	cum	400.00
5.4A	Providing and laying reinforced cement concrete in kerbs , steps and the like at near ground level excluding the cost of centering , shuttering , finishing and reinforcement with 1:1.5:3 (1 cement : 1.5 coarse sand including manufactured sand from recycled concrete (RCA) upto 20% : 3 graded stone aggregate 20 mm nominal size including recycled concrete aggregate (RCA) upto 20%)	cum	425.00
5.5	Reinforced cement concrete work in arches , archribs , domes , vaults , shells , folded plate and roofs having slope more than 15 degree upto floor five level excluding the cost of centering , shuttering , finishing and reinforcement with 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20mm nominal size)	cum	400.00
5.5A	Reinforced cement concrete work in arches ,	cum	400.00

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	archribs , domes , vaults , shells , folded plate and roofs having slope more than 15 degree upto floor five level excluding the cost of centering , shuttering , finishing and reinforcement with 1:1.5:3 (1 cement : 1.5 coarse sand including manufactured sand from recycled concrete aggregate (RCA) upto 20% : 3 graded stone aggregate 20mm nominal size including recycled concrete aggregate (RCA) upto 20%)		
5.6	Reinforced cement concrete work in chimneys , shafts , upto floor five level excluding the cost of centering , shuttering , finishing and reinforcement with 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20mm nominal size)	cum	400.00
5.6A	Reinforced cement concrete work in chimneys , shafts , upto floor five level excluding the cost of centering , shuttering , finishing and reinforcement with 1:1.5:3 (1 cement : 1.5 coarse sand including manufactured sand from recycled concrete aggregate (RCA) upto 20% : 3 graded stone aggregate 20mm nominal size recycled concrete aggregate (RCA) upto 20%)	cum	400.00
5.7	Reinforced cement concrete work in well - steining excluding the cost of centering , shuttering , finishing and reinforcement , with 1:1.5:3 (1cement : 1.5 fine aggregate : 3 graded stone aggregate 20 mm nominal size)	cum	400.00
5.7A	Reinforced cement concrete work in well - steining excluding the cost of centering , shuttering , finishing and reinforcement , with 1:1.5:3 (1cement : 1.5 coarse sand including manufactured sand from recycled concrete aggregate (RCA) upto 20% : 3 graded stone aggregate 20 mm nominal size including recycled concrete aggregate (RCA) upto 20%)	cum	400.00
5.8	Reinforced cement concrete work in vertical and horizontal fins individually or forming box louvers , facias and eaves boards above plinth level upto floor five level excluding the cost of centering , shuttering , finishing and reinforcement , with 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20 mm nominal size)	cum	400.00
5.8A	Reinforced cement concrete work in vertical and horizontal fins individually or forming box louvers , facias and eaves boards above plinth level upto floor five level excluding the cost of centering ,	cum	400.00

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	shuttering , finishing and reinforcement , with 1:1.5:3 (1 cement : 1.5 coarse sand including manufactured sand from recycled concrete aggregate (RCA) upto 20% : 3 graded stone aggregate 20 mm nominal size including recycled concrete aggregate (RCA) upto 20%)		
5.12	Providing , hoisting and fixing above plinth level upto floor five level precast reinforced cement concrete work in string courses, bands, copings, bed plates, anchor blocks, plain window sills and the like, including the cost of required centering, shuttering but excluding cost of reinforcement , with 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20mm nominal size)	cum	404.63
5.12A	Providing , hoisting and fixing above plinth level upto floor five level precast reinforced cement concrete work in string courses, bands, copings, bed plates, anchor blocks, plain window sills and the like, including the cost of required centering, shuttering but excluding cost of reinforcement , with 1:1.5:3 (1 cement : 1.5 coarse sand including manufactured sand from recycled concrete aggregate (RCA) upto 20% : 3 graded stone aggregate 20mm nominal size recycled concrete aggregate (RCA) upto 20%)	cum	405.08
5.13	Providing , hoisting and fixing upto floor five level precast reinforced cement concrete in small lintels not exceeding 1.5 m clear span upto floor five level , including the cost of required centering , shuttering but excluding the cost of reinforcement , with 1:1.5:3 (1cement : 1.5 fine aggregate : 3 graded stone aggregate 20 mm nominal size)	cum	400.00
5.13A	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in small lintels not exceeding 1.5m clear span up to floor five level, including the cost of required centering, shuttering but excluding the cost of reinforcement, with 1:1.5:3 (1 cement :1.5 coarse sand including manufactured sand from Recycled concrete aggregate (RCA) upto 20%: 3 graded stone aggregate 20 mm nominal size including Recycled Concrete Aggregate (RCA) upto 20%)	cum	400.00
5.14	Providing , hoisting and fixing above plinth level to floor five level precast reinforced cement concrete in mouldings as in cornices , windows sills etc. including setting in cement mortar 1:3 (1 cement : 3 fine aggregate) cost of required centering ,	cum	400.00

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	shuttering but excluding the cost of reinforcement, with 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20mm nominal size)		
5.14A	Providing, hoisting and fixing above plinth level up to floor five level precast reinforced cement concrete in mouldings as in cornices, windows sills etc. including setting in cement mortar 1:3 (1 cement : 3 coarse sand) cost of required centering, shuttering but excluding the cost of reinforcement, with 1:1.5:3 (1 cement : 1.5 coarse sand including manufactured sand from Recycled concrete aggregate (RCA) upto 20% : 3 graded stone aggregate 20 mm nominal size including Recycled concrete aggregate (RCA) upto 20%)	cum	425.00
5.15	Providing , transporting, hoisting and fixing above plinth level upto floor five level precast reinforced cement concrete in lintels, beams, and bressumers including setting in cement mortar 1:3 (1 cement : 3 fine aggregate) , cost of required centering and shuttering but excluding the cost of reinforcement with 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20 mm nominal size)	cum	400.00
5.15A	Providing, transporting, hoisting and fixing above plinth level up to floor five level precast reinforced cement concrete in lintels, beams and bressumers including setting in cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centering and shuttering but excluding the cost of reinforcement with, 1:1.5:3 (1 cement : 1.5 coarse sand including manufactured sand from Recycled Concrete Aggregate (RCA) upto 20% : 3 graded stone aggregate 20 mm nominal size including Recycled Concrete Aggregate (RCA) upto 20%).	cum	425.00
5.16	Providing ,transporting, hoisting and fixing upto floor five level precast reinforced cement concrete in shelves including setting in cement mortar 1:3 (1 cement : 3 fine aggregate) , cost of required centering , shuttering and finishing with neat cement punning on exposed surfaces but excluding the cost of reinforcement , with 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20 mm nominal size)	cum	515.43
5.16A	Providing, transporting, hoisting and fixing above plinth level up to floor five level precast reinforced cement concrete in shelevs including setting in cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centering and shuttering and finishing	cum	540.43

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	with neat cement punny on exposed surfaces but excluding the cost of reinforcement with, 1:1.5:3 (1 cement : 1.5 coarse sand including manufactured sand from Recycled Concrete Aggregate (RCA) upto 20% : 3 graded stone aggregate 20 mm nominal size including Recycled Concrete Aggregate (RCA) upto 20%).		
5.17	Providing ,transporting, hoisting and fixing above plinth level upto floor five level precast reinforced cement concrete in vertical and horizontal fins individually or forming box louvers setting in cement mortar 1:2 (1 cement : 2 fine aggregate) , including the cost of required centering , shuttering but excluding the cost of reinforcement , with 1:1.5:3 (1cement : 1.5 fine aggregate : 3 graded stone aggregate 20mm nominal size)	cum	400.00
5.17A	Providing, transporting, hoisting and fixing above plinth level up to floor five level precast reinforced cement concrete in vertical and horizontal fins individually or forming box louvers setting in cement mortar 1:2 (1 cement : 2 coarse sand),including the cost of required centering and shuttering but excluding the cost of reinforcement with, 1:1.5:3 (1 cement : 1.5 coarse sand including manufactured sand from Recycled Concrete Aggregate (RCA) upto 20% : 3 graded stone aggregate 20 mm nominal size including Recycled Concrete Aggregate (RCA) upto 20%).	cum	425.00
5.19	Encasing rolled steel sections, in beams and columns, with cement concrete 1:1.5:3 (1 cement :1.5 fine aggregate : 3 graded stone aggregate 20 mm nominal size) including centering and shuttering complete but excluding cost of reinforcement	cum	400.00
5.19A	Encasing rolled steel sections, in beams and columns, with cement concrete 1:1.5:3 (1 cement : 1.5 coarse sand including manufactured sand from Recycled Concrete Aggregate (RCA) upto 20%: 3 graded stone aggregate 20 mm nominal size Recycled Concrete Aggregate (RCA) upto 20%) including centering and shuttering complete but excluding cost of reinforcement.	cum	425.00
5.20	Encasing rolled steel section in grillages with cement concrete 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20mm nominal size) , including centering and shuttering but excluding cost of expanded metal and hangers	cum	400.00

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
5.20A	Encasing rolled steel section in grillages with cement concrete 1:1.5:3 (1 cement : 1.5 coarse sand including manufactured sand derived from Recycled Concrete Aggregate (RCA) upto 20% : 3 graded stone aggregate 20 mm nominal size Recycled Concrete Aggregate (RCA) upto 20%), including centering and shuttering but excluding cost of expanded metal and hangers.	cum	425.00
5.23	Smooth finishing of the exposed surface of RCC work with 6mm thick cement mortar 1:3 (1 cement : 3 fine aggregate)	sqm	3.67
5.24	Extra for rendering smooth the top of suspended floors , landings and staircases (treads and risers) with cement mortar 1:2 (1cement : 2 fine aggregate) including a floating coat of neat cement and protecting the surface with a layer of 7.5 cm of earth laid over 15 mm of fine aggregate in case of suspended floor and bricks laid in mud mortar in case of landings and steps including subsequent removal and cleanig of the same	sqm	4.17
5.27	Providing and filling in position bitumen mix filler of proportion 80 kg of hot bitumen , 1 kg of cement and 0.25 cubic metre of fine aggregate for expansion joints	cum	3.20
5.33.1.1	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work: using coarse aggregate and fine aggregate,Portand Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of Engineer-in-charge.- all works upto plinth level - Concrete of M25 grade with minimum cement content of 330 kg / cum - Note: Extra cement upto 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.	cum	330.00
5.33.1.2	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced	cum	350.00

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	cement concrete work: using coarse aggregate and fine aggregate, Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of Engineer-in-charge.- all works upto plinth level - Concrete of M30 grade with minimum cement content of 350 kg / cum - Note: Extra cement upto 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.		
5.33.1.3	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work: using coarse aggregate and fine aggregate, Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of Engineer-in-charge.- all works upto plinth level - Concrete of M35 grade with minimum cement content of 370 kg / cum - Note: Extra cement upto 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.	cum	370.00
5.33.1.4	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work: using coarse aggregate and fine aggregate, Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost	cum	390.00

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	of centering, shuttering, finishing and reinforcement as per direction of Engineer-in-charge.- all works upto plinth level - Concrete of M40 grade with minimum cement content of 390 kg / cum - Note: Extra cement upto 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.		
5.33.1.5	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work: using coarse aggregate and fine aggregate, Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of Engineer-in-charge.- all works upto plinth level - Concrete of M50 grade with minimum cement content of 410 kg / cum - Note: Extra cement upto 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.	cum	410.00
5.33.2.1	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work: using coarse aggregate and fine aggregate, Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of Engineer-in-charge.- all works above plinth level upto floor V level- Concrete of M25 grade with minimum cement content of 330 kg / cum - Note: Extra cement upto 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the	cum	330.00

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.		
5.33.2.2	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work: using coarse aggregate and fine aggregate, Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of Engineer-in-charge.- all works above plinth level upto floor V level- Concrete of M30 grade with minimum cement content of 350 kg / cum - Note: Extra cement upto 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.	cum	350.00
5.33.2.3	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work: using coarse aggregate and fine aggregate, Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of Engineer-in-charge.- all works above plinth level upto floor V level- Concrete of M35 grade with minimum cement content of 370 kg / cum - Note: Extra cement upto 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.	cum	370.00
5.33.2.4	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work: using coarse aggregate and fine aggregate, Portland Pozzolana / Ordinary	cum	390.00

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	Portland / Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of Engineer-in-charge.- all works above plinth level upto floor V level- Concrete of M40 grade with minimum cement content of 390 kg / cum - Note: Extra cement upto 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.		
5.33.2.5	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work: using coarse aggregate and fine aggregate, Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of Engineer-in-charge.- all works above plinth level upto floor V level- Concrete of M50 grade with minimum cement content of 410 kg / cum - Note: Extra cement upto 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.	cum	410.00
5.33A.1.1	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work; using coarse aggregate and fine aggregate and using recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate within permissible utilization of 20% each, Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete , to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing,	cum	330.00

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of Engineer-in-charge - All works upto plinth level - Concrete of M25 grade with minimum cement content of 330 kg / cum (Note: Extra cement upto 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)		
5.33A.2.1	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work; using coarse aggregate and fine aggregate and using recycled concrete aggregate (RCA) as coarse aggregate and fine aggregate within permissible utilization of 20% each, Portland Pozzolana / Ordinary Portland/ Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete , to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of Engineer-in-charge - All works above plinth level upto floor V level - Concrete of M25 grade with minimum cement content of 330 kg / cum (Note: Extra cement upto 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement)	cum	330.00
5.35	Add for using extra cement in the items of design mix over and above the specified cement content therein	quintal	100.00
5.36	Providing and placing in position precast reinforced cement concrete waffle units, square or rectangular as per design and shape for floors and roofs in 1:1 1/2 : 3 (1 cement : 1 1/2 fine aggregate : 3 graded stone aggregate 10mm nominal size) , including flush or deep ruled pointing at joints in cement mortar 1:2 (1 cement : 2 fine aggregate) , making necessary holes of required sizes for carrying through service lines etc., providing steel hooks for lifting etc, form work in precasting ,	cum	412.23

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	handling , hoisting , centering and erection complete for all floor levels but excluding the cost of reinforcement		
5.36A	Providing and placing in position precast reinforced cement concrete waffle units, square or rectangular as per design and shape for floors and roofs in 1:1.5:3 (1 cement;1.5 coarse sand including manufactured sand derived from recycled concrete aggregate (RCA) upto 20% :3 graded stone aggregate 10mm nominal size including recycled concrete aggregate (RCA) upto 20%, including flush or deep ruled pointing at joints in cement mortar 1:2 (1 cement :2 fine sand) , making necessary holes of required sizes for carrying through services lines etc., providing steel hooks for lifting etc, form work in precasting, handling,hoisting, centering and erection complete for all floor levels but excluding the cost of reinforcement	cum	568.87
5.40.1	Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work , using fly ash and cement content as per approved design mix , and manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads , having continuous agitated mixer , manufactured as per mix design of specified grade for reinforced cement concrete work including pumping of R.M.C from transit mixer to site of laying , excluding the cost of centering . Shuttering , finishing and reinforcement , including cost of admixtures in recommended proportions as per IS:9103 to accelerate / retard setting of concrete, improve workability without impairing strength and durability Note:- (1) Cement content considered in this item is @ 330 kg /cum. Excess / less cement used as per design mix is payable / recoverable separately (2) Fly ash conforming to grade I of IS:3812 (part - 1) only be used as part replacement of OPC as per IS: 456. Uniform blending with cement to be ensured in accordance with clause 5.2 and 5.2.1 of IS:456 -2000 in the items of BMC and RMC - All works upto plinth level	cum	330.00
5.40.2	Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work , using fly ash and cement content as per approved design mix , and manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads , having continuous	cum	330.00

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	agitated mixer , manufactured as per mix design of specified grade for reinforced cement concrete work including pumping of R.M.C from transit mixer to site of laying , excluding the cost of centering . Shuttering , finishing and reinforcement , including cost of admixtures in recommended proportions as per IS:9103 to accelerate / retard setting of concrete, improve workability without impairing strength and durability Note:- (1) Cement content considered in this item is @ 330 kg /cum. Excess / less cement used as per design mix is payable / recoverable separately (2) Fly ash conforming to grade I of IS:3812 (part - 1) only be used as part replacement of OPC as per IS: 456. Uniform blending with cement to be ensured in accordance with clause 5.2 and 5.2.1 of IS:456 -2000 in the items of BMC and RMC - All works above plinth and upto floor five level		
5.47.1	Providing and fixing in position factory made precast RCC M-40 door and window frame fixing with hold fast embedded in 1:3:6 concrete block, having excellent smooth finish as per IS: 6523 with reinforcement of 3 nos, 6mm dia main bars tied with 3mm M.S.stirrups placed @ 200 mm C/C and 6 numbers high strength polymer blocks of required size for fixing hinges including providing 6 no specially designed M.S.galvanised sleeves for accomodating 6mm dia fully threaded bolts for fixing hold fast on vertical members, providing suitable arrangement for receiving sliding door bolts and tower bolts etc all complete The frame shall be measured in running meter correct to two places of decimal. - Door frame 125 mm x 60 mm	metre	4.68
5.47.2	Providing and fixing in position factory made precast RCC M-40 door and window frame fixing with hold fast embedded in 1:3:6 concrete block, having excellent smooth finish as per IS: 6523 with reinforcement of 3 nos, 6mm dia main bars tied with 3mm M.S.stirrups placed @ 200 mm C/C and 6 numbers high strength polymer blocks of required size for fixing hinges including providing 6 no specially designed M.S.galvanised sleeves for accomodating 6mm dia fully threaded bolts for fixing hold fast on vertical members, providing suitable arrangement for receiving sliding door bolts and tower bolts etc all complete The frame shall be measured in running meter correct to two places of decimal. - Door frame 100 mm x 60 mm	metre	4.08
5.47.3	Providing and fixing in position factory made	metre	3.78

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	precast RCC M-40 door and window frame fixing with hold fast embedded in 1:3:6 concrete block, having excellent smooth finish as per IS: 6523 with reinforcement of 3 nos, 6mm dia main bars tied with 3mm M.S.stirrups placed @ 200 mm C/C and 6 numbers high strength polymer blocks of required size for fixing hinges including providing 6 no specially designed M.S.galvanised sleeves for accomodating 6mm dia fully threaded bolts for fixing hold fast on vertical members, providing suitable arrangement for receiving sliding door bolts and tower bolts etc all complete The frame shall be measured in running meter correct to two places of decimal. - Door frame 85 mm x 60 mm		
5.48.1	Providing and laying Reinforced cement concrete for construction of piers, abutments, portal frames, pier caps and bearing pedestals and seismic arresters over pier / abutment caps at all locations with specified grade using Ordinary Portland Cement (conforming to strength requirement of IS:8112) including the cost of steel centering and shuttering etc.complete including testing of materials etc. for casting pier & pier cap in one / two stage , necessary tools, plants, machinery and all related operations as required to complete the work as per drawings and Specifications with all leads, lifts and depths true to level and position but excluding the cost of providing reinforcement. Reinforcement shall be measured and paid separately. Note:- Cement content considered in this item is 480 kg /cum. Excess /less cement used as per design mix is payable / recoverable separately - Reinforced cement concrete M50 grade	cum	480.00
5.48.2	Providing and laying Reinforced cement concrete for construction of piers, abutments, portal frames, pier caps and bearing pedestals and seismic arresters over pier / abutment caps at all locations with specified grade using Ordinary Portland Cement (conforming to strength requirement of IS:8112) including the cost of steel centering and shuttering etc.complete including testing of materials etc. for casting pier & pier cap in one / two stage , necessary tools, plants, machinery and all related operations as required to complete the work as per drawings and Specifications with all leads, lifts and depths true to level and position but excluding the cost of providing reinforcement. Reinforcement shall be measured and paid separately. Note:- Cement content considered in this item is 480 kg /cum. Excess /less cement used	cum	480.00

5 . Reinforced Concrete Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	as per design mix is payable / recoverable separately - Reinforced cement concrete M60 grade		
5.49	Constructing cast-in situ RCC diaphragm wall by providing and laying machine batched, machine mixed, self compacting, ready mix reinforced cement concrete, tramie controlled, of M 30 grade using minimum 400 kg cement per cum of concrete including providing and mixing required admixtures in recommended proportions as per IS : 9103, as approved by the Engineer-in-charge, for achieving 150- 200mm slump, for diaphragm wall having thickness as per approved structural design not exceeding 600 mm, in pannels of required depth and lengths as per approved drawing, including constructing necessary guide walls as required and as specified including boring in all kinds of soils and rocks, including working in or under water and / or liquid mud, in foul conditions and pumping or bailing out of water and removing slush, including disposal of earth/ rock / slush etc. for all leads and all lifts, including preparing, providing and re-circulating bentonite slurry in the trench as and when required for all depths, including agitating bentonite slurry during trenching etc., providing and fixing stop ends or form tubes, upto the required depth of diaphragm wall including extracting the same after casting, including chipping off the bentonite adulterated concrete or unsound concrete up to the cut off level for obtaining the sound concrete, dressing undulations on the exposed face of diaphragm wall after excavation by chipping / chiseling etc. including filling the depression/ cavities with sound concrete etc. complete and as per direction of Engineer-in-charge, including providing recess for bearing plates and fixing insert boxes for inclined rock anchors etc. complete as per the specifications and approved design and as per direction of Engineer-in-charge, but excluding the cost of reinforcement and inserts. (rates include cost of all inputs of labour, material and T & P, cost of handling, lifting & placing in position the reinforcement cage in the trench, including the additional cost of welding the reinforcement bars etc. involved in the work and all other incidental expenditure for completing the work as per direction of Engineer-in-charge), However, the actual area of the diaphragm wall, correct to two places of decimal, from design bottom level to the design cut off level (including portion anchored in the rock upto the design bottom level) only shall be measured for payment.	cum	467.33

6 . Brick Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
6.1.1	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 3.5 in foundation and plinth in - cement mortar 1:4 (1 cement : 4 fine aggregate)	cum	95.00
6.1.2	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 3.5 in foundation and plinth in - cement mortar 1:6 (1 cement : 6 fine aggregate)	cum	62.50
6.2.1	Brick work with common burnt clay modular bricks of class designation 7.5 in foundation and plinth in - cement mortar 1:4 (1 cement : 4 fine aggregate)	cum	83.60
6.2.2	Brick work with common burnt clay modular bricks of class designation 7.5 in foundation and plinth in - cement mortar 1:6 (1 cement : 6 fine aggregate)	cum	55.00
6.3.1	Brick work with common burnt clay machine moulded perforated bricks of class designation 12.5 conforming to IS : 2222 in superstructure above plinth level upto floor five level in cement mortar 1:6 (1 cement : 6 fine aggregate) - with F.P.S (non - modular) bricks	cum	62.50
6.3.2	Brick work with common burnt clay machine moulded perforated bricks of class designation 12.5 conforming to IS : 2222 in superstructure above plinth level upto floor five level in cement mortar 1:6 (1 cement : 6 fine aggregate) - with modular bricks	cum	55.00
6.4.1	Brick work with common burnt clay F.P.S (non modular) bricks of class designation 3.5 in superstructure above plinth level upto floor five level in all shapes and sizes in - cement mortar 1:4 (1 cement : 4 fine aggregate)	cum	95.00
6.4.2	Brick work with common burnt clay F.P.S (non modular) bricks of class designation 3.5 in superstructure above plinth level upto floor five level in all shapes and sizes in - cement mortar 1:6 (1 cement : 6 fine aggregate)	cum	62.50
6.7	Providing half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 3.5 in cement mortar 1:3 (1 cement : 3 fine aggregate) in superstructure for closing cavity 5 to 7.5 cm wide in cavity wall complete with 10 cm / 11.4 cm wide bitumen felt type 3 grade 1	metre	3.86
6.8	Brick work 7 cm thick common burnt clay F.P.S.	sqm	9.23

6 . Brick Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	(non modular) brick of class designation 3.5 in cement mortar 1:3 (1cement : 3 fine aggregate) in superstructure above plinth level and upto floor five level		
6.9	Brick work in plain arches in superstructure above plinth level and upto floor five level including centering and shuttering complete for span upto 6 metres with common burnt clay F.P.S. (non modular) bricks of class designation 3.5 in cement mortar 1:3 (1 cement : 3 fine aggregate)	cum	127.50
6.10	Brick work in gauged arches in superstruture above plinth level and upto floor five level in cement mortar 1:3 (1 cement : 3 fine aggregate) including centering and shuttering complete , for span upto 6 metre with common burnt clay F.P.S.(non modular) bricks of class designation 3.5	cum	127.50
6.12.1	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 3.5 in foundations and plinth in - cement mortar 1:3 (1 cement :3 fine aggregate)	sqm	14.28
6.12.2	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 3.5 in foundations and plinth in - cement mortar 1:4 (1 cement :4 fine aggregate)	sqm	10.64
6.13.1	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 3.5 in superstructure above plinth level upto floor V level - cement mortar 1:3 (1 cement : 3 fine aggregate)	sqm	14.28
6.13.2	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 3.5 in superstructure above plinth level upto floor V level - cement mortar 1:4 (1 cement : 4 fine aggregate)	sqm	10.64
6.16.1	Tlie brick masonry with common burnt clay tile bricks of class designation 10 in foundation and plith in - cement mortar 1:4 (1cement : 4 fine aggregate)	cum	152.00
6.16.2	Tlie brick masonry with common burnt clay tile bricks of class designation 10 in foundation and plith in - cement mortar 1:6 (1cement : 6 fine aggregate)	cum	100.00
6.17	Tile brick masonry with common burnt clay machine moulded tile bricks of class designation 12.5 conforming to IS: 2690(Part I) in foundation and	cum	100.00

6 . Brick Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	plinth in cement mortar 1:6 (1 cement : 6 fine aggregate)		
6.18	Tile brick masonry with common burnt clay F.P.S.(non modular) tile bricks of class designation 10 in superstructure above plinth level upto floor V level in cement mortar 1:6 (1 cement : 6 fine aggregate)	cum	100.00
6.20	Tile brick masonry with common burnt clay F.P.S (non modular) tile bricks of class designation 10 in plain arch work in superstructure above plinth and upto floor five level in cement mortar 1.:4 (1 cement :4 fine aggregate) including centering and shuttering complete	cum	133.00
6.21	Tile brick masonry with common burnt clay F.P.S (non modular) tile bricks of class designation 10 in gauged arch work in superstructure above plinth and upto floor five level in cement mortar 1.:4 (1 cement :4 fine aggregate) including centering and shuttering complete	cum	133.00
6.22	Tile brick masonry work 5 cm thick with common burnt clay F.P.S.(non modular) tile bricks of class designation 10 in cement mortar 1:3 (1 cement : 3 fine aggregate) in superstructure above plinth and upto floor five level	sqm	7.65
6.23	Honey -comb brick work 10/11.4 cm thick with common burnt clay bricks of class designation 3.5 in super structure above plinth level upto floor V level with cement mortar 1:4 (1 cement : 4 fine aggregate)	sqm	6.56
6.26.1	Brick work with common burnt clay selected F.P.S (non -modualr) bricks of class designation 3.5 in exposed brick work including making horizontal and vertical grooves 10 mm wide 12 mm deep complete in cement mortar 1:6 (1 cement : 6 fine aggregate) - from ground level upto plinth level	cum	62.50
6.26.2	Brick work with common burnt clay selected F.P.S (non -modualr) bricks of class designation 3.5 in exposed brick work including making horizontal and vertical grooves 10 mm wide 12 mm deep complete in cement mortar 1:6 (1 cement : 6 fine aggregate) - above plinth level and upto floor V level	cum	62.50
6.27.1	Brick work with common burnt clay modular bricks of class designation 7.5 in exposed brick work including making horizontal and vertical grooves	cum	55.00

6 . Brick Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	10mm wide 12mm deep complete in cement mortar 1:6 (1 cement : 6 fine aggregate) - from ground level upto plinth level		
6.27.2	Brick work with common burnt clay modular bricks of class designation 7.5 in exposed brick work including making horizontal and vertical grooves 10mm wide 12mm deep complete in cement mortar 1:6 (1 cement : 6 fine aggregate) - above plinth level and upto floor V level	cum	55.00
6.28.1	Brick work with common burnt clay machine moulded modular bricks of class designation 12.5 in exposed brick work including making horizontal and vertical grooves 10mm wide 12mm deep complete in cement mortar 1:6 (1 cement : 6 fine aggregate) - from ground level upto plinth level	cum	55.00
6.28.2	Brick work with common burnt clay machine moulded modular bricks of class designation 12.5 in exposed brick work including making horizontal and vertical grooves 10mm wide 12mm deep complete in cement mortar 1:6 (1 cement : 6 fine aggregate) - above plinth level and upto floor V level	cum	55.00
6.29.1	Brick work with common burnt clay machine moulded F.P.S.(non modular) bricks of class designation 12.5 in exposed brick work including making horizontal and vertical grooves 10mm wide 12mm deep complete in cement mortar 1:6 (1 cement : 6 fine aggregate) - from ground level upto plinth level	cum	62.50
6.29.2	Brick work with common burnt clay machine moulded F.P.S.(non modular) bricks of class designation 12.5 in exposed brick work including making horizontal and vertical grooves 10mm wide 12mm deep complete in cement mortar 1:6 (1 cement : 6 fine aggregate) - above plinth level and upto floor V level	cum	62.50
6.30.1	Brick work with common burnt clay machine moulded perforated F.P.S. (non modular bricks of class designation 12.5 conforming IS : 2222 in exposed brickwork including making horizontal and vertical grooves 10mm wide 12 mm deep complete in cement mortar 1:6 (1 cement : 6 fine aggregate) - from ground level upto plinth level	cum	62.50
6.30.2	Brick work with common burnt clay machine moulded perforated F.P.S. (non modular bricks of class designation 12.5 conforming IS : 2222 in	cum	62.50

6 . Brick Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	exposed brickwork including making horizontal and vertical grooves 10mm wide 12 mm deep complete in cement mortar 1:6 (1 cement : 6 fine aggregate) - above plinth level and upto floor V level		
6.31.1	Brick work with common burnt clay machine moulded perforated modular bricks of class designation 12.5 conforming to IS:2222 in exposed brick work including making horizontal and vertical grooves 10 mm wide 12 mm deep complete in cement mortar 1:6 (1 cement :6 fine aggregate)- from ground level upto plinth level	cum	55.00
6.31.2	Brick work with common burnt clay machine moulded perforated modular bricks of class designation 12.5 conforming to IS:2222 in exposed brick work including making horizontal and vertical grooves 10 mm wide 12 mm deep complete in cement mortar 1:6 (1 cement :6 fine aggregate)- above plinth level and upto floor V level	cum	55.00
6.32.1	Brick work with clay flyash F.P.S. (non modular) bricks of class designation 3.5 in superstructure above plinth level upto floor five level in - cement mortar 1:4 (1 cement : 4 fine aggregate)	cum	95.00
6.32.2	Brick work with clay flyash F.P.S. (non modular) bricks of class designation 3.5 in superstructure above plinth level upto floor five level in - cement mortar 1:6 (1 cement : 6 fine aggregate)	cum	62.50
6.34.1	Brick work with non modular fly ash bricks conforming to IS:12894 , class designation 10 average compressive strength in super struture above plinth level upto floor V level in - cement mortar 1:4 (1 cement : 4 fine aggregate)	cum	83.60
6.34.2	Brick work with non modular fly ash lime bricks conforming to IS:12894 , class designation 10 average compressive strength in super struture above plinth level upto floor V level in - cement mortar 1:6 (1 cement : 6 fine aggregate)	cum	55.00
6.35.1	Brick work with modular calcium silicate bricks machine moulded conforming to IS -4139 , class designation 10 average compressive strength in super structure above plinth level upto floor V level in - cement moratr 1:4 (1 cement : 4 fine aggregate)	cum	83.60
6.35.2	Brick work with modular calcium silicate bricks machine moulded conforming to IS -4139 , class designation 10 average compressive strength in	cum	55.00

6 . Brick Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	super structure above plinth level upto floor V level in - cement moratr 1:6 (1 cement : 6 fine aggregate)		
6.36.1	Brick work with modular extruded burnt fly ash clay sewer bricks (conforming to IS : 4885) in foundation and plinth - cement mortar 1:4 (1 cement : 4 fine aggregate)	cum	83.60
6.37	Brick work with modular extruded burnt fly ash clay sewer bricks (conforming to IS : 4885) in arches in foundation and plinth in cement mortar 1:3 (1 cement : 3 fine aggregate)	cum	127.50
6.38	Providing and laying autoclaved aerated concrete (AAC) blocks masonry with 100mm /125 mm thick with grade - 1 AAC blocks of density 551 to 650 kg/cum conforming to IS:2185 (Part 3) in superstructure above plinth level upto floor five level in cement mortar 1:4 (1 cement : 4 fine aggregate) . The rate includes providing and placing in position 2 nos 6 mm dia M.S.bars at every third course of masonry work.	cum	57.00
6.44	Brick edging 7cm wide 11.4 cm deep to plinth protection with common burnt clay F.P.S. (non modular) bricks of class designation 3.5 including grouting with cement mortar 1:4 (1 cement : 4 fine aggregate)	metre	0.14
6.45.1	Half brick masonry with non modular fly ash lime Gypsum bricks (FALG bricks) of class designation 10, conforming to IS : 12894 , in super structure above plinth and upto floor V level - cement mortar 1:3 (1 cement : 3 fine aggregate)	sqm	14.28
6.45.2	Half brick masonry with non modular fly ash lime Gypsum bricks (FALG bricks) of class designation 10, conforming to IS : 12894 , in super structure above plinth and upto floor V level - cement mortar 1:4 (1 cement : 4 fine aggregate)	sqm	10.64

7 . Stone Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
7.1.1	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1cement : 6 fine aggregate : 12 graded stone aggregate 20mm nominal size) upto plinth level with - cement mortar 1:6 (1 cement : 6 fine aggregate)	cum	82.50
7.2.1	Random rubble masonry with hard stone in superstructure above plinth level and upto floor five level, including leveling up with cement concrete 1:6:12 (1cement : 6 fine aggregate : 12 graded stone aggregate 20mm nominal size) at window sills, ceiling level and the like - cement mortar 1:6 (1 cement : 6 fine aggregate)	cum	82.50
7.6.1	Coursed rubble masonry (first sort) with hard stone in foundation and plinth with - cement mortar 1:6 (1 cement : 6 fine aggregate)	cum	75.00
7.7.1	Coursed rubble masonry (second sort) with hard stone in foundation and plinth with - cement mortar 1:6 (1 cement : 6 fine aggregate)	cum	75.00
7.8.1	Coursed rubble masonry with hard stone (first or second sort) in superstructure above plinth level and upto floor five level - Masonry work (first sort), in cement mortar 1:6 (1 cement : 6 fine aggregate)	cum	75.00
7.8.2	Coursed rubble masonry with hard stone (first or second sort) in superstructure above plinth level and upto floor five level - Masonry work (second sort), in cement mortar 1:6 (1 cement : 6 fine aggregate)	cum	75.00
7.26	Providing and fixing stone dowels 10x5x2.50 cm cut to double wedge shape as per design in cement mortar 1:2 (1 cement : 2 fine aggregate) including making the necessary chases	each	0.68
7.28.1.1	Providing and fixing sloping chajja of stone 40 mm thick and upto 80 cm wide beyond the wall as measured along the slope in cement mortar 1:4 (1 cement : 4 fine aggregate) with 12mm diameter anchoring steel bar, 45 cm long, fixed in each stone and supported on and including with brick cove in cement mortar 1:4 (1 cement :4 fine aggregate) including pointing in cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade - red sand stone - with common burnt clay F.P.S (non modular) bricks of class designation 3.5	sqm	3.92

7 . Stone Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
7.28.2.1	Providing and fixing sloping chajja of stone 40 mm thick and upto 80 cm wide beyond the wall as measured along the slope in cement mortar 1:4 (1 cement : 4 fine aggregate) with 12mm diameter anchoring steel bar, 45 cm long, fixed in each stone and supported on and including with brick cove in cement mortar 1:4 (1 cement :4 fine aggregate) including pointing in cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade - white sand stone - with common burnt clay F.P.S (non modular) bricks of class designation 3.5	sqm	3.92
7.38.1.1	Stone tile work for wall lining upto 10m height with special adhesive over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 fine aggregate), including pointing in white cement with an admixture of pigment to match the stone shade - 8mm thick (mirror polished and machine cut edge) - granite stone of any colour and shade	sqm	10.44
7.38.1.2	Stone tile work for wall lining upto 10m height with special adhesive over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 fine aggregate), including pointing in white cement with an admixture of pigment to match the stone shade - 8mm thick (mirror polished and machine cut edge) - raj nagar plain white marble / udaipur green marble / zebra black marble	sqm	10.44
7.100.1	Laterite Stone Masonry for building work using neatly dressed Laterite Stone of size 30x20x20 cm in cement mortar 1:4 (1 cement : 4 fine aggregate) for foundation and basement	cum	58.00
7.100.2	Laterite Stone Masonry for Well steining work using neatly dressed Laterite Stone of size 30x20x20 cm in cement mortar 1:4 (1 cement : 4 fine aggregate) for foundation and basement	cum	58.00

8 . Cladding Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
8.1.1.1	Marble work gang saw cut (polished and machine cut) of thickness 18mm for wall lining (veneer work), backing filled with a grout of average 12mm thick in cement mortar 1:3 (1 cement : 3 fine aggregate), including pointing with white cement mortar 1:2 (1 white cement : 2 marble dust) with an admixture of pigment to match the marble shade (To be secured to the backing by means of cramps, which shall be paid for separately) - Raj nagar plain white marble / Udaipur green marble / Zebra black marble - area of slab upto 0.50 sqm	sqm	8.16
8.1.1.2	Marble work gang saw cut (polished and machine cut) of thickness 18mm for wall lining (veneer work), backing filled with a grout of average 12 mm thick in cement mortar 1:3 (1 cement : 3 fine aggregate) , including pointing with white cement mortar 1:2 (1 white cement : 2 marble dust) with an admixture of pigment to match the marble shade (To be secured to the backing by means of cramps, which shall be paid for separately) - Raj nagar plain white marble / Udaipur green marble / Zebra black marble - area of slab over 0.50 sqm	sqm	7.34
8.2.1.1	Providing and fixing 18mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations, of required size, approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement : 4 fine aggregate), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels - Raj nagar plain white marble / Udaipur green marble / Zebra black marble - area of slab upto 0.50 sqm	sqm	9.12
8.2.1.2	Providing and fixing 18mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations, of required size, approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement : 4 fine aggregate), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels - Raj nagar plain white marble / Udaipur green marble / Zebra black marble - area of slab over 0.50 sqm	sqm	9.12

8 . Cladding Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
8.2.2.1	Providing and fixing 18mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations, of required size, approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement : 4 fine aggregate), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels - Granite stone slab of colour black, cherry/ ruby red - area of slab upto 0.50 sqm	sqm	9.12
8.2.2.2	Providing and fixing 18mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations, of required size, approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement : 4 fine aggregate), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels - Granite stone slab of colour black, cherry/ ruby red - area of slab over 0.50 sqm	sqm	9.12
8.2.3.1	Providing and fixing 18mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations, of required size, approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement : 4 fine aggregate), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels - Granite stone slab of all colour and texture except black, cherry/ruby red - area of slab upto 0.50 sqm	sqm	9.12
8.2.3.2	Providing and fixing 18mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations, of required size, approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement : 4 fine aggregate), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels - Granite stone slab of all colour and texture except black, cherry/ruby red -	sqm	9.12

8 . Cladding Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	area of slab over 0.50 sqm		
8.4	Extra for fixing marble / granite stone , over and above corresponding basic item, in facia and drops of width upto 150 mm with epoxy resin based adhesive , including cleaning etc.complete	metre	1.27
8.7.1	Providing and fixing cramps of required size & shape in RCC / CC / Brick masonry backing with cement mortar 1:2 (1 cement : 2 fine aggregate), including drilling necessary hole in stones and embedding the cramp in the hole (fastener to be paid separately) - Gunmetal cramps	kg	0.66
8.7.2	Providing and fixing cramps of required size & shape in RCC / CC / Brick masonry backing with cement mortar 1:2 (1 cement : 2 fine aggregate), including drilling necessary hole in stones and embedding the cramp in the hole (fastener to be paid separately) - stainless steel cramps	kg	0.73
8.9.1.1	Stone tile (polished) work for wall lining over 12mm thick bed of cement mortar 1:3 (1 cement : 3 fine aggregate) and cement slurry @ 3.3 kg/sqm including pointing in white cement complete - 8mm thick - Raj nagar plain white marble / udaipur green marble / zebra black marble	sqm	10.44
8.9.1.2	Stone tile (polished) work for wall lining over 12mm thick bed of cement mortar 1:3 (1 cement : 3 fine aggregate) and cement slurry @ 3.3 kg/sqm including pointing in white cement complete - 8mm thick - granite of any colour and shade	sqm	10.44
8.11.1	Providing and fixing machine cut, mirror / eggshell polished, marble stone work for wall lining (veneer work) including dado, skirting , risers of steps etc., in required design and pattern wherever required, stones of different finished surface texture, on 12mm (average) thick cement mortar 1:3 (1 cement : 3 fine aggregate) laid and jointed with white cement slurry @ 3.3 kg /sqm including pointing with white cement slurry admixed with pigment of matching shade, including rubbing,curing,polishing etc. All complete as per Architectural drawings and as per direction of Engineer-in-charge -18 mm thick Italian marble stone slab, Perlato,Rosso verona,fire red or dark emperadore etc	sqm	8.16
8.14.1.1	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar	sqm	9.18

8 . Cladding Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - Red sand stone - exposed face fine dressed with rough backing 70mm thick		
8.14.1.2	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - Red sand stone - exposed face fine dressed with rough backing 60mm thick	sqm	9.18
8.14.1.3	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - Red sand stone - exposed face fine dressed with rough backing 50mm thick	sqm	9.18
8.14.1.4	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - Red sand stone - exposed face fine dressed with rough backing 40mm thick	sqm	9.18
8.14.1.5	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing	sqm	9.18

8 . Cladding Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	and the sides by means of cramps and pins which shall be paid for separately) - Red sand stone - exposed face fine dressed with rough backing 30mm thick		
8.14.2.1	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - Red sand stone - exposed face machine cut and table rubbed with rough backing -70mm thick	sqm	9.18
8.14.2.2	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - Red sand stone - exposed face machine cut and table rubbed with rough backing -60mm thick	sqm	9.18
8.14.2.3	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - Red sand stone - exposed face machine cut and table rubbed with rough backing -50mm thick	sqm	9.18
8.14.2.4	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - Red sand stone - exposed face machine cut and table rubbed with rough backing -40mm thick	sqm	9.18

8 . Cladding Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
8.14.2.5	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - Red sand stone - exposed face machine cut and table rubbed with rough backing -30mm thick	sqm	9.18
8.14.3.1	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - White sand stone - exposed face fine dressed with rough backing - 70mm thick	sqm	9.18
8.14.3.2	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - White sand stone - exposed face fine dressed with rough backing - 60mm thick	sqm	9.18
8.14.3.3	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - White sand stone - exposed face fine dressed with rough backing - 50mm thick	sqm	9.18
8.14.3.4	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing	sqm	9.18

8 . Cladding Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - White sand stone - exposed face fine dressed with rough backing - 40mm thick		
8.14.3.5	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - White sand stone - exposed face fine dressed with rough backing - 30mm thick	sqm	9.18
8.14.4.1	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - White sand stone - exposed face machine cut and table rubbed with rough backing - 70mm thick	sqm	9.18
8.14.4.2	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - White sand stone - exposed face machine cut and table rubbed with rough backing - 60mm thick	sqm	9.18
8.14.4.3	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which	sqm	9.18

8 . Cladding Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	shall be paid for separately) - White sand stone - exposed face machine 50mm thick		
8.14.4.4	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - White sand stone - exposed face machine 40mm thick	sqm	9.18
8.14.4.5	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - White sand stone - exposed face machine 30mm thick	sqm	9.18
8.14.5.1	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - Gang saw cut stone - 30 mm thick white sand stone	sqm	9.18
8.14.5.2	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade ; (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - Gang saw cut stone - 30 mm thick red sand stone	sqm	9.18
8.15	Providing and fixing stainless steel cramps of required size and shape for anchoring stone wall lining to the backing or securing adjacent stones in stone wall lining in cement mortar 1:2 (1 cement ; 2 fine aggregate), including making the necessary	kg	0.73

8 . Cladding Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	chases in stone and holes in walls wherever required		
8.16	Providing and fixing copper pins 7.5cm long 6mm diameter for securing adjacent stones in stone wall lining in cement mortar 1:2 (1 cement : 2 fine aggregate), including making the necessary chases	each	0.68
8.17	Wall lining work upto 10m height with Dholpur stone 40mm thick rough facing on the exposed surface with stone strips of minimum length 300mm and required width, including embedding every tenth layer and bottom most layer in masonry or concrete after making necessary chases of size 75x75 mm and by providing layer of 75mm thick strips i/c ruled pointing in cement mortar 1:2 *1 white cement : 2 stone dust) with an admixture of pigment to match the shade of stone complete as per direction of Engineer-in-charge	sqm	18.14
8.18.1.1	Syone work (machine cut edges in veneer work) for wall lining upto 10m height, backing filled with a grout of 12mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) and jointed with cement mortar 1:2 (1 cement:2 stone dust) including grinding with hand grinder on joints, rubbing and polishing complete (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) - Prepolished kota stone slabs on exposed face - 25mm thick	sqm	7.34
8.21	Providing and fixing structural steel frame (for dry cladding with 30mm thick gang saw cut with machine cut edges sand stone) on walls at all heights using M.S. square / rectangular tube in the required pattern as per architectural drawing, including cost of cutting, bending, welding etc. The frame work shall be fixed to the wall with the help of M.S. brackets / lugs of angle iron / flats etc.which shall be welded to the frame and embedded in brick wall with cement concrete block 1:2:4 (1 cement: 2 fine aggregate: 4 graded stone aggregate 20mm nominal size) of size 300x230x300mm, including cost of necessary centering and shuttering and with approved expansion hold fasteners on CC/RCC surface, including drilling necessary holes. Approved cramps/ pins etc.shall be welded to the frame work to support stone cladding, the steel work will be given a priming coat of Zinc primer as approved by Engineer-in-charge and painted with two or more coats of epoxy paint (shop drawings shall be submitted by the contractor to the engineer-	kg	1.05

8 . Cladding Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	in-charge for approval before execution). The frame work shall be fixed in true horizontal & vertical lines/planes.(Only structural steel frame work shall be measured for the purpose of payment, stainless steel cramps shall be paid for separately and nothing extra shall be paid)		
8.31	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS:15622(thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved, in skirting, risers of steps and dados, over 12mm thick bed of cement mortar 1:3 (1 cement : 3 fine aggregate) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete	sqm	10.44

9 . Wood and PVC Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
9.53	Providing 40 X 5 mm flat iron hold fast 400 mm long including fixing to frame with 10 mm diameter bots, nuts and wooden plugs and embeddings in cement concrete block 300 x100 x 150 mm 1:3:6 mix (1 cement : 3 fine aggregate : 6 graded stone aggregate 20mm nominal size)	each	1.10

10 . Steel Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
10.10.1	Fixing standard steel glazed doors, windows and ventilators in walls, including fixing of float glass panes with glazing clips and special metal -sash putty of approved make , or metal beading with screws, (only steel windows, glass panes cut to size and glazing clips or metal beading with screws, shall be supplied by department free of cost - Fixing with 15x3 mm lugs 10cm long embedded in cement concrete block 15 x 10x10 cm of C.C 1:3:6 (1 cement : 3 fine aggregate : 6 graded stone aggregate 20 mm nominal size)	kg	0.13
10.13.1	Providing and fixing T-iron frames for doors, windows and ventilators of mild steel Tee-sections , joints mitred and welded , including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer - Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 cement : 3 fine aggregate : 6 graded stone aggregate 20mm nominal size)	kg	0.11
10.15.1	Providing and fixing M.S.Tubular frames for doors, windows, ventilators and cupboard with rectangular / L-type sections ,made of 1.60 mm thick M.S.sheet , joints mitred,welded and grinded finish, with profiles of required size, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer - fixing with 15x3 mm lugs 10cm long embedded in cement concrete block 15x10x10 cm of C.C.1:3:6 (1 cement : 3 fine aggregate: 6 graded stone aggregate 20mm nominal size)	kg	0.28

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
11.1.1	Brick on edge flooring with bricks of class designation 3.5 on a bed of 12mm cement mortar , including filling the joints with same mortar , with common burnt clay non modular bricks - cement mortar 1:4 (1 cement : 4 fine aggregate)	sqm	18.49
11.1.2	Brick on edge flooring with bricks of class designation 3.5 on a bed of 12mm cement mortar , including filling the joints with same mortar , with common burnt clay non modular bricks - cement mortar 1:6 (1 cement : 6 fine aggregate)	sqm	12.85
11.3.1	Cement concrete flooring 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc .complete - 40mm thick with 20mm nominal size stone aggregate	sqm	17.00
11.4	52 mm thick cement concrete flooring with concrete hardener topping , under layers 40mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20mm nominal size) and top layer 12 mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6mm nominal size) by volume,hardening compound mixed @ 2 litre per 50 kg of cement or as per manufacturer's specification . This includes cost of cement slurry, but excluding the cost of nosing of steps etc.complete	sqm	23.10
11.5	62 mm thick cement concrete flooring with concrete hardener topping, under layer 50 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) and top layer 12 mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate , 6mm nominal size) by volume, hardening compound mixed @ 2 litre per 50 kg of cement or as per manufactures specifications. This includes cost of cement slurry , but excluding the cost of nosing of steps etc.complete	sqm	26.30
11.6.1	Cement plaster skirting upto 30 cm height , with cement mortar 1:3 (1 cement : 3 fine aggregate) , finished with a floating coat of neat cement - 18mm thick	sqm	13.99
11.7	Cement concrete pavement with 1:2:4 (1 cement : 2 fine aggregate: 4 graded stone aggregate 20 mm nominal size) including finishing complete	cum	320.00

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
11.9.1	40 mm thick marble chips flooring rubbed and polished to granolithic finish , under layer 34 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size) and top layer 6mm thick with white, black, chocolate ,grey,yellow or green marble chips of sizes from 1mm to 4 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume including cement slurry etc.complete - dark shade pigment with ordinary cement	sqm	16.95
11.9.2	40 mm thick marble chips flooring rubbed and polished to granolithic finish , under layer 34 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size) and top layer 6mm thick with white, black, chocolate ,grey,yellow or green marble chips of sizes from 1mm to 4 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume including cement slurry etc.complete - light shade pigment with white cement	sqm	12.90
11.9.3	40 mm thick marble chips flooring rubbed and polished to granolithic finish , under layer 34 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size) and top layer 6mm thick with white, black, chocolate ,grey,yellow or green marble chips of sizes from 1mm to 4 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume including cement slurry etc.complete - medium shade pigment with 50 % white cement and 50% ordinary cement	sqm	14.92
11.9.4	40 mm thick marble chips flooring rubbed and polished to granolithic finish , under layer 34 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size) and top layer 6mm thick with white, black, chocolate ,grey,yellow or green marble chips of sizes from 1mm to 4 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume including cement slurry etc.complete - white cement without any pigment	sqm	12.90

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
11.9.5	40 mm thick marble chips flooring rubbed and polished to granolithic finish , under layer 34 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size) and top layer 6mm thick with white, black, chocolate ,grey,yellow or green marble chips of sizes from 1mm to 4 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume including cement slurry etc.complete - light shade pigment with ordinary cement	sqm	16.95
11.9.6	40 mm thick marble chips flooring rubbed and polished to granolithic finish , under layer 34 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size) and top layer 6mm thick with white, black, chocolate ,grey,yellow or green marble chips of sizes from 1mm to 4 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume including cement slurry etc.complete - ordinary cement without any pigment	sqm	16.95
11.10.1	40mm thick marble chips flooring, rubbed and polished to granolithic finish,under layer 31 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate12.5mm nominal size) and top layer 9 mm thick with white , black , chocolate ,grey, yellow or green marble chips of sizes from 4 mm to 7 mm nominal size , laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder : 7 marble chips) by volume , including cement slurry etc.complete - dark shade pigment with ordinary cement	sqm	17.83
11.10.2	40mm thick marble chips flooring, rubbed and polished to granolithic finish,under layer 31 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate12.5mm nominal size) and top layer 9 mm thick with white , black , chocolate ,grey, yellow or green marble chips of sizes from 4 mm to 7 mm nominal size , laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder : 7 marble chips) by volume , including cement slurry etc.complete - light shade pigment with white cement	sqm	12.05

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
11.10.3	40mm thick marble chips flooring, rubbed and polished to granolithic finish, under layer 31 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5mm nominal size) and top layer 9 mm thick with white , black , chocolate , grey, yellow or green marble chips of sizes from 4 mm to 7 mm nominal size , laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder : 7 marble chips) by volume , including cement slurry etc. complete - medium shade pigment with 50% white cement and 50% ordinary cement	sqm	14.94
11.10.4	40mm thick marble chips flooring, rubbed and polished to granolithic finish, under layer 31 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5mm nominal size) and top layer 9 mm thick with white , black , chocolate , grey, yellow or green marble chips of sizes from 4 mm to 7 mm nominal size , laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder : 7 marble chips) by volume , including cement slurry etc. complete - white cement without any pigment	sqm	12.05
11.10.5	40mm thick marble chips flooring, rubbed and polished to granolithic finish, under layer 31 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5mm nominal size) and top layer 9 mm thick with white , black , chocolate , grey, yellow or green marble chips of sizes from 4 mm to 7 mm nominal size , laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder : 7 marble chips) by volume , including cement slurry etc. complete - light shade pigment with ordinary cement	sqm	17.83
11.10.6	40mm thick marble chips flooring, rubbed and polished to granolithic finish, under layer 31 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5mm nominal size) and top layer 9 mm thick with white , black , chocolate , grey, yellow or green marble chips of sizes from 4 mm to 7 mm nominal size , laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder : 7 marble chips) by volume , including cement slurry etc. complete - ordinary cement without any pigment	sqm	17.83

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
11.11.1	40 mm thick marble chips flooring , rubbed and polished to granolithic finish , under layer 28 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size) and top layer 12mm thick with white, black,chocolate, grey yellow or green marble chips of size from 7mm to 10mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 2:3 (2 cement marble powder mix : 3 marble chips) by volume, including cement slurry etc.complete - dark shade pigment with ordinary cement	sqm	19.07
11.11.2	40 mm thick marble chips flooring , rubbed and polished to granolithic finish , under layer 28 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size) and top layer 12mm thick with white, black,chocolate, grey yellow or green marble chips of size from 7mm to 10mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 2:3 (2 cement marble powder mix : 3 marble chips) by volume, including cement slurry etc.complete - light shade pigment with white cement	sqm	10.97
11.11.3	40 mm thick marble chips flooring , rubbed and polished to granolithic finish , under layer 28 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size) and top layer 12mm thick with white, black,chocolate, grey yellow or green marble chips of size from 7mm to 10mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 2:3 (2 cement marble powder mix : 3 marble chips) by volume, including cement slurry etc.complete - medium shade pigment with 50 % white cement and 50% ordinary cement	sqm	15.02
11.11.4	40 mm thick marble chips flooring , rubbed and polished to granolithic finish , under layer 28 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size) and top layer 12mm thick with white, black,chocolate, grey yellow or green marble chips of size from 7mm to 10mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 2:3 (2 cement marble powder mix : 3 marble chips) by volume, including cement slurry etc.complete -	sqm	23.47

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	white cement without any pigment		
11.11.5	40 mm thick marble chips flooring , rubbed and polished to granolithic finish , under layer 28 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size) and top layer 12mm thick with white, black,chocolate, grey yellow or green marble chips of size from 7mm to 10mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 2:3 (2 cement marble powder mix : 3 marble chips) by volume, including cement slurry etc.complete - light shade pigment with ordinary cement	sqm	19.07
11.11.6	40 mm thick marble chips flooring , rubbed and polished to granolithic finish , under layer 28 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size) and top layer 12mm thick with white, black,chocolate, grey yellow or green marble chips of size from 7mm to 10mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 2:3 (2 cement marble powder mix : 3 marble chips) by volume, including cement slurry etc.complete - ordinary cement without any pigment	sqm	19.07
11.12.1.1	Marble chips skirting upto 30 cm height , rubbed and polished to granolithic finish, top layer 6mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from smallest to 4 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume - 18mm thick with under layer 12mm thick in cement plaster 1:3 (1 cement :3 fine aggregate) - dark shade pigment with ordinary cement	sqm	12.92
11.12.1.2	Marble chips skirting upto 30 cm height , rubbed and polished to granolithic finish, top layer 6mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from smallest to 4 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume - 18mm thick with under layer 12mm thick in cement plaster 1:3 (1 cement :3 fine aggregate) - light shade pigment with white cement	sqm	8.87

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
11.12.1.3	Marble chips skirting upto 30 cm height , rubbed and polished to granolithic finish, top layer 6mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from smallest to 4 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume - 18mm thick with under layer 12mm thick in cement plaster 1:3 (1 cement :3 fine aggregate) -medium shade pigment with 50% white cement and 50% ordinary cement	sqm	10.89
11.12.1.4	Marble chips skirting upto 30 cm height , rubbed and polished to granolithic finish, top layer 6mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from smallest to 4 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume - 18mm thick with under layer 12mm thick in cement plaster 1:3 (1 cement :3 fine aggregate) - white cement without any pigment	sqm	8.87
11.12.1.5	Marble chips skirting upto 30 cm height , rubbed and polished to granolithic finish, top layer 6mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from smallest to 4 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume - 18mm thick with under layer 12mm thick in cement plaster 1:3 (1 cement :3 fine aggregate) - light shade pigment with ordinary cement	sqm	12.92
11.12.1.6	Marble chips skirting upto 30 cm height , rubbed and polished to granolithic finish, top layer 6mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from smallest to 4 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume - 18mm thick with under layer 12mm thick in cement plaster 1:3 (1 cement :3 fine aggregate) - ordinary cement without any pigment	sqm	12.92
11.15.1	Crazy marble stone flooring, including filling the gaps with light shade pigment with white cement marble powder mixture (3 parts of white cement : 1 part of marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 white, black, or	sqm	12.00

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	white and black marble chips of sizes from 1 mm to 4mm nominal size by volume),with under layer 25 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size), including rubbing,polishing and cement slurry etc.complete - 18mm thick crazy marble stone white , black or as specified		
11.22.1.1	Tile work in skirting, risers of steps and dado upto 2 m height ,over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 fine aggregate) and jointed with grey cement slurry @ 3.3 kg / sqm, including pointing in white cement mixed with pigment of matching shade complete - marble tiles (polished) Raj nagar - 8mm thick	sqm	10.44
11.23.1	Marble stone flooring with 18mm thick marble stone as per sample of marble approved by Engineer-in-charge, over 20mm (average) thick base of cement mortar 1:4 (1 cement :4 fine aggregate) laid and jointed with grey cement slurry including rubbing and polishing complete with - Makrana white second quality	sqm	13.51
11.23.2	Marble stone flooring with 18mm thick marble stone as per sample of marble approved by Engineer-in-charge over 20mm (average) thick base of cement mortar 1:4 (1 cement :4 fine aggregate) laid and jointed with grey cement slurry including rubbing and polishing complete with - Raj nagar plain	sqm	13.51
11.23.3	Marble stone flooring with 18mm thick marble stone as per sample of marble approved by Engineer-in-charge over 20mm (average) thick base of cement mortar 1:4 (1 cement :4 fine aggregate) laid and jointed with grey cement slurry including rubbing and polishing complete with -Agaria white	sqm	13.51
11.23.4	Marble stone flooring with 18mm thick marble stone as per sample of marble approved by Engineer-in-charge over 20mm (average) thick base of cement mortar 1:4 (1 cement :4 fine aggregate) laid and jointed with grey cement slurry including rubbing and polishing complete with - Black zebra	sqm	13.51
11.23.5	Marble stone flooring with 18mm thick marble stone as per sample of marble approvedby Engineer-in-charge over 20mm (average) thick base of cement mortar 1:4 (1 cement :4 fine aggregate) laid and jointed with grey cement slurry including rubbing and polishing complete with - Udaipur green marble	sqm	13.51

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
11.23.6	Marble stone flooring with 18mm thick marble stone as per sample of marble approved by Engineer-in-charge over 20mm (average) thick base of cement mortar 1:4 (1 cement : 4 fine aggregate) laid and jointed with grey cement slurry including rubbing and polishing complete with - Pink plain marble	sqm	13.51
11.26.1	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1:4 (1 cement : 4 fine aggregate) - 25 mm thick	sqm	14.91
11.27	Kota stone slabs 20 mm thick in risers of steps , skirting , dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement : 3 fine aggregate) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete	sqm	13.74
11.28.1	40 mm thick fine dressed stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement : 5 fine aggregate) with joints finished flush - Red sand stone	sqm	7.75
11.28.2	40 mm thick fine dressed stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement : 5 fine aggregate) with joints finished flush - White sand stone	sqm	7.75
11.29.1	40 mm thick fine dressed stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement : 5 fine aggregate), including pointing with cement mortar 1:2 (1 cement : 2 stone dust) with an admixture of pigment to match the shade of stone - Red sand stone	sqm	9.31
11.29.2	40 mm thick fine dressed stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement : 5 fine aggregate), including pointing with cement mortar 1:2 (1 cement : 2 stone dust) with an admixture of pigment to match the shade of stone - White sand stone	sqm	9.31
11.30.1	40 mm thick rubbed stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement : 5 fine aggregate) with joints 3 mm thick, side buttered with cement mortar 1:2 (1 cement : 2 stone dust) admixed with pigment to match the shade of stone and pointing with same mortar - red sand stone	sqm	9.31

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
11.30.2	40 mm thick rubbed stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement : 5 fine aggregate) with joints 3 mm thick, side buttered with cement mortar 1:2 (1 cement : 2 stone dust) admixed with pigment to match the shade of stone and pointing with same mortar - white sand stone	sqm	9.31
11.37	Providing and laying ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in colours such as white, Ivory, Grey, Fume red brown, laid on 20mm thick cement mortar 1:4 (1 cement : 4 fine aggregate), jointing with grey cement slurry @ 3.3 kg/ sqm including pointing the joints with white cement and matching pigment etc., complete	sqm	12.42
11.37A	Providing and fixing 1st quality ceramic glazed floor tiles conforming to IS:15622 (thickness to be specified by the manufacturer) of approved make in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-charge, in skirting, risers of steps and dados over 12mm thick bed of cement mortar 1:3 (1 cement : 3 fine aggregate) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete	sqm	10.44
11.38	Providing and laying ceramic glazed floor tiles of size 300 x 300 mm (thickness to be specified by the manufacturer) , of 1st quality conforming to IS :15622, of approved make , in all colours, shades, except white , ivory, grey, fume red brown, laid on 20 mm thick bed of cement mortar 1:4 (1 cement : 4 fine aggregate), jointing with grey cement slurry @ 3.3 kg /sqm including pointing the joints with white cement and matching pigments etc., complete	sqm	12.42
11.39	Providing and laying rectified glazed ceramic flooring tiles of size 300x300 mm or more (thickness to be specified by the manufacturer), of 1st quality conforming to IS :15622 , of approved make , in colours white, ivory, grey, fume red brown, laid on 20mm thick cement mortar 1:4 (1 cement : 4 fine aggregate) ,jointing with grey cement slurry @ 3.3 kg per sqm including grouting the joints with white cement and matching pigments etc., complete	sqm	12.42
11.40	Providing and laying rectified glazed ceramic floor tiles of size 300x300 mm or more (thickness to be	sqm	12.42

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	specified by the manufacturer) of 1st quality conforming to IS:15622 of approved make in all colours , shades, except white, ivory, grey, fume red brown, laid on 20mm thick cement mortar 1:4 (1 cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including pointing the joints with white cement and matching pigments etc., complete		
11.41.1	Providing and laying vitrified floor tiles of size 500x500 mm (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622 of approved make , in all colours and shades, laid on 20 mm thick cement mortar 1:4 (1 cement : 4 fine aggregate) ,jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching pigments etc., complete - size of tile 500x500mm	sqm	12.42
11.41.2	Providing and laying vitrified floor tiles of size 600 x600 mm (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622 of approved make , in all colours and shades, laid on 20 mm thick cement mortar 1:4 (1 cement : 4 fine aggregate) ,jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching pigments etc., complete - size of tile 600x600mm	sqm	12.42
11.41.3	Providing and laying vitrified floor tiles of size 800 x 800 mm (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622 of approved make , in all colours and shades, laid on 20 mm thick cement mortar 1:4 (1 cement : 4 fine aggregate) , jointing with grey cement slurry @3.3 kg per sqmincluding grouting the joints with white cement and matching pigments etc., complete - size of tile 800x800mm	sqm	12.42
11.41.4	Providing and laying vitrified floor tiles of size 1000 x1000 mm (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622 of approved make , in all colours and shades, laid on 20 mm thick cement mortar 1:4 (1 cement : 4 fine aggregate) ,jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching pigments etc., complete - size of tile 1000x1000mm	sqm	12.42

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
11.41A.1.1	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622, of approved brand and manufacturer, in all colours and shade, laid on 20mm thick cement mortar 1:4 (one cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching the pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge. Clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily - Double charge vitrified tiles polished finish of size - size of tile 600x600mm	sqm	12.42
11.41A.1.2	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622, of approved brand and manufacturer, in all colours and shade, laid on 20mm thick cement mortar 1:4 (one cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching the pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge. Clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily - Double charge vitrified tiles polished finish of size - size of tile 800x800mm	sqm	12.42
11.41A.1.3	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622, of approved brand and manufacturer, in all colours and shade, laid on 20mm thick cement mortar 1:4 (one cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching the pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge. Clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily - Double charge vitrified tiles polished finish of size - size of tile 600x1200mm	sqm	12.42
11.41A.1.4	Providing and laying Vitrified tiles in floor in different	sqm	12.42

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	sizes (thickness to be specified by the manufacturere) wirh water absorption less than 0.08% and conforming to IS:15622, of approved brand and manufacturer, in all colours and shade, laid on 20mm thick cement mortar 1:4 (one cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching the pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge. Clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily - Double charge vitrified tiles polished finish of size - size of tile 800x1600mm		
11.41A.1.5	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturere) wirh water absorption less than 0.08% and conforming to IS:15622, of approved brand and manufacturer, in all colours and shade, laid on 20mm thick cement mortar 1:4 (one cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching the pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge. Clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily - Double charge vitrified tiles polished finish of size - size of tile 1000x1000mm	sqm	12.42
11.41A.2.1	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturere) wirh water absorption less than 0.08% and conforming to IS:15622, of approved brand and manufacturer, in all colours and shade, laid on 20mm thick cement mortar 1:4 (one cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching the pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge. Clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily - Glazed vitrified floor tiles polished finish of size - size of tile 600x600mm	sqm	12.42
11.41A.2.2	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the	sqm	12.42

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	manufacturere) wirh water absorption less than 0.08% and conforming to IS:15622, of approved brand and manufacturer, in all colours and shade, laid on 20mm thick cement mortar 1:4 (one cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching the pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge. Clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily - Glazed vitrified floor tiles polished finish of size - size of tile 600x1200mm		
11.41A.2.3	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specifed by the manufacturere) wirh water absorption less than 0.08% and conforming to IS:15622, of approved brand and manufacturer, in all colours and shade, laid on 20mm thick cement mortar 1:4 (one cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching the pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge. Clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily - Glazed vitrified floor tiles polished finish of size - size of tile 800x800mm	sqm	12.42
11.41A.2.4	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specifed by the manufacturere) wirh water absorption less than 0.08% and conforming to IS:15622, of approved brand and manufacturer, in all colours and shade, laid on 20mm thick cement mortar 1:4 (one cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching the pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge. Clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily - Glazed vitrified floor tiles polished finish of size - size of tile 800x1200mm	sqm	12.42
11.41A.2.5	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specifed by the manufacturere) wirh water absorption less than	sqm	12.42

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	0.08% and conforming to IS:15622, of approved brand and manufacturer, in all colours and shade, laid on 20mm thick cement mortar 1:4 (one cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching the pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge. Clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily - Glazed vitrified floor tiles polished finish of size - size of tile 1200x1200mm		
11.41A.3.1	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622, of approved brand and manufacturer, in all colours and shade, laid on 20mm thick cement mortar 1:4 (one cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching the pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge. Clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily - Glazed vitrified tiles Matt / Antiskid finish of size - size of tile 600x600mm	sqm	12.42
11.41A.3.2	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622, of approved brand and manufacturer, in all colours and shade, laid on 20mm thick cement mortar 1:4 (one cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching the pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge. Clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily - Glazed vitrified tiles Matt / Antiskid finish of size - size of tile 600x1200mm	sqm	12.42
11.41A.3.3	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622, of approved	sqm	12.42

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	brand and manufacturer, in all colours and shade, laid on 20mm thick cement mortar 1:4 (one cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching the pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge. Clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily - Glazed vitrified tiles Matt / Antiskid finish of size - size of tile 800x800mm		
11.41A.3.4	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622, of approved brand and manufacturer, in all colours and shade, laid on 20mm thick cement mortar 1:4 (one cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching the pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge. Clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily - Glazed vitrified tiles Matt / Antiskid finish of size - size of tile 800x1200mm	sqm	12.42
11.41A.3.5	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622, of approved brand and manufacturer, in all colours and shade, laid on 20mm thick cement mortar 1:4 (one cement : 4 fine aggregate) jointing with grey cement slurry @3.3 kg per sqm including grouting the joints with white cement and matching the pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge. Clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily - Glazed vitrified tiles Matt / Antiskid finish of size - size of tile 1200x1200mm	sqm	12.42
11.42	Deduct for not using 20mm thick cement mortar 1:4 (1 cement : 4 fine aggregate) bedding in laying of floor tiles and jointing with grey cement slurry @ 3.3 kg / sqm	sqm	12.42

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
11.44	Crazy ceramic tile flooring , with under layer 12mm thick cement mortar 1:4 (1 cement : 4 fine aggregate) with joints not exceeding 5mm , including filling the gaps with ordinary cement mixture & mixing with synthetic polyester fibre, triangular in shape having specific gravity of 1.34 to 1.40, cross section size ranging from 10 to 40 micron & length upto 6mm, mixing fibre @ 125 grams per 50 kg of cement in cement mortar , including providing and mixing water proofing material in mortar @ 1kg per 50kg of cement , all complete as per direction of Engineer-in-charge	sqm	10.46
11.46.1	Providing and laying vitrified tiles of size 500 x500 mm (thickness to be specified by manufacturer), with water absorption less than 0.08% and conforming to IS : 15622 , of approved make , in all colours & shade, in skirting ,riser of steps , over 12 mm thick bed of cement mortar 1:3 (1 cement :3 fine aggregate), jointing with grey cement slurry @3.3 kg per sqm including grouting the joint with white cement & matching pigments etc.complete - size of tile 500x500mm	sqm	10.44
11.46.2	Providing and laying vitrified tiles of size 500 x500 mm (thickness to be specified by manufacturer), with water absorption less than 0.08% and conforming to IS : 15622 , of approved make , in all colours & shade, in skirting ,riser of steps , over 12 mm thick bed of cement mortar 1:3 (1 cement :3 fine aggregate), jointing with grey cement slurry @3.3 kg per sqm including grouting the joint with white cement & matching pigments etc.complete - size of tile 600x600mm	sqm	10.44
11.46.3	Providing and laying vitrified tiles of size 500 x500 mm (thickness to be specified by manufacturer), with water absorption less than 0.08% and conforming to IS : 15622 , of approved make , in all colours & shade, in skirting ,riser of steps , over 12 mm thick bed of cement mortar 1:3 (1 cement :3 fine aggregate), jointing with grey cement slurry @3.3 kg per sqm including grouting the joint with white cement & matching pigments etc.complete - size of tile 800x800mm	sqm	10.44
11.46.4	Providing and laying vitrified tiles of size 500 x500 mm (thickness to be specified by manufacturer), with water absorption less than 0.08% and conforming to IS : 15622 , of approved make , in all colours & shade, in skirting ,riser of steps , over 12 mm thick bed of cement mortar 1:3 (1 cement :3	sqm	10.44

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	fine aggregate), jointing with grey cement slurry @3.3kg per sqm including grouting the joint with white cement & matching pigments etc.complete - size of tile 1000x1000mm		
11.46A	Providing and fixing glazed screen printed border tile 75mm wide having thickness 5mm, of approved quality & make , in all shades ,design and prints, in dado, over 12mm thick bed of cement mortar 1:3 (1 cement : 3 fine aggregate) and jointing with grey cement slurry @ 3.3kg/sqm including pointing with white cement mixed with pigment of matching shade , all complete as approved by Engineer-in-charge	metre	0.78
11.49A	Providing and laying full body vitrified tiles in floor of minimum thickness 15mm with water absorption less than 0.06% and conforming to IS:15622, of approved make brand and manufacturer, laid on 20mm thick base cement mortar 1:4 (1 cement : 4 fine aggregate) jointing with grey cement slurry @3.3kg per sqm including grouting the joints with white cement and matching pigments etc. The slab must be cut with the zero chipping diamond cutter only. Laying of slab will be done with the help of notch trowel, wedge, clips of required thickness, vaccum cups for lifting, levelling system and rubber mallet for placing the slab gently and easily. Size of tile 800x2400mm of all colours and shades	sqm	12.12
11.51.1	Providing and laying machine cut, mirror polished , italian marble stone flooring laid in required pattern in liner portion of the building all complete as per architectural drawings, with 18mm thick stone slab laid over 20mm (average) thick base of cement mortar 1:4 (1 cement : 4 fine aggregate) laid and jointed with white cement slurry @ 4.4kg/sqm including pointing with white cement slurry admixed with pigment to match the marble shade including rubbing,curing and polishing etc., all complete as specified and as per direction of Engineer-in-charge- 18 mm thick Italian marble stone slab, Perlato,Rosso verona, Fire red or dark emperadore etc	sqm	8.51
11.52.1	Providing and laying machine cut , mirror polished marble stone flooring , in required design (simple geometrical, abstract etc) and in patterns in combination with italian marble stones of different colours ,shades and finished surface texture etc.,in linear portions of the building all complete as per the architectural drawings , with 18mm thick stone	sqm	8.51

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	slab laid over 20mm (average) thick base of cement mortar 1:4 (1 cement : 4 fine aggregate) laid and jointed with white cement slurry @ 4.4 kg / sqm including pointing with white cement slurry admixed with pigment to match the marble shade including rubbing,curing and polishing etc. all complete as specified as per direction of Engineer-in-charge - 18mm thick italian marble stone slab , Perlato,Rosso verona, Fire red or dark emperadore etc		
11.55.1	Providing and laying flamed finish Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as per direction of Engineer-in-charge :Flamed finish granite stone slab Jet Black, Cherry Red, Elite Brown, Cat Eye or equivalent.	sqm	13.51
11.56.1	Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18mm thick stone slab over 20mm (average) thick base of cement mortar 1:4 (1 cement : 4 fine aggregate) laid and joined with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as per direction of Engineer-in-charge - Polished granite stone slab of colour black, cherry/ ruby red or equivalent	sqm	13.51
11.56.2	Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18mm thick stone slab over 20mm (average) thick base of cement mortar 1:4 (1 cement : 4 fine aggregate) laid and joined with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as per direction of Engineer-in-charge - Polished granite stone slab of all colour and texture except black, cherry /ruby red	sqm	30.46

11 . Flooring

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
11.61	Providing and laying 22 mm thick factory made pre-polished cement concrete flooring tiles of required colour and design over 20 mm thick cement mortar 1:4 (1 cement : 4 sand) and jointed with cement slurry mixed with an admixture of pigment to match the shade of the tile.	sqm	17.31

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
12.19.1	Providing and laying brick tiles over mumty roofs grouted with cement mortar 1:3 (1 cement : 3 fine aggregate) mixed with 2% of integral water proofing compound by weight of cement , over 12 mm layer of cement mortar 1:3 (1 cement : 3 fine aggregate) and finished neat - with common burnt clay F.P.S (non modular) bricks tiles class designation 10	sqm	9.13
12.20	Providing and laying pressed clay tiles (as per approved pattern 18mm nominal thickness of approved size) on roofs jointed with cement mortar 1:4 (1 cement : 4 fine aggregate) mixed with 2% integral water proofing compound , laid over a bed of 20mm thick cement mortar 1:4 (1 cement : 4 fine aggregate) and finished neat complete	sqm	9.92
12.21.1	Providing gola 75x75 mm in cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 stone aggregate 10mm and down gauge) including finishing with cement mortar 1:3 (1 cement : 3 fine aggregate) as per standard design - In 75x75 mm deep chase	metre	3.46
12.22	Making khurras 45x45cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate of 20mm nominal size) over P.V.C. sheet 1m x1m x 400 micron , finished with 12 mm cement plaster 1:3 (1cement : 3 fine aggregate) and a coat of neat cement , rounding the edges, making and finishing the outlet complete	each	5.89
12.23.1.1	Providing sand stone slab for roofing and laying them in cement mortar 1:4 (1 cement : 4 fine aggregate) over wooden karries or RCC battens or structural steel sections (Karries or battens or structural steel sections to be paid separately). Including pointing the ceiling joints with cement mortar 1:3 (1 cement : 3 fine aggregate) complete - Red sand stone slab - 40 to 50 mm thick	sqm	0.74
12.23.2.1	Providing sand stone slab for roofing and laying them in cement mortar 1:4 (1 cement : 4 fine aggregate) over wooden karries or RCC battens or structural steel sections (Karries or battens or structural steel sections to be paid separately). Including pointing the ceiling joints with cement mortar 1:3 (1 cement : 3 fine aggregate) complete - White sand stone slab - 40 to 50 mm thick	sqm	0.74
12.55	Providing and fixing heat resistant terrace tiles	sqm	12.91

12 . Roofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Req'd. per unit in Kg</i>
	(300mm x 300mm x 20mm) with SRI (solar refractive index) > 78, solar reflection > 0.70 and initial emittance > 0.75 on waterproof and sloped surface of terrace, laid on 20 mm thick cement sand mortar in the ratio of 1:4 (1 cement : 4 fine aggregate) and grouting the joints with mix of white cement & marble powder in ratio of 1:1, including rubbing and polishing of the surface upto 3 cuts complete , including providing skirting upto 150mm height along the parapet walls in the same manner		

13 . Finishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
13.1.1	12mm cement plaster of mix -1:4 (1 cement : 4 fine aggregate)	sqm	5.47
13.1.1A	12mm thick plastering using with volcanic glass sand and cement with mix ratio of 50kg of cement with 10kg of volcanic glass sand with 29 liters of water	sqm	6.33
13.1.2	12mm cement plaster of mix -1:6 (1 cement : 6 fine aggregate)	sqm	3.60
13.2.1	15mm cement plaster on the rough side of single or half brick wall of mix - 1:4 (1cement : 4 fine aggregate)	sqm	6.54
13.2.2	15mm cement plaster on the rough side of single or half brick wall of mix - 1:6 (1cement : 6 fine aggregate)	sqm	4.30
13.3.1	20mm cement plaster of mix -1:4 (1 cement : 4 fine aggregate)	sqm	8.51
13.3.2	20mm cement plaster of mix -1:6 (1 cement : 6 fine aggregate)	sqm	5.60
13.4.1	12 mm cement plaster of mix 1:4 (1 cement :4 course sand)	sqm	5.47
13.4.2	12 mm cement plaster of mix 1:6 (1 cement :6 course sand)	sqm	3.60
13.5.1	15mm cement plaster on rough side of single or half brick wall of mix - 1:4 (1 cement : 4 fine aggregate)	sqm	6.54
13.5.2	15mm cement plaster on rough side of single or half brick wall of mix - 1:6 (1 cement : 6 fine aggregate)	sqm	4.30
13.6.1	20mm cement plaster of mix 1:4 (1 cement : 4 fine aggregate)	sqm	8.51
13.6.2	20mm cement plaster of mix 1:6 (1 cement : 6 fine aggregate)	sqm	5.60
13.7.1	12mm cement plaster finished with a floating coat of neat cement of mix - 1:3 (1 cement :3 fine aggregate)	sqm	9.34
13.7.2	12mm cement plaster finished with a floating coat of neat cement of mix - 1:4 (1 cement :4 fine aggregate)	sqm	7.47

13 . Finishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	aggregate)		
13.8.1	15 mm cement plaster on rough side of single or halfbrick wall finished with a floating coat of neat cement of mix - 1:3 (1 cement : 3 fine aggregate)	sqm	10.77
13.8.2	15 mm cement plaster on rough side of single or halfbrick wall finished with a floating coat of neat cement of mix - 1:4 (1 cement : 4 fine aggregate)	sqm	8.54
13.8.3	12 mm cement plaster of mix 1:5 (1 cement : 5 fine aggregate)	sqm	4.46
13.9.1	cement plaster 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement - 12mm cement plaster	sqm	9.34
13.9.2	cement plaster 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement - 20mm cement plaster	sqm	13.42
13.9.2A	15 mm cement plaster on the rough side of single or half brick wall of mix 1:5 (1 cement : 5 fine aggregate)	sqm	5.33
13.9.3	24mm thick flooring in roof usinv volcanic glass sand and cement with a mix ratio of 50kg of cement with 10kg of volicnic glass sand mixed with 29 liters of water	sqm	12.82
13.10	15 mm cement plaster 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement on the rough side of single or halfbrick wall	sqm	10.77
13.11	18mm cement plaster in two coats under layer 12mm thick cement plaster 1:5 (1 cement : 5 fine aggregate) finished with a top layer 6mm thick cement plaster 1:6 (1 cement : 6 fine aggregate)	sqm	6.26
13.12	18 mm cement plaster in two coats under layer 12mm thick cement plaster 1:5 (1 cement : 5 fine aggregate) and a top layer 6mm thick cement plaster 1:3 (1cement : 3 fine aggregate) finished rough with sponge	sqm	8.14
13.13	12mm cement plaster 1:2 (1cement :2 stone dust)	sqm	9.79
13.14	15mm cement plaster 1:2 (1 cement : 2 stone dust) on the rough side of single or half brick wall	sqm	11.70
13.15	20mm cement plaster 1:2 (1 cement : 2 stone dust)	sqm	15.23

13 . Finishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
13.16.1	6mm cement plaster of mix 1:3 (1 cement : 3 fine aggregate)	sqm	3.67
13.17	6 mm cement plaster 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement and thick coat of lime wash on top of walls when dry for bearing of R.C.C. slabs and beams	sqm	5.67
13.18	Neat cement punning	sqm	2.20
13.19.1	Rough cast plaster upto 10 m height above ground level with a mixture of sand and gravel or crushed stone from 6mm to 10mm nominal size, dashed over and including the fresh plaster in two layers, under layer 12mm cement plaster 1:4 (1 cement : 4 fine aggregate) and top layer 10mm cement plaster 1:3 (1 cement : 3 fine aggregate) mixed with 10% finely grounded hydrated lime by volume of cement - Ordinary cement finish using ordinary cement	sqm	11.59
13.20	Pebble dash plaster upto 10m height above ground level with a mixture of washed pebble or crushed stone 6mm to 12.5mm nominal size, dashed over and including fresh plaster in two layers under layer 12mm cement plaster 1:4 (1 cement : 4 fine aggregate) and top layer 10mm cement plaster with cement mortar 1:3(1cement : 3 fine aggregate) mixed with 10% finely grounded hydrated lime by volume of cement	sqm	11.59
13.31.1	Pointing on brick work or brick flooring with cement mortar 1:3 (1 cement : 3 fine aggregate) - flush / ruled/ struck or weathered pointing	sqm	1.53
13.31.2	Pointing on brick work or brick flooring with cement mortar 1:3 (1 cement : 3 fine aggregate) - raised and cut pointing	sqm	2.35
13.32.1	Pointing on tile brick work with cement mortar 1:3 (1 cement : 3 fine aggregate) - flush/ruled/struck or weathered pointing	sqm	2.35
13.33.1	Pointing on stone work with cement mortar 1:3 (1 cement : 3 fine aggregate) - flush/ruled pointing	sqm	1.17
13.33.2	Pointing on stone work with cement mortar 1:3 (1 cement : 3 fine aggregate) - raised and cut pointing	sqm	1.94
13.35.1	Pointing on stone slab ceiling with cement mortar 1:2 (1 cement : 2 fine aggregate) - flush / ruled pointing	sqm	1.02

13 . Finishing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
13.72	Washed stone grit plaster on exterior walls height upto 10 metre above ground level, in two layers , under layer 12mm cement plaster 1:4 (1 cement : 4 fine aggregate), furrowing the under layer with scratching tool, applying cement slurry on the under layer @ 2 kg of cement per square metre, top layer 15mm cement plaster 1:1/2:2 (1 cement : 1/2 fine aggregate : 2 stone chipping 10mm nominal size), in panels with groove all around as per approved pattern including scrubbing and washing the top layer with brushes and water to expose the stone chippings , complete as per specification and direction of Engineer-in-charge (payment for providing grooves shall be made separately)	sqm	17.47

14 . Repairs To Buildings

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
14.1.1	Repairs to plaster of thickness 12mm to 20mm in patches of area 2.5 sq.metres and under including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete including disposal of rubbish to the dumping ground as per direction of Engineer-in-charge - with cement mortar 1:4 (1 cement : 4fine aggregate)	sqm	6.95
14.1.2	Repairs to plaster of thickness 12mm to 20mm in patches of area 2.5 sq.metres and under including cutiing the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete including disposal of rubbish to the dumping ground lead as per direction of Engineer-in-charge - with cement mortar 1:4 (1 cement : 4 fine aggregate)	sqm	6.95
14.2.1	Fixing chowkhats in existing opening including embedding chowkhats in floors or walls cutting masonry for holdfasts embedding hold fasts in cement concrete blocks of size 15 x10x10 cm , with cement concrete 1:3:6 (1cement : 3 fine aggregate : 6 graded stone aggregate 20mm nominal size) painting two coats of approved wood preservative to sides of chowkhats and making good the damages to walls and floors as required complete including disposal of rubbish to the dumping ground as per direction of Engineer-in-charge- Door chowkhats	each	9.10
14.2.2	Fixing chowkhats in existing opening including embedding chowkhats in floors or walls cutting masonry for holdfasts embedding hold fasts in cement concrete blocks of size 15 x10x10 cm , with cement concrete 1:3:6 (1cement : 3 fine aggregate : 6 graded stone aggregate 20mm nominal size) painting two coats of approved wood preservative to sides of chowkhats and making good the damages to walls and floors as required complete including disposal of rubbish to the dumping ground as per direction of Engineer-in-charge - Window chowkhats	each	5.90
14.2.3	Fixing chowkhats in existing opening including embedding chowkhats in floors or walls cutting masonry for holdfasts embedding hold fasts in cement concrete blocks of size 15 x10x10 cm , with cement concrete 1:3:6 (1cement : 3 fine aggregate : 6 graded stone aggregate 20mm nominal size) painting two coats of approved wood preservative	each	2.95

14 . Repairs To Buildings

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	to sides of chowkhats and making good the damages to walls and floors as required complete including disposal of rubbish to the dumping ground as per direction of Engineer-in-charge - Clerestory window chowkhats		
14.4.1	Making the opening in brick masonry including dismantling in floor or walls by cutting masonry and making good the damages to walls, flooring and jambs complete to match existing surface i/c disposal of mulba / rubbish to the nearest dumping ground as per direction of Engineer-in-charge - for door/window/clerestory window	sqm	1.32
14.14.1	Replacing sand stone slabs in roofing , laid in cement mortar 1:4 (1 cement :4fine aggregate) , including necessary repairs and cement pointing with same mortar complete, including disposal of rubbish to dumping ground, all complete as per direction of Engineer-in-charge - Red / White sand stone slabs 30 to 50 mm thick	sqm	0.78
14.18.1	Flush pointing with cement mortar 1:3 (1 cement : 3 fine aggregate) mixed with 2% of integral water proofing compound by weight of cement for flat tile bricks on top of mud phaska - with F.P.S. brick tiles	sqm	0.77
14.18.2	Flush pointing with cement mortar 1:3 (1 cement : 3 fine aggregate) mixed with 2% of integral water proofing compound by weight of cement for flat tile bricks on top of mud phaska - with modular brick tiles	sqm	0.87
14.21	Renewing bottom rail and / or top runner of collapsible gate including making good all damages and applying priming coat of zinc chromate yellow primer of approved brand and manufacture	kg	0.79
14.81	Cutting holes of required size in brick masonry wall for fixing of exhaust fan including providing and fixing 300 mm dia PVC pipe conforming BIS-12818 and making good the same etc.complete as per the direction of Engineer-in-charge.	no	16.42

16 . Miscellaneous Building Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
16.15.1	Supplying at site : RCC standards post / struts/ rails/ pales of mix 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 12.5 mm nominal size) with wooden plugs or 6mm bar nibs, wherever required as per direction of Engineer-in-charge (cost of earth works in excavation , concrete works in foundation to be paid separately)	cum	536.61
16.42	Cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 40mm nominal size) in pavements , laid to required slope and camber in panels as required including consolidation finishing and tamping complete	cum	320.00
16.75	Providing and laying C.C. pavement of mix M25 with ready mixed concrete from batching plant. The ready mixed concrete shall be laid and finished with screed board vibrator , vaccum dewatering process and finally finished by floating brooming with wire brush etc complete (The panel shuttering work shall be paid for separately)	cum	330.00

17 . Sanitary Installations

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
17.37.1	Providing and fixing M.S.holder - bat clamps of approved design to sand cast iron / cast iron (spun) pipe embedded in and including cement concrete blocks 10x10x10 cm of 1:2:4 mix (1 cement : 2 fine aggregate : 4 graded stone aggregate 20mm nominal size), including cost of cutting holes and making good the walls etc. - for 100mm dia pipe	each	0.32
17.37.2	Providing and fixing M.S.holder - bat clamps of approved design to sand cast iron / cast iron (spun) pipe embedded in and including cement concrete blocks 10x10x10 cm of 1:2:4 mix (1 cement : 2 fine aggregate : 4 graded stone aggregate 20mm nominal size), including cost of cutting holes and making good the walls etc. - for 75mm dia pipe	each	0.32
17.61.1	Cutting chases in brick masonry walls for following diameter sand cast iron / centrifugally cast (spun) iron pipes and making good the same with cement concrete 1:3:6 (1 cement : 3 fine aggregate : 6 graded stone aggregate 12.5mm nominal size) including necessary plaster and pointing in cement mortar 1:4 (1cement : 4 fine aggregate) - 100mm dia	metre	4.84
17.61.2	Cutting chases in brick masonry walls for following diameter sand cast iron / centrifugally cast (spun) iron pipes and making good the same with cement concrete 1:3:6 (1 cement : 3 fine aggregate : 6 graded stone aggregate 12.5mm nominal size) including necessary plaster and pointing in cement mortar 1:4 (1cement : 4 fine aggregate) - 75 mm dia	metre	3.30
17.61.3	Cutting chases in brick masonry walls for following diameter sand cast iron / centrifugally cast (spun) iron pipes and making good the same with cement concrete 1:3:6 (1 cement : 3 fine aggregate : 6 graded stone aggregate 12.5mm nominal size) including necessary plaster and pointing in cement mortar 1:4 (1cement : 4 fine aggregate) -50 mm dia	metre	1.76

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
18.2.1	Providing and fixing Polyethelene - Aluminium - Polyethelene (PE-AL-PE) composite pressure pipes conforming to IS - 15450, U.V.stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 80 degree C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g.elbows,tees, reducers, couplers & connectors etc., with clamps at 1.00 metre spacing .This includes the cost of cutting chases and including testing of joints complete as perdirection - .Concealed work, including cutting chases and making good the wall etc- 1216 (16 mm OD) pipe	metre	0.88
18.2.2	Providing and fixing Polyethelene - Aluminium - Polyethelene (PE-AL-PE) composite pressure pipes conforming to IS - 15450, U.V.stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 80 degree C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g.elbows,tees, reducers, couplers & connectors etc., with clamps at 1.00 metre spacing .This includes the cost of cutting chases and including testing of joints complete as perdirection - .Concealed work, including cutting chases and making good the wall etc- 1620 (20 mm OD) pipe	metre	0.88
18.2.3	Providing and fixing Polyethelene - Aluminium - Polyethelene (PE-AL-PE) composite pressure pipes conforming to IS - 15450, U.V.stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 80 degree C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g.elbows,tees, reducers, couplers & connectors etc., with clamps at 1.00 metre spacing .This includes the cost of cutting chases and including testing of joints complete as perdirection - .Concealed work, including cutting chases and making good the wall etc- 2025 (25 mm OD) pipe	metre	0.88
18.2.4	Providing and fixing Polyethelene - Aluminium - Polyethelene (PE-AL-PE) composite pressure pipes conforming to IS - 15450, U.V.stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 80 degree C including all special fittings of	metre	0.88

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	composite material (engineering plastic blend and brass inserts wherever required) e.g.elbows,tees, reducers, couplers & connectors etc., with clamps at 1.00 metre spacing .This includes the cost of cutting chases and including testing of joints complete as perdirection - .Concealed work, including cutting chases and making good the wall etc- 2532 (32 mm OD) pipe		
18.5.1	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes conforming to IS:15801, UV stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply, including all PP-R plain & brass threaded polypropylene random fittings and fixing the pipe with clamps at 1.00 m spacing. This includes the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer-in-charge - Concealed work, including cutting chases and making good the wall etc - PN - 16 pipe, 20mm OD (SDR-7.4)	metre	0.88
18.5.2	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes conforming to IS:15801, UV stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply, including all PP-R plain & brass threaded polypropylene random fittings and fixing the pipe with clamps at 1.00 m spacing. This includes the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer-in-charge - Concealed work, including cutting chases and making good the wall etc - PN - 16 pipe, 25mm OD (SDR-7.4)	metre	0.88
18.5.3	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes conforming to IS:15801, UV stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply, including all PP-R plain & brass threaded polypropylene random fittings and fixing the pipe with clamps at 1.00 m spacing. This includes the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer-in-charge - Concealed work, including cutting chases and making good the wall etc - PN - 16 pipe, 32mm OD (SDR-7.4)	metre	0.88
18.8.1	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at	metre	0.88

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	1.00 m spacing. This includes jointing of pipes & fittings , with one step CPVC solvment cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer-in-charge- Concealed work , including cutting chases and making good the wall etc - 15mm nominal dia pipes		
18.8.2	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings , with one step CPVC solvment cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer-in-charge - Concealed work , including cutting chases and making good the wall etc - 20 mm nominal dia pipes	metre	0.88
18.8.3	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings , with one step CPVC solvment cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer-in-charge - Concealed work , including cutting chases and making good the wall etc - 25 mm nominal dia pipes	metre	0.88
18.8.4	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings , with one step CPVC solvment cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer-in-charge- Concealed work , including cutting chases and making good the wall etc - 32 mm nominal dia pipes	metre	0.88
18.9.21	Providing and fixing ASTM pipes including all ASTM plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing . This includes jointing of pipes & fitting with one step ASTM solvent cement and the cost of cutting chases and making good the same including testing of joints complete (Concealed work including cutting chases and making good the walls etc.) - 20 mm nominal outer	metre	0.88

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	dia pipes		
18.9.22	Providing and fixing ASTM pipes including all ASTM plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing . This includes jointing of pipes & fitting with one step ASTM solvent cement and the cost of cutting chases and making good the same including testing of joints complete (Concealed work including cutting chases and making good the walls etc.) - 25 mm nominal outer dia pipes	metre	0.88
18.9.23	Providing and fixing ASTM pipes including all ASTM plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing . This includes jointing of pipes & fitting with one step ASTM solvent cement and the cost of cutting chases and making good the same including testing of joints complete (Concealed work including cutting chases and making good the walls etc.) - 32 mm nominal outer dia pipes	metre	0.88
18.11.1	Providing & fixing GI pipes complete with GI fittings and clamps including making good the walls etc. concealed pipe including painting with anti corrosive bitumastic paint, cutting chases and making good the wall - 15mm dia nominal bore	metre	0.88
18.11.2	Providing & fixing GI pipes complete with GI fittings and clamps including making good the walls etc. concealed pipe including painting with anti corrosive bitumastic paint, cutting chases and making good the wall - 20mm dia nominal bore	metre	0.88
18.32.1	Constructing masonry chamber 30x30x50 cm inside , in brick work in cement mortar 1.4 (1 cement : 4 fine aggregate) for stop cock, with C.I.surface box 100x100x75 mm (inside) with hinged cover fixed in reinforced cement concrete slab 1:1.5:3 mix (1 cement : 1.5fine aggregate : 3 graded stone aggregate 20mm nominal size) , including necessary excavation , foundation concrete 1:5:10 (1 cement :5 fine aggregate : 10 graded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 fine aggregate) 12mm thick , finished with a floating coat of neat cement complete as per standard design - with common burnt clay F.P.S (non modular) bricks of class designation 3.5	each	28.57
18.33.1	Constructing masonry chamber 60x60x75 cm inside , in brick work in cement mortar 1.4 (1 cement : 4	each	161.83

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	fine aggregate) for sluice valve, with C.I.surface box 100mm top diameter,160mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:1.5:3 mix (1 cement :1.5 coarse sand : 3 graded stone aggregate 20mm nominal size), including neceasry excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12mm thick, finished with a floating coat of neat cement complete as per standard design: with common burnt clay F.P.S (non moduar) bricks of class designation 3.5		
18.34.1	Constructing masonry chamber 90x90x100 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 fine aggregate) for sluice valve, with C.I.surface box 100mm top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:1.5:3 mix (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20mm nominal size), including necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine aggregate: 10 graded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 fine aggregate) 12mm thick finished with a floating coat of neat cement complete as per standard design - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5	each	277.91
18.35.1	Constructing masonry chamber 120x120x100 cm inside, in brick work in cement mortar 1:4 (1cement : 4 fine aggregate) for sluice valve, with C.I.surface box 100mm top diameter, 160mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:1.5:3 mix (1 cement :1.5 fine aggregate : 3 graded stone aggregate 20mm nominal size), including necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 fine aggregate) 12mm thick , finished with a floating coat of neat cement complete as per standard design - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5	each	390.61
18.36.1	Constructing masonry chamber 60x60x75 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 fine aggregate) for fire hydrants , with C.I. surface box 350 x 350 mm top and 165 mm deep	each	145.83

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	(inside) with chained lid and RCC to slab 1:1.5:3 mix (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20 mm nominal size), including necessary excavation , foundation concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 fine aggregate) 12mm thick, finished with a floating coat of neat cement complete as per standard design - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5		
18.37.1	Constructing masonry chamber 60x45x50 cm inside , in brick work in cement mortar 1:4 (1 cement : 4 fine aggregate) for water meter complete with C.I.double flap surface box 400 x 200 x 200 mm (inside) with locking arrangement and RCC top slab 1:1.5:3 mix (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20 mm nominal size), including necessary excavation , foundation concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 fine aggregate) 12 mm thick, finished with a floating coat of neat cement complete as per standard design - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5	each	150.48
18.76.1	Cutting holes upto 30x30 cm in walls including making good the same - with common burnt clay F.P.S.(non - modular) brick	each	2.65
18.77	Cutting holes upto 15x15 cm in R.C.C floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc with cement concrete 1:2:4 (1 cement : 2 fine aggregate: 4 graded stone aggregate 20 mm nominal size)including finishing complete so as to make it leak proof	each	0.64
18.78	Making chases upto 7.5x7.5 cm in walls including making good and finishing with matching surface after housing G.I.pipe etc.	metre	0.88
18.79	Making hole upto 20x20 cm and embedding pipes upto 150mm diameter in masonry and filling with cement concrete 1:3:6 (1 cement : 3coarsesand: 6 graded stone aggregate 20 mm nominal size) including disposal of malba	metre	4.84
18.86.1	Providing and fixing Stainless steel pipe and fittings of grade AISI 304 as per JIS standard 3448	metre	0.88

18 . Water Supply

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	complete with press type fitting (fitting shall be paid for separately) i.c fixing of the pipe with clamps at 1.00 m spacing and also including cutting of chases and making good the walls including testing of joints complete as per direction of Engineer-in-charge (The pipe length inserted in the fitting shall not be measured for payment) - Internal work - Concealed pipe - 15.88 outer dia pipe		
18.86.2	Providing and fixing Stainless steel pipe and fittings of grade AISI 304 as per JIS standard 3448 complete with press type fitting (fitting shall be paid for separately) i.c fixing of the pipe with clamps at 1.00 m spacing and also including cutting of chases and making good the walls including testing of joints complete as per direction of Engineer-in-charge(The pipe length inserted in the fitting shall not be measured for payment) - Internal work - Concealed pipe - 22.22 outer dia pipe	metre	0.88
18.86A.1	Providing and fixing Stainless Steel pipe and fitting of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards complete with press type fitting (fitting shall be paid for separately) including fixing of the pipe with clamps at 1.00m spacing and also including cutting of chases and making good the walls including testing of joints complete as per direction of Engineer-in-charge.(The pipe lengthinserted in the fitting shall not be measured for payment) - Internal work - Concealed pipe - 15mm outer dia pipe	metre	0.88
18.86A.2	Providing and fixing Stainless Steel pipe and fitting of grade 316L as per IS 6911:2017 and conforming to EN-10312 standards complete with press type fitting (fitting shall be paid for separately) including fixing of the pipe with clamps at 1.00m spacing and also including cutting of chases and making good the walls including testing of joints complete as per direction of Engineer-in-charge.(The pipe lengthinserted in the fitting shall not be measured for payment) - Internal work - Concealed pipe - 22mm outer dia pipe	metre	0.88

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
19.1.1	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine aggregate 0.01) including testing of joints etc.complete -100mm diameter	metre	0.63
19.1.2	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine aggregate 0.01) including testing of joints etc.complete -150mm diameter	metre	1.20
19.1.3	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine aggregate 0.01) including testing of joints etc.complete -200mm diameter	metre	1.77
19.1.4	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine aggregate 0.01) including testing of joints etc.complete -250mm diameter	metre	3.13
19.1.5	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine aggregate 0.01) including testing of joints etc.complete -300mm diameter	metre	4.17
19.2.1	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40mm nominal size) all-round S.W.pipes including bed concrete as per standard design - 100 mm diameter S.W. pipe	metre	19.24
19.2.2	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40mm nominal size) all-round S.W.pipes including bed concrete as per standard design - 150 mm diameter S.W. pipe	metre	23.53
19.2.3	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40mm nominal size) all-round S.W.pipes including bed concrete as per standard design - 200 mm diameter S.W. pipe	metre	27.43
19.2.4	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40mm nominal size) all-round S.W.pipes	metre	31.72

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	including bed concrete as per standard design - 250 mm diameter S.W. pipe		
19.3.1	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40mm nominal size) up to haunches of S.W.pipes including bed concrete as per standard design - 100 mm diameter S.W. pipe	metre	9.14
19.3.2	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40mm nominal size) up to haunches of S.W.pipes including bed concrete as per standard design - 150 mm diameter S.W. pipe	metre	14.82
19.3.3	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40mm nominal size) up to haunches of S.W.pipes including bed concrete as per standard design - 200 mm diameter S.W. pipe	metre	17.42
19.3.4	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40mm nominal size) up to haunches of S.W.pipes including bed concrete as per standard design - 250 mm diameter S.W. pipe	metre	20.28
19.3.5	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40mm nominal size) up to haunches of S.W.pipes including bed concrete as per standard design - 300 mm diameter S.W. pipe	metre	23.40
19.4.1.1	Providing and fixing square - mouth S.W.gully trap class SP -1 complete with C.I. grating brick masonry chamber with water tight C.I.cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50kg and frame to be not less than 2.70 kg as per standard design - 100x100mm size P type - with common burnt clay F.P.S.(non modular) bricks of class designation 3.5	each	29.32
19.4.1.2	Providing and fixing square - mouth S.W.gully trap class SP -1 complete with C.I. grating brick masonry chamber with water tight C.I.cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50kg and frame to be not less than 2.70 kg as per standard design - 100x100mm size P type - with sewer bricks conforming to IS :4885	each	27.84
19.4.2.1	Providing and fixing square - mouth S.W.gully trap	each	28.11

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	class SP -1 complete with C.I. grating brick masonry chamber with water tight C.I.cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50kg and frame to be not less than 2.70 kg as per standard design - 150x100mm size P type - with common burnt clay F.P.S.(non modular) bricks of class designation 3.5		
19.4.2.2	Providing and fixing square - mouth S.W.gully trap class SP -1 complete with C.I. grating brick masonry chamber with water tight C.I.cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50kg and frame to be not less than 2.70 kg as per standard design - 150x100mm size P type - with sewer bricks conforming to IS:4885	each	26.63
19.4.3.1	Providing and fixing square - mouth S.W.gully trap class SP -1 complete with C.I. grating brick masonry chamber with water tight C.I.cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50kg and frame to be not less than 2.70 kg as per standard design - 180x150mm size P type - with common burnt clay F.P.S.(non modular) bricks of class designation 3.5	each	26.81
19.4.3.2	Providing and fixing square - mouth S.W.gully trap class SP -1 complete with C.I. grating brick masonry chamber with water tight C.I.cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50kg and frame to be not less than 2.70 kg as per standard design - 180x150mm size P type - with sewer bricks conforming to IS:4885	each	25.32
19.6.1	Providing and laying non - pressure NP2 class (light duty) R.C.C pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 100 mm dia R.C.C. pipe	metre	0.50
19.6.2	Providing and laying non - pressure NP2 class (light duty) R.C.C pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 150 mm dia R.C.C. pipe	metre	0.60
19.6.3	Providing and laying non - pressure NP2 class (light duty) R.C.C pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 250 mm dia R.C.C. pipe	metre	0.90

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
19.6.4	Providing and laying non - pressure NP2 class (light duty) R.C.C pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 300 mm dia R.C.C. pipe	metre	1.10
19.6.5	Providing and laying non - pressure NP2 class (light duty) R.C.C pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 450 mm dia R.C.C. pipe	metre	2.40
19.6.6	Providing and laying non - pressure NP2 class (light duty) R.C.C pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 500 mm dia R.C.C. pipe	metre	2.60
19.6.7	Providing and laying non - pressure NP2 class (light duty) R.C.C pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 600 mm dia R.C.C. pipe	metre	3.20
19.6.8	Providing and laying non - pressure NP2 class (light duty) R.C.C pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 700 mm dia R.C.C. pipe	metre	3.70
19.6.9	Providing and laying non - pressure NP2 class (light duty) R.C.C pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 800 mm dia R.C.C. pipe	metre	4.20
19.6.10	Providing and laying non - pressure NP2 class (light duty) R.C.C pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 900 mm dia R.C.C. pipe	metre	4.90
19.6.11	Providing and laying non - pressure NP2 class (light duty) R.C.C pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 1000 mm dia R.C.C. pipe	metre	5.50
19.6.12	Providing and laying non - pressure NP2 class (light duty) R.C.C pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints	metre	6.10

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	etc.complete - 1100 mm dia R.C.C. pipe		
19.6.13	Providing and laying non - pressure NP2 class (light duty) R.C.C pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 1200 mm dia R.C.C. pipe	metre	6.80
19.7.1.1	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design :-Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) :-With common burnt clay F.P.S. (non modular) bricks of class designation 3.5	each	246.94
19.7.1.2	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design :-Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) :- with sewer bricks conforming to IS:4885	each	243.06
19.7.2.1	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 coarse	each	406.31

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	sand (zone-III) : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design : - inside size 120x90 cm and 90cm deep including C.I.cover with frame (medium duty) 500 mm internal diameter, total weight of cover and frame to be not less than 116 kg (weight of cover 58 kg and weight of frame 58 kg) - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5		
19.7.2.2	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design : - inside size 120x90 cm and 90cm deep including C.I.cover with frame (medium duty) 500 mm internal diameter, total weight of cover and frame to be not less than 116 kg (weight of cover 58 kg and weight of frame 58 kg) - with sewer bricks conforming to IS :4885	each	395.71
19.7.3.1	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design : - inside size 120x90 cm and	each	404.02

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	90cm deep including C.I.cover with frame (heavy duty) 560 mm internal diameter, total weight of cover and frame to be not less than 208kg (weight of cover 108 kg and weight of frame 100 kg) - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5		
19.7.3.2	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design : - inside size 120x90 cm and 90cm deep including C.I.cover with frame (heavy duty) 560 mm internal diameter, total weight of cover and frame to be not less than 208kg (weight of cover 108 kg and weight of frame 100 kg) - with sewer bricks conforming to IS : 4885	each	394.90
19.8.1.1	Extra for depth for manholes - size 90x80 cm - with common burnt clay F.P.S (non modular) bricks of class designation 3.5	metre	125.82
19.8.1.2	Extra for depth for manholes - size 90x80 cm - with sewer bricks conforming to IS:4885	metre	114.53
19.8.2.1	Extra for depth for manholes - size 120x90 cm - with common burnt clay F.P.S (non modular) bricks of class designation 3.5	metre	151.34
19.8.2.2	Extra for depth for manholes - size 120x90 cm - with sewer bricks conforming to IS : 4885	metre	137.89
19.9.1.1	Constructing brick masonry circular type manhole 0.91 m internal dia at bottom and 0.56 m dia at top in cement mortar 1:4 (1 cement : 4 fine aggregate) , in side cement plaster 12mm thick with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement , foundation concrete 1:3:6 mix (1 cement : 3 fine aggregate : 6 graded stone aggregate 40mm nominal size) , and making necessary channels in cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20mm nominal size) finished with a	each	275.05

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	floating coat of neat cement , all complete as per standard design - 0.91 m deep with S.F.R.C .cover and frame (heavy duty, HD-20 grade designation) 560 mm internal diameter conforming to IS : 12592, total weight of cover and frame to be not less than 182 kg , fixed in cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 grade stone aggregate 20 mm nominal size) including centering, shuttering all complete . (Excavation , foot rests and 12mm thick cement plaster at the external surface shall be paid for separately) - with common burnt clay F.P.S (non modular) bricks of class designation 3.5		
19.9.1.2	Constructing brick masonry circular type manhole 0.91 m internal dia at bottom and 0.56 m dia at top in cement mortar 1:4 (1 cement : 4 fine aggregate) , in side cement plaster 12mm thick with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement , foundation concrete 1:3:6 mix (1 cement : 3 fine aggregate : 6 graded stone aggregate 40mm nominal size) , and making necessary channels in cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement , all complete as per standard design - 0.91 m deep with S.F.R.C .cover and frame (heavy duty, HD-20 grade designation) 560 mm internal diameter conforming to IS : 12592, total weight of cover and frame to be not less than 182 kg , fixed in cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 grade stone aggregate 20 mm nominal size) including centering, shuttering all complete . (Excavation , foot rests and 12mm thick cement plaster at the external surface shall be paid for separately) - with sewer bricks conforming to IS :4885	each	269.01
19.10.1	Extra depth for circular type manhole 0.91 m internal dia (at bottom) beyond 0.91 m to 1.67 m - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5	metre	111.61
19.10.2	Extra depth for circular type manhole 0.91 m internal dia (at bottom) beyond 0.91 m to 1.67 m - with sewer bricks conforming IS: 4885	metre	102.16
19.11.1.1	Constructing brick masonry circular manhole 1.22 m internal dia at bottom and 0.56 m dia at top in cement mortar 1:4 (1 cement : 4 fine aggregate) inside cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement foundation	each	538.56

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	concrete 1:3:6 (1 cement : 3 fine aggregate : 6 gaded stone aggregate 40 mm nominal size) and making necessary channel in cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement , all complete as per standard design - 1.68 m deep with SFRC cover and frame (heavy duty HD-20 grade designation) 560 mm internal diameter conforming to IS: 12592, total weight of cover and frame to be not less than 182 kg fixed in cement concrete 1:2:4 (1cement :2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) including centering , shuttering all complete.(Excavation , foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately) - with common burnt clay F.P.S.(non modular) bricks of class designation 3.5		
19.11.1.2	Constructing brick masonry circular manhole 1.22 m internal dia at bottom and 0.56 m dia at top in cement mortar 1:4 (1 cement : 4 fine aggregate) inside cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement foundation concrete 1:3:6 (1 cement : 3 fine aggregate : 6 gaded stone aggregate 40 mm nominal size) and making necessary channel in cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement , all complete as per standard design - 1.68 m deep with SFRC cover and frame (heavy duty HD-20 grade designation) 560 mm internal diameter conforming to IS: 12592, total weight of cover and frame to be not less than 182 kg fixed in cement concrete 1:2:4 (1cement :2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) including centering , shuttering all complete.(Excavation , foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately) - with sewer bricks conforming to IS : 4885	each	523.86
19.12.1	Extra depth for circular type manhole 1.22 m internal dia (at bottom) beyond 1.68 m to 2.29 m - with common burnt clay F.P.S.(non modular) bricks of class designation 3.5	metre	142.00
19.12.2	Extra depth for circular type manhole 1.22 m internal dia (at bottom) beyond 1.68 m to 2.29 m - with sewer bricks conforming IS :4885	metre	129.67
19.13.1.1	Constructing brick masonry circular manhole 1.52	each	1084.01

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	m internal dia at bottom and 0.56 m dia at top in cement mortar 1:4 (1 cement : 4 fine aggregate) inside cement plaster 12mm thick with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement , foundation concrete 1:3:6 (1 cement : 3fine aggregate : 6 graded stone aggregate 40 mm nominal size) and making necessary channel in cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement , all complete as per standard design - 2.30 m deep with SFRC cover and frame (heavy duty HD - 20 grade designation) 560 mm internal diameter conforming to IS : 12592, total weight of cover and frame to be not less than 182 kg fixed in cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) including centering , shuttering all complete .(Excavation , foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately) - with common burnt clay F.P.S.(non modular) bricks of class designation 3.5		
19.13.1.2	Constructing brick masonry circular manhole 1.52 m internal dia at bottom and 0.56 m dia at top in cement mortar 1:4 (1 cement : 4 fine aggregate) inside cement plaster 12mm thick with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement , foundation concrete 1:3:6 (1 cement : 3fine aggregate : 6 graded stone aggregate 40 mm nominal size) and making necessary channel in cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement , all complete as per standard design - 2.30 m deep with SFRC cover and frame (heavy duty HD - 20 grade designation) 560 mm internal diameter conforming to IS : 12592, total weight of cover and frame to be not less than 182 kg fixed in cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) including centering , shuttering all complete .(Excavation , foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately) - with Sewer bricks conforming to IS :4885	each	1042.06
19.14.1	Extra depth for circular type manhole 1.52 m internal dia (at bottom) beyond 2.30m - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5	metre	310.48

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
19.14.2	Extra depth for circular type manhole 1.52 m internal dia (at bottom) beyond 2.30m - with sewer bricks conforming IS: 4885	metre	278.58
19.15.1	Providing M.S.foot rests including fixing in manholes with 20x20x10 cm cement concrete blocks 1:3:6 (1 cement :3 fine aggregate :6 graded stone aggregate 20 mm nominal size) as per standard design - with 20x20 mm square bar	each	0.88
19.15.2	Providing M.S.foot rests including fixing in manholes with 20x20x10 cm cement concrete blocks 1:3:6 (1 cement :3 fine aggregate :6 graded stone aggregate 20 mm nominal size) as per standard design - with 20 mm diameter round bar	each	0.88
19.16	Providing orange colour safety foot rest of minimum 6mm thick plastic encapsulated as per IS : 10910 on 12 mm dia steel bar conforming to IS : 1786 , having minimum cross section as 23 mm x 25 mm and over all minimum length 263 mm and width as 165 mm with minimum 112 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even after fixing , including fixing in manholes with 30x20x15 cm cement concrete block 1:3:6 (1 cement : 3 fine aggregate : 6 graded stone aggregate 20mm nominal size) complete as per design	each	1.98
19.17.1	Replacement of M.S. foot rests in manholes including dismantling concrete blocks and fixing with 20x20x10 cm cement concrete blocks 1:3:6 (1 cement : 3 fine aggregate : 6 graded stone aggregate 20 mm nominal size) - with 20x20 mm square bar	each	0.88
19.17.2	Replacement of M.S. foot rests in manholes including dismantling concrete blocks and fixing with 20x20x10 cm cement concrete blocks 1:3:6 (1 cement : 3 fine aggregate : 6 graded stone aggregate 20 mm nominal size) - with 20 mm diameter round bar	each	0.88
19.19.1.1	Providing and fixing in position pre-cast R.C.C. manhole cover and frame of required shape and approved quality - LD - 2.5 - rectangular shape	each	12.80

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	600x450 mm internal dimensions		
19.19.1.2	Providing and fixing in position pre-cast R.C.C. manhole cover and frame of required shape and approved quality - LD - 2.5 - square shape 450 mm internal dimensions	each	9.60
19.19.1.3	Providing and fixing in position pre-cast R.C.C. manhole cover and frame of required shape and approved quality - LD -2.5 - circular shape 450 mm internal diameter	each	9.60
19.19.2.1	Providing and fixing in position pre-cast R.C.C. manhole cover and frame of required shape and approved quality - MD -10 - square shape 450 mm internal dimensions	each	12.80
19.19.2.2	Providing and fixing in position pre-cast R.C.C. manhole cover and frame of required shape and approved quality - MD -10 - Circular shape 500 mm internal diameter	each	9.60
19.19.3.1	Providing and fixing in position pre-cast R.C.C. manhole cover and frame of required shape and approved quality - HD -20 - Circular shape 560 mm internal diameter	each	9.60
19.19.4.1	Providing and fixing in position pre-cast R.C.C. manhole cover and frame of required shape and approved quality - EHD -35 - Circular shape 560 mm internal diameter	each	9.60
19.21.1	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete - For pipes 100 to 250 mm diameter	each	5.54
19.21.2	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete - For pipes 250	each	9.39

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	to 300 mm diameter		
19.21.3	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete - For pipes 350 to 450 mm diameter	each	15.21
19.22.1	Providing sand cast iron drop connection externally for 60 cm drop from branch sewer line to main sewer manhole including inspection and cleaning eye with chain and lid, sand cast iron drop pipe and bend encased all - round with cement concrete 1:5:10 (1cement : 5 fine aggregate : 10 graded stone aggregate 40mm nominal size) with all centering and shuttering required , cutting holes in walls and making good with brick work in cement mortar 1:4 (1cement : 4 fine aggregate) plastered with cement mortar 1:3 (1 cement : 3 fine aggregate) on inside of the manhole wall, lead caulked joints between sand cast iron pipes and fittings , stiff cement mortar 1:1 (1 cement : 1 fine aggregate) joints between sand cast iron tee and S.W.pipe, making required channels complete as per standard design and specifications - 100 mm dia sand cast iron drop connection	each	28.53
19.22.2	Providing sand cast iron drop connection externally for 60 cm drop from branch sewer line to main sewer manhole including inspection and cleaning eye with chain and lid, sand cast iron drop pipe and bend encased all - round with cement concrete 1:5:10 (1cement : 5 fine aggregate : 10 grade stone aggregate 40mm nominal size) with all centering and shuttering required , cutting holes in walls and making good with brick work in cement mortar 1:4 (1cement : 4 fine aggregate) plastered with cement mortar 1:3 (1 cement : 3 fine aggregate) on inside of the manhole wall, lead caulked joints between sand cast iron pipes and fittings , stiff cement mortar 1:1 (1 cement : 1 fine aggregate) joints between sand cast iron tee and S.W.pipe, making required channels complete as per standard design and specifications - 150 mm dia sand cast iron drop connection	each	37.44
19.23.1	Extra for depths beyond 60cm of sand cast iron	metre	20.80

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	drop connection complete - for 100 mm dia sand cast iron drop connection		
19.23.2	Extra for depths beyond 60cm of sand cast iron drop connection complete - for 150 mm dia sand cast iron drop connection	metre	26.00
19.26.1	Raising manhole cover and frame slab to required level including dismantling existing slab and making good the damages as required (raising depth of manhole to be paid separately) - rectangular manhole 90x80 cm with rectangular cover 600x450 mm of grade LD - 2.5	each	68.00
19.26.2	Raising manhole cover and frame slab to required level including dismantling existing slab and making good the damages as required (raising depth of manhole to be paid separately) - rectangular manhole 120x90 cm with circular cover 500 mm dia of grade MD -10	each	104.00
19.26.3	Raising manhole cover and frame slab to required level including dismantling existing slab and making good the damages as required (raising depth of manhole to be paid separately) - rectangular manhole 120x90 cm with circular cover 560mm dia of grade HD -20	each	96.00
19.26.4	Raising manhole cover and frame slab to required level including dismantling existing slab and making good the damages as required (raising depth of manhole to be paid separately) - circular manhole 140cm dia with circular cover 600 mm dia of grade EHD -35	each	6.40
19.27.1	Constructing brick masonry road gully chamber 50x45x60 cm with bricks in cement mortar 1:4 (1 cement : 4 fine aggregate) including 500 x 450 mm pre-cast R.C.C. horizontal grating with frame complete as per standard design - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5	each	93.04
19.28.1	Constructing brick masonry road gully chamber 45x45x77.5 cm with bricks in cement mortar 1:4 (1 cement : 4 fine aggregate) with pre-cast R.C.C. vertical grating complete as per standard design - with common burnt clay F.P.S.(non modular) bricks of class designation 3.5	each	101.75
19.29.1	Constructing brick masonry road gully chamber 110x50x77.5 cm with bricks in cement mortar 1:4 (1	each	173.45

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	cement : 4 fine aggregate) including 500 x450 mm pre - cast R.C.C. horizontal grating with frame and vertical grating complete as per standard design - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5		
19.30.1.1	Constructing brick masonry chamber for underground C.I. inspection chamber and bends with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg), R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 fine sand : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand), finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design: - Inside dimensions 455x610 mm and 45 cm deep for single pipe line : -With common burnt clay F.P.S. (non modular) bricks of class designation 3.5	each	98.36
19.30.2.1	Constructing brick masonry chamber for underground C.I. inspection chamber and bends with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg), R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 fine sand : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand), finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design: - inside dimensions 500 x700 mm and 45 cm deep for pipe line with one or two inlets - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5	each	111.31
19.30.3.1	Constructing brick masonry chamber for underground C.I. inspection chamber and bends with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg), R.C.C.	each	139.02

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	top slab with 1:1.5:3 mix (1 cement : 1.5 fine sand : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand), finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design: - inside dimensions 600 x 850 mm and 45 cm deep for pipe line with three or more inlets - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5		
19.31.1.1	Extra for depth beyond 45 cm of brick masonry chamber - for 455x610mm size - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5	metre	86.40
19.31.2.1	Extra for depth beyond 45 cm of brick masonry chamber - for 500x700mm size - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5	metre	94.63
19.31.3.1	Extra for depth beyond 45 cm of brick masonry chamber - for 600x850mm size - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5	metre	110.70
19.32.1	Making soak pit 2.5 m diameter 3.0 metre deep with 45 x 45 cm dry brick honey comb shaft with bricks and S.W. drain pipe 100 mm diameter , 1.8 m long complete as per standard design - with common burnt clay F.P.S. (non modular) bricks of class designation 3.5	each	8.09
19.32.1A	Making soak pit 2.5 m diameter 3 m deep with 45 x 45 cm dry brick honeycomb shaft with bricks of class designation 75 and 110mm dia UPVC pipe (type B) 1.8 m long complete as per stadard design with F.P.S.bricks	1 soak pit	8.09
19.34.1	Providing and fixing S.W.intercepting trap in manholes with stiff mixture of cement mortar 1:1 (1 cement : 1 fine aggregate) including testing of joints etc.complete - 100 mm dia	each	1.30
19.34.2	Providing and fixing S.W.intercepting trap in manholes with stiff mixture of cement mortar 1:1 (1 cement : 1 fine aggregate) including testing of joints etc.complete - 150 mm dia	each	1.90
19.35.1	Providing and laying Non Pressure NP-3 class	metre	1.20

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	(Medium duty) R.C.C.pipes including collars / spigot jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 450 mm dia RCC pipes		
19.35.2	Providing and laying Non Pressure NP-3 class (Medium duty) R.C.C.pipes including collars / spigot jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 600 mm dia RCC pipes	metre	1.60
19.35.3	Providing and laying Non Pressure NP-3 class (Medium duty) R.C.C.pipes including collars / spigot jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 900 mm dia RCC pipes	metre	2.50
19.35.4	Providing and laying Non Pressure NP-3 class (Medium duty) R.C.C.pipes including collars / spigot jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 1000 mm dia RCC pipes (laying by manual / mechanical means)	metre	2.80
19.35.5	Providing and laying Non Pressure NP-3 class (Medium duty) R.C.C.pipes including collars / spigot jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 1200 mm dia RCC pipes (Laying by mannual / mechanical means)	metre	3.40
19.35.6	Providing and laying Non Pressure NP-3 class (Medium duty) R.C.C.pipes including collars / spigot jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 1800 mm dia RCC pipes - (Laying by manual / mechanical means)	metre	4.90
19.36.1	Providing and laying Non pressure NP-4 class (Heavy duty) R.C.C. pipes including collars / spigot jointed with stiff mixture of cement mortar in the propotion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 450mm dia RCC pipes	metre	1.20
19.36.2	Providing and laying Non pressure NP-4 class	metre	1.60

19 . Drainage

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	(Heavy duty) R.C.C. pipes including collars / spigot jointed with stiff mixture of cement mortar in the propotion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 600mm dia RCC pipes		
19.36.3	Providing and laying Non pressure NP-4 class (Heavy duty) R.C.C. pipes including collars / spigot jointed with stiff mixture of cement mortar in the propotion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 900mm dia RCC pipes	metre	2.50
19.36.4	Providing and laying Non pressure NP-4 class (Heavy duty) R.C.C. pipes including collars / spigot jointed with stiff mixture of cement mortar in the propotion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 1000mm dia RCC pipes (Laying by manual / mechanical means)	metre	2.80
19.36.5	Providing and laying Non pressure NP-4 class (Heavy duty) R.C.C. pipes including collars / spigot jointed with stiff mixture of cement mortar in the propotion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 1200mm dia RCC pipes (Laying by mannual / mechanical means)	metre	3.40
19.36.6	Providing and laying Non pressure NP-4 class (Heavy duty) R.C.C. pipes including collars / spigot jointed with stiff mixture of cement mortar in the propotion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc.complete - 1800mm dia RCC pipes (Laying by mannual / mechanical means)	metre	4.90

20 . Pile Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
20.1.1	Providing, driving with hydraulic piling rigs with power units and installing driven cast -in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry safe working load not less than specified , excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap) - 400 mm dia piles	metre	41.42
20.1.2	Providing, driving with hydraulic piling rigs with power units and installing driven cast -in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry safe working load not less than specified , excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap) - 450 mm dia piles	metre	52.47
20.1.3	Providing, driving with hydraulic piling rigs with power units and installing driven cast -in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry safe working load not less than specified , excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap) - 500 mm dia piles	metre	64.76
20.1.4	Providing, driving with hydraulic piling rigs with power units and installing driven cast -in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry safe working load not less than specified , excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap) - 550 mm dia piles	metre	78.38
20.1.5	Providing, driving with hydraulic piling rigs with power units and installing driven cast -in-situ reinforced cement concrete piles of grade M-25 of	metre	145.64

20 . Pile Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	specified diameter and length below the pile cap, to carry safe working load not less than specified , excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap) - 750 mm dia piles		
20.1.6	Providing, driving with hydraulic piling rigs with power units and installing driven cast -in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry safe working load not less than specified , excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap) - 1000 mm dia piles	metre	259.05
20.1.7	Providing, driving with hydraulic piling rigs with power units and installing driven cast -in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry safe working load not less than specified , excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap) -1200 mm dia piles	metre	372.90
20.1.8	Providing, driving with hydraulic piling rigs with power units and installing driven cast -in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry safe working load not less than specified , excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap) - 1500 mm dia piles	metre	583.00
20.2.1	Boring , providing and installing bored cast -in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring , with bentonite solution and temporary casing of appropriate length for	metre	52.47

20 . Pile Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	setting out and removal of same and the length of the pile to be embedded in the pile cap etc, by percussion drilling using direct mud circulation (DMC) or bailer and chisel technique by tripod and mechanical winch machine all complete, including removal of excavated earth with all its lifts and leads (length of pile for payment shall be measured upto bottom of pile cap) - 450 mm dia piles - Note: Truck Mounted rotary/TMR/Tubewell boring machine shall not be used		
20.2.2	Boring , providing and installing bored cast -in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring , with bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc, by percussion drilling using direct mud circulation (DMC) or bailer and chisel technique by tripod and mechanical winch machine all complete, including removal of excavated earth with all its lifts and leads (length of pile for payment shall be measured upto bottom of pile cap) - 500 mm dia piles - Note: Truck Mounted rotary/TMR/Tubewell boring machine shall not be used	metre	64.76
20.2.3	Boring , providing and installing bored cast -in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring , with bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc, by percussion drilling using direct mud circulation (DMC) or bailer and chisel technique by tripod and mechanical winch machine all complete, including removal of excavated earth with all its lifts and leads (length of pile for payment shall be measured upto bottom of pile cap) - 600 mm dia piles - Note: Truck Mounted rotary/TMR/Tubewell boring machine shall not be used	metre	93.23
20.2.4	Boring , providing and installing bored cast -in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but	metre	145.64

20 . Pile Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	including the cost of boring , with bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc, by percussion drilling using direct mud circulation (DMC) or bailer and chisel technique by tripod and mechanical winch machine all complete, including removal of excavated earth with all its lifts and leads (length of pile for payment shall be measured upto bottom of pile cap) - 750 mm dia piles - Note: Truck Mounted rotary/TMR/Tubewell boring machine shall not be used		
20.2A.1	Boring, providing and installation bored cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below pile cap, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and temporary casing of appropriate lengthfor setting out and removal of same and the length of the pile to be embedded in the pile cap etc. by Crawler mounted telescopic boom hydraulic pilling rig all complete, including removal of excavated earth with all its lifts and leads (length of pile for payment shall be measured upto bottom of pile cap) Note:Truck Mounted rotary / TMR/Tube well boring machine shall not be used- 600mm dia piles	metre	93.23
20.2A.2	Boring, providing and installation bored cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below pile cap, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and temporary casing of appropriate lengthfor setting out and removal of same and the length of the pile to be embedded in the pile cap etc. by Crawler mounted telescopic boom hydraulic pilling rig all complete, including removal of excavated earth with all its lifts and leads (length of pile for payment shall be measured upto bottom of pile cap) Note:Truck Mounted rotary / TMR/Tube well boring machine shall not be used- 750mm dia piles	metre	145.64
20.2A.3	Boring, providing and installation bored cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below pile cap, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and temporary casing of appropriate lengthfor	metre	259.05

20 . Pile Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	setting out and removal of same and the length of the pile to be embedded in the pile cap etc. by Crawler mounted telescopic boom hydraulic piling rig all complete, including removal of excavated earth with all its lifts and leads (length of pile for payment shall be measured upto bottom of pile cap) Note:Truck Mounted rotary / TMR/Tube well boring machine shall not be used- 1000 mm dia piles		
20.2A.4	Boring, providing and installation bored cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below pile cap, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and temporary casing of appropriate lengthfor setting out and removal of same and the length of the pile to be embedded in the pile cap etc. by Crawler mounted telescopic boom hydraulic piling rig all complete, including removal of excavated earth with all its lifts and leads (length of pile for payment shall be measured upto bottom of pile cap) Note:Truck Mounted rotary / TMR/Tube well boring machine shall not be used- 1200 mm dia piles	metre	372.90
20.2A.5	Boring, providing and installation bored cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below pile cap, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and temporary casing of appropriate lengthfor setting out and removal of same and the length of the pile to be embedded in the pile cap etc. by Crawler mounted telescopic boom hydraulic piling rig all complete, including removal of excavated earth with all its lifts and leads (length of pile for payment shall be measured upto bottom of pile cap) Note:Truck Mounted rotary / TMR/Tube well boring machine shall not be used- 1500 mm dia piles	metre	583.00
20.3.1	Boring with hydraulic piling rigs with power units, providing and installing cast in situ single under reamed piles of specified diameter and length below pile cap in M-25 cement concrete, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and the length of the pile to be embedded in pile cap etc. all	metre	25.67

20 . Pile Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	complete (Length of pile for payment shall be measured upto to the bottom of pile cap) - 300 mm dia piles		
20.3.2	Boring with hydraulic piling rigs with power units, providing and installing cast in situ single under reamed piles of specified diameter and length below pile cap in M-25 cement concrete, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and the length of the pile to be embedded in pile cap etc. all complete (Length of pile for payment shall be measured upto to the bottom of pile cap) - 400 mm dia piles	metre	48.77
20.3.3	Boring with hydraulic piling rigs with power units, providing and installing cast in situ single under reamed piles of specified diameter and length below pile cap in M-25 cement concrete, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and the length of the pile to be embedded in pile cap etc. all complete (Length of pile for payment shall be measured upto to the bottom of pile cap) - 450 mm dia piles	metre	62.90
20.3.4	Boring with hydraulic piling rigs with power units, providing and installing cast in situ single under reamed piles of specified diameter and length below pile cap in M-25 cement concrete, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and the length of the pile to be embedded in pile cap etc. all complete (Length of pile for payment shall be measured upto to the bottom of pile cap) - 550 mm dia piles	metre	79.20
20.4.1	Extra over single under ream for providing additional bulbs in under reamed piles, under specified diameter (only the nos, of extra bulbs are to be paid) - 300mm dia piles	each	10.89
20.4.2	Extra over single under ream for providing additional bulbs in under reamed piles, under specified diameter (only the nos, of extra bulbs are to be paid) - 400mm dia piles	each	20.79
20.4.3	Extra over single under ream for providing additional bulbs in under reamed piles, under	each	26.73

20 . Pile Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	specified diameter (only the nos, of extra bulbs are to be paid) - 450mm dia piles		
20.4.4	Extra over single under ream for providing additional bulbs in under reamed piles, under specified diameter (only the nos, of extra bulbs are to be paid) - 550mm dia piles	each	33.66
20.5.1	Providing, driving (with vibrating pile driving hammer complete with power units & accessories) and installing driven Pre-cast reinforced cement concrete piles of specified diameter and length below the pile cap in M-25 cement concrete to carry safe working load not less than specified. With a central through preformed hole with M.S.black pipe of dia , 40mm for grouting with cement sand grouting mix 1:2 (1 cement : 2 fine aggregate) under sufficient positive pressure to ensure complete filling including centring , shuttering, driving and removing the steel casing pipe and lifting casing etc. complete but excluding the cost of steel reinforcement . (Length of pile for payment shall be measured from top of the shoe to the bottom of pile cap) - 400 mm dia piles	metre	52.31
20.5.2	Providing, driving (with vibrating pile driving hammer complete with power units & accessories) and installing driven Pre-cast reinforced cement concrete piles of specified diameter and length below the pile cap in M-25 cement concrete to carry safe working load not less than specified. With a central through preformed hole with M.S.black pipe of dia , 40mm for grouting with cement sand grouting mix 1:2 (1 cement : 2 fine aggregate) under sufficient positive pressure to ensure complete filling including centring , shuttering, driving and removing the steel casing pipe and lifting casing etc. complete but excluding the cost of steel reinforcement . (Length of pile for payment shall be measured from top of the shoe to the bottom of pile cap) - 450 mm dia piles	metre	66.04
20.5.3	Providing, driving (with vibrating pile driving hammer complete with power units & accessories) and installing driven Pre-cast reinforced cement concrete piles of specified diameter and length below the pile cap in M-25 cement concrete to carry safe working load not less than specified. With a central through preformed hole with M.S.black pipe of dia , 40mm for grouting with cement sand grouting mix 1:2 (1 cement : 2 fine aggregate) under sufficient positive pressure to ensure	metre	81.31

20 . Pile Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	complete filling including centring , shuttering, driving and removing the steel casing pipe and lifting casing etc. complete but excluding the cost of steel reinforcement . (Length of pile for payment shall be measured from top of the shoe to the bottom of pile cap) - 500 mm dia piles		
20.5.4	Providing, driving (with vibrating pile driving hammer complete with power units & accessories) and installing driven Pre-cast reinforced cement concrete piles of specified diameter and length below the pile cap in M-25 cement concrete to carry safe working load not less than specified. With a central through preformed hole with M.S.black pipe of dia , 40mm for grouting with cement sand grouting mix 1:2 (1 cement : 2 fine aggregate) under sufficient positive pressure to ensure complete filling including centring , shuttering, driving and removing the steel casing pipe and lifting casing etc. complete but excluding the cost of steel reinforcement . (Length of pile for payment shall be measured from top of the shoe to the bottom of pile cap) - 550 mm dia piles	metre	98.23
20.5.5	Providing, driving (with vibrating pile driving hammer complete with power units & accessories) and installing driven Pre-cast reinforced cement concrete piles of specified diameter and length below the pile cap in M-25 cement concrete to carry safe working load not less than specified. With a central through preformed hole with M.S.black pipe of dia , 40mm for grouting with cement sand grouting mix 1:2 (1 cement : 2 fine aggregate) under sufficient positive pressure to ensure complete filling including centring , shuttering, driving and removing the steel casing pipe and lifting casing etc. complete but excluding the cost of steel reinforcement . (Length of pile for payment shall be measured from top of the shoe to the bottom of pile cap) - 750 mm dia piles	metre	223.89
20.5.6	Providing, driving (with vibrating pile driving hammer complete with power units & accessories) and installing driven Pre-cast reinforced cement concrete piles of specified diameter and length below the pile cap in M-25 cement concrete to carry safe working load not less than specified. With a central through preformed hole with M.S.black pipe of dia , 40mm for grouting with cement sand grouting mix 1:2 (1 cement : 2 fine aggregate) under sufficient positive pressure to ensure complete filling including centring , shuttering,	metre	322.70

20 . Pile Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	driving and removing the steel casing pipe and lifting casing etc. complete but excluding the cost of steel reinforcement . (Length of pile for payment shall be measured from top of the shoe to the bottom of pile cap) - 1000 mm dia piles		

21 . Aluminium Work

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
21.4.1	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS:6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors including cost of cutting floors , embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete and the direction.- with stainless steel cover plate minimum 1.25mm thickness	each	0.64
21.4.2	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS:6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors including cost of cutting floors , embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete and the direction.- with brass cover plate minimum 1.25mm thickness	each	0.64
21.18	Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture , including providing and fixing top & bottom pivot & double acting hydraulic floor spring type fixing arrangement and making necessary holes etc. for fixing required door fittings, all complete as per direction of Engineer-in-charge (Door handle, lock and stopper etc. to be paid separately)	sqm	0.30

22 . Water Proofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
22.1.1	Providing and laying integral cement based treatment for water proofing on horizontal surfcae at all depth below ground level for under ground structures as per direction of Engineer-in-charge and consisting of :i) 1st layer of 22mm to 25mm thick approved and specified rough stone slab over a 25 mm thick base of cement mortar 1:3 (1 cement : 3 fine aggregate) including applying of twice (at base and top of mortar) cement slurry @ 2.2kg/sqm (each time) mixed with water proofing compound conforming to IS :2645 in the recommended propotion over the levelling course (leveling course to be paid separately) . Joints sealed and grouted with cement slurry mixed with water proofing compound .ii) 2nd layer of 25 mm thick cement mortar 1:3 (1cement : 3 fine aggregate) mixed with water proofing compound in recommended proportions . Iii) Finishing top with stone aggregate of 10 mm to 12mm nominal size spreading @ 8 cudm /sqm thoroughly embedded in the 2nd layer - Using rough kota stone	sqm	33.53
22.2.1	Providing and laying integral cement based treatment for water proofing on the vertical surface by fixing specified stone slab 22 mm to 25mm thick with cement slurry mixed with water proofing compound conforming to IS:2645 in recommended proportions with a gap of 20mm (minimum) between stone slabs and the receiving surfaces and filling the gaps with neat cement slurry mixed with water proofing compound and finishing the exterior of stone slab with cement mortat 1:3 (1cement : 3 fine aggregate) 20mm thick with neat cement punning mixed with water proofing compound in recommended proportion complete at all levels as directed by Engineer-in-charge - Using rough kota stone	sqm	43.52
22.3	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen and the like consisting of : i) 1st course of applying cement slurry @ 4.4 kg /sqm mixed with water proofing compound conforming to IS : 2645 in recommended proportions including rounding off junction of vertical and horizontal surface - ii) II nd course of 20mm cement plaster 1:3 (1 cement : 3 fine aggregate) mixed with water proofing compound in recommended proportion including rounding off junction of vertival and horizontal surface - iii) III rd course of applying blown or residual bitumen	sqm	15.82

22 . Water Proofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	applied hot at 1.7 kg per sqm of area - iv) IV th course of 400 micron thick PVC sheet. (Overlaps at joints of PVC sheet should be 100mm wide and pasted to each other with bitumen @1.7 kg/sqm)		
22.5	Providing and laying water proofing treatment in sunken portion of WCs , bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying :- a) First layer of slurry of cement @0.488 kg / sqm mixed with water proofing cement compound @ 0.253 kg / sqm . This layer will be allowed to air cure for 4 hours - b) second layer of slurry of cement @ 0.242 kg / sqm mixed with water proofing cement compound @ 0.126 kg /sqm . This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate included preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.	sqm	1.20
22.6	Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying : -a) after surface preparation, first layer of slurry of cement @ 0.488 kg / sqm mixed with water proofing cement compound @ 0.253 kg / sqm - b) laying second layer of fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm . - c) third layer of 1.5mm thickness consisting of slurry of cement @ 1.289 kg / sqm mixed with water proofing cement compound @ 0.670 kg / sqm and fine aggregate @ 1.289 kg / sqm . This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around . - d) fourth and final layer of brick tilling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured)	sqm	2.00
22.7.1	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations : - a) Applying a slurry coat of neat cement using 2.75 kg / sqm of cement admixed with water proofing compound conforming to IS: 2645 and approved over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment - b) Laying brick bats with mortar	sqm	36.46

22 . Water Proofing

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	using broken bricks / brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 fine aggregate) admixed with water proofing compound conforming to IS : 2645 and approved over 20mm thick layer of cement mortar of mix 1:5 (1 cement : 5 fine aggregate) admixed with water proofing compound conforming to IS:2645 and approved to required slope and treating similarly the adjoining walls upto 300mm height including rounding of junctions of walls and slabs - c) after two days of proper curing applying a second coat of cement slurry using 2.75 kg / sqm of cement admixed with water proofing compound conforming to IS: 2645 and approved - d) Finishing the surface with 20mm thick jointless cement mortar of mix 1:4 (1 cement : 4 fine aggregate) admixed with water proofing compound conforming to IS: 2645 and approved including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep - e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test . All above operations to be done in order and as per direction of Engineer-in-charge and specified - with average thickness of 120mm and minimum thickness at khurra as 65 mm		
22.14.1	Grading roof for water proofing treatment with - Cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size)	cum	320.00
22.14.2	Grading roof for water proofing treatment with - Cement mortar 1:3 (1 cement : 3 fine aggregate)	cum	510.00
22.14.3	Grading roof for water proofing treatment with - Cement mortar 1:4 (1 cement : 4 fine aggregate)	cum	380.00

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
26.31.1	Providing, mixing and applying bonding coat of approved adhesive on chipped portion of RCC as per specifications and direction of Engineer-In-charge complete in all respect. 26.31.1SBR Polymer (@10% of cement weight) modified cementitious bond coat @ 2.2 kg cement per sqm of surface area mixed with specified proportion of approved polymer	sqm	2.20
26.32.1	Providing , mixing and applying SBR polymer (of approved make) modified Cement mortar in proportion of 1:4 (1 cement : 4 graded fine aggregate with polymer minimum 2% by wt.of cement used) as per specifications and directions of Engineer-in-charge.Note: Measurement and Payment : The Pre-measurement of thickness shall be done just after the surface preparation is completed and payment under this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding / tapping with a blunt metal instrument and / or the 75mm size cube crusing strength at the end of 28 days to be not less than 30 N / Sqmm) - 12mm average thickness	sqm	5.47
26.32.2	Providing , mixing and applying SBR polymer (of approved make) modified Cement mortar in proportion of 1:4 (1 cement : 4 graded fine aggregate with polymer minimum 2% by wt.of cement used) as per specifications and direction. Note: Measurement and Payment : The Pre-measurement of thickness shall be done just after the surface preparation is completed and payment under this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding / tapping with a blunt metal instrument and / or the 75mm size cube crusing strength at the end of 28 days to be not less than 30 N / Sqmm) - 25 mm average thickness in two layers	sqm	11.40
26.32.3	Providing , mixing and applying SBR polymer (of approved make) modified Cement mortar in proportion of 1:4 (1 cement : 4 graded fine aggregate with polymer minimum 2% by wt.of cement used) as per specifications and direction. Note: Measurement and Payment : The Pre-measurement of thickness shall be done just after the surface preparation is completed and payment under this item shall be made only after proper wet curing has been done and surface has been	sqm	22.80

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<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	satisfactorily evaluated by sounding / tapping with a blunt metal instrument and / or the 75mm size cube crushing strength at the end of 28 days to be not less than 30 N / Sqmm) - 50 mm average thickness in two layers		
26.33.1	Providing , mixing and applying SBR polymer (of approved make @ minimum 2% by wt.of cement used) modified plain / reinforced cement concrete for structural members having minimum characteristic compressive strength (with ordinary portland cement , coarse sand and graded stone aggregate of 10 mm maximum size in proportion as per design criteria) with specified average thickness Note: Rates shall be for finished surface area of concrete and shall include the cost of labour , concrete and appropriate approved Super - Plasticiser for rendering concrete as flowable and SBR polymer but shall exclude cost of reinforcement , bond coat , Shear Keys , centering and shuttering , strutting , propping etc., (Payment under this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding / tapping with a blunt metal instrument) - 50 mm thick in Grade M 25 with cement content not less than 330 kg per cum	sqm	16.50
26.33.2	Providing , mixing and applying SBR polymer (of approved make @ minimum 2% by wt.of cement used) modified plain / reinforced cement concrete for structural members having minimum characteristic compressive strength (with ordinary portland cement , coarse sand and graded stone aggregate of 10 mm maximum size in proportion as per design criteria) with specified average thickness Note: Rates shall be for finished surface area of concrete and shall include the cost of labour , concrete and appropriate approved Super - Plasticiser for rendering concrete as flowable and SBR polymer but shall exclude cost of reinforcement , bond coat , Shear Keys , centering and shuttering , strutting , propping etc., (Payment under this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding / tapping with a blunt metal instrument) - 75 mm thick in Grade M 25 with cement content not less than 330 kg per cum	sqm	24.75

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
26.34.1	Providing and laying SBR Polymer modified (of approved make @ minimum 2% by wt.of cement used) plain / reinforced concrete jacket for the structural members e.g. columns , pillars , piers , beams etc with concrete having the specified minimum characteristic compressive strength (with ordinary portland cement , coarse and graded stone aggregate of 10mm maximum size in proportion as per design criteria) with specified average thickness all - round existing core of RCC member. Note: Rates shall be for finished surface area of concrete and shall include the cost of making holes in existing RCC slab , if required , for pouring concrete in shuttering mould of jacket and appropriate approved Super - Plasticiser for rendering concrete as flowable self compacting and SBR polymer but shall exclude cost of reinforcement , bond coat , Shear Keys , centering and shuttering , strutting , propping etc (Payment undr this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding/ tapping with a blunt metal instrument) - 50mm thick in Grade M25 with cement concrete not less than 330 kg per cum	sqm	16.50
26.34.2	Providing and laying SBR Polymer modified (of approved make @ minimum 2% by wt.of cement used) plain / reinforced concrete jacket for the structural members e.g. columns , pillars , piers , beams etc with concrete having the specified minimum characteristic compressive strength (with ordinary portland cement , coarse and graded stone aggregate of 10mm maximum size in proportion as per design criteria) with specified average thickness all - round existing core of RCC member. Note: Rates shall be for finished surface area of concrete and shall include the cost of making holes in existing RCC slab , if required , for pouring concrete in shuttering mould of jacket and appropriate approved Super - Plasticiser for rendering concrete as flowable self compacting and SBR polymer but shall excude cost of reinforcement , bond coat , Shear Keys , centering and shuttering , strutting , propping etc (Payment undr this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding/ tapping with a blunt metal instrument) - 75mm thick in Grade M25 with cement concrete not less than 330 kg per cum	sqm	24.75
26.34.3	Providing and laying SBR Polymer modified (of approved make @ minimum 2% by wt.of cement	sqm	33.00

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	used) plain / reinforced concrete jacket for the structural members e.g. columns , pillars , piers , beams etc with concrete having the specified minimum characteristic compressive strength (with ordinary portland cement , coarse and graded stone aggregate of 10mm maximum size in proportion as per design criteria) with specified average thickness all - round existing core of RCC member. Note: Rates shall be for finished surface area of concrete and shall include the cost of making holes in existing RCC slab , if required , for pouring concrete in shuttering mould of jacket and appropriate approved Super - Plasticiser for rendering concrete as flowable self compacting and SBR polymer but shall excude cost of reinforcement , bond coat , Shear Keys , centering and shuttering , strutting , propping etc (Payment undr this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding tapping with a blunt metal instrument) - 100mm thick in Grade M25 with cement concrete not less than 330 kg per cum		
26.35.1	Providing and injecting approved grout in proportion recommended by the manufacturers into cracks / honey-comb area of concrete / masonry by suitable gun / pump at required pressure including cutting of Nipples after curing etc complete as per direction of Engineer-in-charges. (The payment shall be made on the basis of actual weight of approved grout injected) - Stirrer mixed Acrylic Polymer of approved make @ 2% of weight of cement used) modified Cement slurry made with non shrink compound in concrete / RCC work)	kg	1.00
26.35.2	Providing and injecting approved grout in proportion recommended by the manufacturers into cracks / honey-comb area of concrete / masonry by suitable gun / pump at required pressure including cutting of Nipples after curing etc complete as per direction of Engineer-in-charges (The payment shall be made on the basis of actual weight of approved grout injected) - Stirrer mixed SBR Polymer (of approved make) modified Cement slurry made with Shrinkage Compensating Cement in concrete / RCC work	kg	1.00
26.38.1	Shotcreting R.C.C. columns, beams and slabs etc. in layers with approved design mix concrete having the specified minimum characteristic compressive strength [with ordinary portland cement, coarse sand and graded stone aggregate of 10 mm	sqm	10.31

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	maximum size in proportion as per design criteria] including the cost of centering and shuttering at edges and corners etc. as directed by Engineer- in-Charge Note: Rates shall include the providing necessary ground wires etc. The levelling gauges, if used, shall be paid for separately. Payment under this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding/tapping with a blunt metal instrument.25mm thick in Grade M 25 with cement content not less than 330 kg per cum		
26.38.2	Shotcreting R.C.C. columns, beams and slabs etc. in layers with approved design mix concrete having the specified minimum characteristic compressive strength [with ordinary portland cement, coarse sand and graded stone aggregate of 10 mm maximum size in proportion as per design criteria] including the cost of centering and shuttering at edges and corners etc. as directed by Engineer- in-Charge-Note: Rates shall include the providing necessary ground wires etc. The levelling gauges, if used, shall be paid for separately. Payment under this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding/tapping with a blunt metal instrument.-50mm thick in Grade M 25 with cement content not less than 330 kg per cum	sqm	20.63
26.38.3	Shotcreting R.C.C. columns, beams and slabs etc. in layers with approved design mix concrete having the specified minimum characteristic compressive strength [with ordinary portland cement, coarse sand and graded stone aggregate of 10 mm maximum size in proportion as per design criteria] including the cost of centering and shuttering at edges and corners etc. as directed by Engineer- in-Charge Note: Rates shall include the providing necessary ground wires etc. The levelling gauges, if used, shall be paid for separately. Payment under this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding/tapping with a blunt metal instrument.75mm thick in Grade M 25 with cement content not less than 330 kg per cum	sqm	30.94
26.46	Providing and fixing in position , 200 mm thick factory made Expanded Polystyrene Core (EPS Core) wall panels consisting of EPS core sandwiched between two engineered sheets of	sqm	51.00

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	welded wire fabric mesh duly finished with shortcrete materials on outer faces . The fabric mesh shall be made of 3mm dia G.I.wire mesh with 50mm pitch in both the directions and on both faces of the wall, kept at 120-135 mm gap and connected by the zigzag G.I.wire of 3mm dia at alternate row by welding (at an angle ranging from 50 -70 degree) . The EPS core shall consist of 100 mm thick EPS of density not less than 20kg /cum. Both the outer faces of the panel shall be finished by applying the layer of 50mm thick cement mortar 1:3 (1cement :3 fine aggregate) (not having more than 40% stone chips of size upto 6mm) .A with the help of shortcreting / guniting equipment etc at a pressure not less than 1 bar (100Kn/sqm) and both surfaces finished with trowel. Fixing operations of wall panels shall be completed in all respect as per drawings and specifications and under the overall direction of the Engineer-in-charge		
26.47	Providing and fixing in position , 230 mm thick factory made Expanded Polystyrene Core (EPS Core) roof / floor panels made of 3mm dia G.I.wire mesh with 50mm pitch in both the directions and on both faces of panel, kept at 120-135 mm gap and connected by the zig zag G.I.wire of 3 mm dia at alternate row by welding (at an angle ranging from 50-70 degree). The EPS core shall consist of 100mm thick EPS of density not less than 20kg / per cum. The bottom side of the panel shall be finished by applying a layer of 60 -65 mm thick cement mortar 1:3 (1 cement : 3 fine aggregate) (not having more than 40% stone chips of size upto 6mm) . At with the help of shortcreting equipment etc at a pressure of not less than 1 bar (100Kn/sqm) and surface finished with trowel. The top face of the panel shall be provided and finished by applying 70-75 mm thick layer of cement concrete 1:1.5:3 (1 cement :1.5fine aggregate: 3 graded stone aggregate 20mm nominal size). Fixing operations of roof /floor panels shall be completed in all respect as per drawings and specifications and under the overall direction of the Enginner-in-charge	sqm	58.60
26.53	"Filling of empty cavities (as shown in the structural design drawing) with quarry dust mixed with 5% cement (by volume). After initial infill of 50 mm thick with M25 concrete at base/bottom of cavities to seal off, infill wall panel cavities in 3 stages as detailed below, (i) 1st pour / infill to be limited to 0.3 to 0.50 m height from bottom of the panel.(ii) 2nd	cum	71.76

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	Pour/ infill: infilling shall be done only after 90 minutes interval between successive pours. The maximum height of infill shall be restricted to 1.5m height or up to the top level of door / window.(iii) 3rd pour/infill: After an interval of 90 minutes of second pour, infill or pour the balance height up to the bottom of embedded RCC tie beam Pour enough water just required to dampen the dry mix enough to form cake form after each stage.(cost of laying M25 concrete shall be paid separately)(If any rain falls in between any stages of concrete pour, make sure to cover the panel top to prevent ingress of water or water falling into the cavities. In case of water collection over the concrete inside the panel, drill 10mm hole in GFRG panel immediately above concrete filled level to drain out water before pour/in-fill of balance concreting) "		
26.66	Providing and fixing in position, 130 mm thick factory made Expanded Polystyrene Core (EPS Core) wall panels consisting of EPS core sandwiched between two Engineered sheets of welded wire fabric mesh duly finished with shotcrete materials on outer faces. The fabric mesh shall be made of 3 mm dia zinc coated G.I. wire mesh with 50 mm pitch in both the directions and on both faces of the wall and connected by GI wire of 3mm dia at alternate row by welding. The EPS core shall consist of 60 mm thick EPS of density not less than 16 kg/ per cum. Both the outer faces of the panel shall be finished by applying the layer of 35 mm thick cement mortar 1:3 {1 cement: 3 coarse sand (not having more than 40% stone chips of size upto 6 mm)} with the help of shotcreting/guniting equipment etc at a pressure not less than 1 bar (100KN/m ²) and both surfaces finished with trowel. Fixing operations of wall panels shall be completed in all respect as per drawings and specifications and under the overall direction of the Engineer-in-charge.	sqm	35.70
26.68.1	Providing and laying factory made Precast concrete solid blocks of 200 mm thickness of grade M10 made of C&D waste from approved manufacturer in foundation and plinth in:- Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	28.25
26.69.1	Providing and laying factory made Precast concrete solid blocks of 200 mm thickness of grade M10 made of C&D waste from approved manufacturer in foundation and plinth level upto floor V level- Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	28.25

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
26.70.1	Providing and laying half block masonry with factory made Precast concrete solid blocks of 100 mm thickness of grade M10 made of C&D waste from approved manufacturer in foundation and plinth in: Cement mortar 1:4(1 cement : 4 coarse sand)	sqm	2.69
26.71.1	Providing and laying half block masonry with factory made Precast concrete solid blocks of 100 mm thickness of grade M10 made of C&D waste from approved manufacturer in superstructure above plinth level up to floor V level: Cement mortar 1:4 (1 cement : 4 coarse sand)	sqm	2.69
26.73.1.1	Fabrication & Manufacturing of Prestressed Hollow Core slab (Hollow area 25 to 30%) of different thickness & modular width 1200mm in Controlled Factory Environment with approved methodology confirming to IS 10297:1982 by using long line casting method having arrangement of proper steel bed. Concreting should be done by batch mixing plant capable of producing zero slump concrete , transported through automatic shuttels of standard make & layed on bed with the help of extruder / Slipformer, finishing ,curing and also provision of steam curing, cutting, making necessary cutout / holes of required sizes for services in slab element after achieving required strength, yard handling & stacking all complete as per approved shop drawings & design mix as per the direction of the Engineer-in-charge.(Cost of strands should be paid separately). Note : Excess / less cement over the specified cement content used as per design mix is payable / recoverable separately) - Concrete Grade M-40 (Cement content 400 Kg) - 100mm thick hollow core slab	metre	39.60
26.73.1.2	Fabrication & Manufacturing of Prestressed Hollow Core slab (Hollow area 25 to 30%) of different thickness & modular width 1200mm in Controlled Factory Environment with approved methodology confirming to IS 10297:1982 by using long line casting method having arrangement of proper steel bed. Concreting should be done by batch mixing plant capable of producing zero slump concrete , transported through automatic shuttels of standard make & layed on bed with the help of extruder / Slipformer, finishing ,curing and also provision of steam curing, cutting, making necessary cutout / holes of required sizes for services in slab element after achieving required strength, yard handling & stacking all complete as per approved shop drawings & design mix as per the direction of the	metre	47.52

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	Engineer-in-charge.(Cost of strands should be paid separately). Note : Excess / less cement over the specified cement content used as per design mix is payable / recoverable separately) - Concrete Grade M-40 (Cement content 400 Kg) - 120mm thick hollow core slab		
26.73.1.3	Fabrication & Manufacturing of Prestressed Hollow Core slab (Hollow area 25 to 30%) of different thickness & modular width 1200mm in Controlled Factory Environment with approved methodology confirming to IS 10297:1982 by using long line casting method having arrangement of proper steel bed. Concreting should be done by batch mixing plant capable of producing zero slump concrete , transported through automatic shuttels of standard make & layed on bed with the help of extruder / Slipformer, finishing ,curing and also provision of steam curing, cutting, making necessary cutout / holes of required sizes for services in slab element after achieving required strength, yard handling & stacking all complete as per approved shop drawings & design mix as per the direction of the Engineer-in-charge.(Cost of strands should be paid separately). Note : Excess / less cement over the specified cement content used as per design mix is payable / recoverable separately) - Concrete Grade M-40 (Cement content 400 Kg) - 150mm thick hollow core slab	metre	59.40
26.73.1.4	Fabrication & Manufacturing of Prestressed Hollow Core slab (Hollow area 25 to 30%) of different thickness & modular width 1200mm in Controlled Factory Environment with approved methodology confirming to IS 10297:1982 by using long line casting method having arrangement of proper steel bed. Concreting should be done by batch mixing plant capable of producing zero slump concrete , transported through automatic shuttels of standard make & layed on bed with the help of extruder / Slipformer, finishing ,curing and also provision of steam curing, cutting, making necessary cutout / holes of required sizes for services in slab element after achieving required strength, yard handling & stacking all complete as per approved shop drawings & design mix as per the direction of the Engineer-in-charge.(Cost of strands should be paid separately). Note : Excess / less cement over the specified cement content used as per design mix is payable / recoverable separately) - Concrete Grade M-40 (Cement content 400 Kg) - 200mm thick hollow core slab	metre	73.92

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
26.73.1.5	Fabrication & Manufacturing of Prestressed Hollow Core slab (Hollow area 25 to 30%) of different thickness & modular width 1200mm in Controlled Factory Environment with approved methodology confirming to IS 10297:1982 by using long line casting method having arrangement of proper steel bed. Concreting should be done by batch mixing plant capable of producing zero slump concrete , transported through automatic shuttels of standard make & layed on bed with the help of extruder / Slipformer, finishing ,curing and also provision of steam curing, cutting, making necessary cutout / holes of required sizes for services in slab element after achieving required strength, yard handling & stacking all complete as per approved shop drawings & design mix as per the direction of the Engineer-in-charge.(Cost of strands should be paid separately). Note : Excess / less cement over the specified cement content used as per design mix is payable / recoverable separately) - Concrete Grade M-40 (Cement content 400 Kg) - 250mm thick hollow core slab	metre	92.40
26.73.1.6	Fabrication & Manufacturing of Prestressed Hollow Core slab (Hollow area 25 to 30%) of different thickness & modular width 1200mm in Controlled Factory Environment with approved methodology confirming to IS 10297:1982 by using long line casting method having arrangement of proper steel bed. Concreting should be done by batch mixing plant capable of producing zero slump concrete , transported through automatic shuttels of standard make & layed on bed with the help of extruder / Slipformer, finishing ,curing and also provision of steam curing, cutting, making necessary cutout / holes of required sizes for services in slab element after achieving required strength, yard handling & stacking all complete as per approved shop drawings & design mix as per the direction of the Engineer-in-charge.(Cost of strands should be paid separately). Note : Excess / less cement over the specified cement content used as per design mix is payable / recoverable separately) - Concrete Grade M-40 (Cement content 400 Kg) - 300mm thick hollow core slab	metre	110.88
26.73.1.7	Fabrication & Manufacturing of Prestressed Hollow Core slab (Hollow area 25 to 30%) of different thickness & modular width 1200mm in Controlled Factory Environment with approved methodology confirming to IS 10297:1982 by using long line	metre	129.36

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	casting method having arrangement of proper steel bed. Concreting should be done by batch mixing plant capable of producing zero slump concrete , transported through automatic shuttels of standard make & layed on bed with the help of extruder / Slipformer, finishing ,curing and also provision of steam curing, cutting, making necessary cutout / holes of required sizes for services in slab element after achieving required strength, yard handling & stacking all complete as per approved shop drawings & design mix as per the direction of the Engineer-in-charge.(Cost of strands should be paid separately). Note : Excess / less cement over the specified cement content used as per design mix is payable / recoverable separately) - Concrete Grade M-40 (Cement content 400 Kg) - 350mm thick hollow core slab		
26.73.1.8	Fabrication & Manufacturing of Prestressed Hollow Core slab (Hollow area 25 to 30%) of different thickness & modular width 1200mm in Controlled Factory Environment with approved methodology confirming to IS 10297:1982 by using long line casting method having arrangement of proper steel bed. Concreting should be done by batch mixing plant capable of producing zero slump concrete , transported through automatic shuttels of standard make & layed on bed with the help of extruder / Slipformer, finishing ,curing and also provision of steam curing, cutting, making necessary cutout / holes of required sizes for services in slab element after achieving required strength, yard handling & stacking all complete as per approved shop drawings & design mix as per the direction of the Engineer-in-charge.(Cost of strands should be paid separately). Note : Excess / less cement over the specified cement content used as per design mix is payable / recoverable separately) - Concrete Grade M-40 (Cement content 400 Kg) - 400mm thick hollow core slab	metre	147.84
26.73.2.1	Extra for using M-50 (cement content 425kg) instead of M-40 - 100 mm thick hollow core slab	metre	2.25
26.73.2.2	Extra for using M-50 (cement content 425kg) instead of M-40 - 120 mm thick hollow core slab	metre	2.70
26.73.2.3	Extra for using M-50 (cement content 425kg) instead of M-40 - 150 mm thick hollow core slab	metre	3.38
26.73.2.4	Extra for using M-50 (cement content 425kg) instead of M-40 - 200 mm thick hollow core slab	metre	4.20

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
26.73.2.5	Extra for using M-50 (cement content 425kg) instead of M-40 - 250 mm thick hollow core slab	metre	5.25
26.73.2.6	Extra for using M-50 (cement content 425kg) instead of M-40 - 300 mm thick hollow core slab	metre	6.30
26.73.2.7	Extra for using M-50 (cement content 425kg) instead of M-40 - 350 mm thick hollow core slab	metre	7.35
26.73.2.8	Extra for using M-50 (cement content 425kg) instead of M-40 - 400 mm thick hollow core slab	metre	8.40
26.73.3.1	Extra for using M-60 (cement content 440kg) instead of M-40 - 100 mm thick hollow core slab	metre	3.60
26.73.3.2	Extra for using M-60 (cement content 440kg) instead of M-40 - 120 mm thick hollow core slab	metre	4.32
26.73.3.3	Extra for using M-60 (cement content 440kg) instead of M-40 - 150 mm thick hollow core slab	metre	5.40
26.73.3.4	Extra for using M-60 (cement content 440kg) instead of M-40 - 200 mm thick hollow core slab	metre	6.72
26.73.3.5	Extra for using M-60 (cement content 440kg) instead of M-40 - 250 mm thick hollow core slab	metre	8.40
26.73.3.6	Extra for using M-60 (cement content 440kg) instead of M-40 - 300 mm thick hollow core slab	metre	10.08
26.73.3.7	Extra for using M-60 (cement content 440kg) instead of M-40 - 350 mm thick hollow core slab	metre	11.76
26.73.3.8	Extra for using M-60 (cement content 440kg) instead of M-40 - 400 mm thick hollow core slab	metre	13.44
26.74.1	Fabrication & Manufacturing of solid precast concrete element with provisions of shear keys, connecting loops, dowel tubes and proper lifting accessories for walls, beams, slabs, stairs, columns etc, of various thickness, shape and size of different concrete grades manufactured in controlled factory environment with approved methodology including moulds(Pallet systems, Tilts form , table moulds, battery moulds, vertical moulds, beam moulds, column moulds, stair case moulds, Façade mould , etc), mixing transporting and placing of concrete, vibrating, curing, finishing, making necessary cutout/ holes of required sizes for services, yard handling & stacking all complete as per IS 11447:1985 and as per approved shop drawings and design mix as per the direction of	cum	390.00

26 . New Technologies and Materials

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	Engineer -in-charge (Cost of reinforcement,Mechanical, Electrical and Plumbing inserts will be paid separately). - Note: Excess/ less cement over the specified cement content used as per design mix is payable / recoverable separately) - Concrete grade M-35		
26.74.2	Extra for using M-40 instead of M-35	cum	30.00
26.74.3	Extra for using M-50 instead of M-35	cum	55.00
26.74.4	Extra for using M-60 instead of M-35	cum	70.00
26.82	"Providing and laying rigid EPS (cellular plastic material) blocks conforming to ASTM standards/specifications of minimum density 21.60 Kg/cum on floors, steps, stage etc. of required size and shape as per direction of Engineer-in-charge. This shall include the following operation. The EPS blocks shall be cut to required shape and sizes including cuttings for passing of services, joined together with synthetic resin adhesives as per relevant specifications and packed/placed in position for stepped floor or platform formation. The top and sides surfaces to be provided with GI woven wire mesh of aperture 5.45 mm (with wire dia 0.90 mm) secured to EPS blocks with wire pins/clips. Horizontal top surface to be provided with 20 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate upto 6mm chippings) and vertical surface to be provided with 12mm cement plaster 1:4 (1 cement : 4 coarse sand). The concrete/plastered surfaces so prepared shall be scratched with wire brushes to form burrs, so as to act as base for flooring or veneering/panelling to be done later as per approved design (which shall be paid for separately complete as per direction of Engineer-in-charge. "	sqm	8.38

30 . Irrigation

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
30.12	Providing and laying brick block of size 0.34 x 0.34 x 0.3mts . In C.M 1:4 (1 cement : 4 fine aggregate) using well burnt country bricks of class designation 35 for launching apron including the bed, laying to the required levels , slop etc. complete	cum	88.64
30.13	Providing and laying brick block of size 0.34 x 0.34 x 0.23 mts . In C.M 1:4 (1 cement : 4 fine aggregate) using well burnt country bricks of class designation 35 for apron and revetment including levelling the bed, laying to the required levels , slop etc.complete	cum	88.64
30.13C	Providing and laying precast cement concrete blocks for launching apron of size 0.5 x 0.5 x 0.45 m in cement concrete 1:3:6 (1 cement : 3 sand : 6 graded stone aggregate) using 6mm thick steel mould including consolidation , curing and placing in position etc.,complete	cum	220.00
30.13D	Providing and laying precast cement concrete blocks for launching apron of size 0.9 x 0.9 x 0.45 m in cement concrete 1:3:6 (1 cement : 3 sand : 6 graded stone aggregate) using 6mm thick steel mould including consolidation , curing and placing in position etc.,complete	cum	220.00
30.18	Grouting the revetment not less than 15 cm deep with cement concrete 1:5:10 (one cement , five sand , and ten graded stone aggregate of 12.50 mm size) and pointing the same with cement mortar 1:5 (one cement and five sand) to give an even and smooth surface)	sqm	5.78

31 . Water Supply (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
31.278.1C	Erection, testing and commissioning of the centrifugal motor pumpset with pipe fittings, etc complete- 60HP to 75 HP motor	no	200.00
31.278.1D	Erection, testing and commissioning of the centrifugal motor pumpset with pipe fittings, etc complete- 100 HP motor	no	200.00

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
32.2.1	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40 mm nominal size) alround S.W. pipes including bed concrete as per standard design - 100 mm diameter.	metre	1.90
32.4.1.2	Providing and fixing square-mouth S.W. gully trap grade `A' complete with C.I. grating brick masonry chamber with bricks of class designation 35 and water tight C.I. cover with frame of 300 x 300 mm size (inside) the weight of cover to be not less than 4.5 kg. and frame to be not less than 2.70 kg. as per standard design - 100 x 100 mm size P type.	each	29.32
32.4.2.2	Providing and fixing square-mouth S.W. gully trap grade `A' complete with C.I. grating brick masonry chamber with bricks of class designation 35 and water tight C.I. cover with frame of 300 x 300 mm size (inside) the weight of cover to be not less than 4.5 kg. and frame to be not less than 2.70 kg. as per standard design - 125 x 100 mm size P type.	each	52.36
32.4.4.2	Providing and fixing square-mouth S.W. gully trap grade `A' complete with C.I. grating brick masonry chamber with bricks of class designation 35 and water tight C.I. cover with frame of 300 x 300 mm size (inside) the weight of cover to be not less than 4.5 kg. and frame to be not less than 2.70 kg. as per standard design - 180 x 100 mm size P type.	each	28.02
32.4.5.2	Providing and fixing square-mouth S.W. gully trap grade `A' complete with C.I. grating brick masonry chamber with bricks of class designation 35 and water tight C.I. cover with frame of 300 x 300 mm size (inside) the weight of cover to be not less than 4.5 kg. and frame to be not less than 2.70 kg. as per standard design - 180 x 150 mm size P type.	each	26.81
32.6.1	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc. complete - 100 mm dia.	metre	0.50
32.6.2	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc. complete - 150 mm dia.	metre	0.60
32.6.3	Providing and laying non-pressure NP2 class (light	metre	0.90

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc. complete - 250 mm dia.		
32.6.4	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc. complete - 300 mm dia.	metre	1.10
32.6.5	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc. complete - 450 mm dia.	metre	2.40
32.6.10	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine aggregate) including testing of joints etc. complete - 900 mm dia.	metre	4.90
32.11.1.2	Constructing brick masonry manhole with 35 class designation bricks in cement mortar 1:4 (1 cement : 4 fine aggregate) R.C.C. top slab with 1:2:4 mix (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 fine aggregate : 8 graded stone aggregate 40 mm nominal size) inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design - inside size 90 x 80 cm and 45 cm deep including C.I. cover with frame (light duty) 455 x 610 mm internal dimensions total weight of cover and frame to be not less than 38 kg. (weight of cover 23 kg. and weight of frame 15 kg) - with bricks of class designation 3.5	each	246.94
32.11.2.2	Constructing brick masonry manhole with 35 class designation bricks in cement mortar 1:4 (1 cement : 4 fine aggregate) R.C.C. top slab with 1:2:4 mix (1 cement : 2 fine aggregate : 4 graded stone aggregate 20mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 fine aggregate : 8 graded stone aggregate 40mm nominal size) inside plastering 12mm thick with cement mortar 1:3 (1	each	265.95

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	cement : 3 fine aggregate) finished with a floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20mm nominal size) neatly finished complete as per standard design - inside size 90 x 80cm and 60cm deep including C.I. cover with frame (light duty) 455 x 610mm internal dimensions total weight of cover and frame to be not less than 38 kg. (weight of cover 23 kg. and weight of frame 15 kg.) - with bricks of class designation 3.5		
32.11.3.2	Constructing brick masonry manhole with 35 class designation bricks in cement mortar 1:4 (1 cement : 4 fine aggregate) R.C.C. top slab with 1:2:4 mix (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 fine aggregate : 8 graded stone aggregate 40 mm nominal size) inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design - inside size 120 x 90 cm and 90 cm deep including C.I. cover with frame (medium duty) 500 mm internal diameter, total weight of cover and frame to be not less than 116 kg. (weight of cover 58 kg. and weight of frame 58 kg) - with bricks of class designation 3.5.	each	406.31
32.11.4.2	Constructing brick masonry manhole with 35 class designation bricks in cement mortar 1:4 (1 cement : 4 fine aggregate) R.C.C. top slab with 1:2:4 mix (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 fine aggregate : 8 graded stone aggregate 40 mm nominal size) inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design - inside size 120 x 90 cm and 90 cm deep including C.I. cover with frame (heavy duty) 560 mm internal diameter, total weight of cover and frame to be not less than 208 kg. (weight of cover 108 kg. and weight of frame 100 kg) - with bricks of class	each	404.02

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	designation 3.5		
32.12.1.2	Extra for depth for manholes - size of 90 x 80 cm - with bricks of class designation 3.5	metre	125.82
32.12.2.2	Extra for depth for manholes - size 120 x 90 cm - with bricks of class designation 3.5	metre	151.34
32.17.1	Providing M.S. foot rests including fixing in manholes with 20 x 20 x 10 cm cement concrete blocks 1:3:6 (1 cement : 3 fine aggregate : 6 graded stone aggregate 20 mm nominal size) as per standard design - with 20 x 20 mm square bar.	each	0.88
32.17.2	Providing M.S. foot rests including fixing in manholes with 20 x 20 x 10 cm cement concrete blocks 1:3:6 (1 cement : 3 fine aggregate : 6 graded stone aggregate 20 mm nominal size) as per standard design - with 20 mm diameter round bar.	each	0.88
32.18.1	Replacement of M.S. foot rest in manhole including dismantling concrete blocks and fixing with 20 x 20 x 10 cm cement concrete blocks 1:3:6 (1 Cement : 3 fine aggregate : 6 grade stone aggregate 20mm nominal size) with 20 x 20 mm square bar.	each	0.88
32.18.2	Replacement of M.S foot rests in manhole including dismantling concrete blocks and fixing with 20 x 20 x 10 cm cement concrete blocks 1:3:6 (1 cement : 3 fine aggregate : 6 grade stone aggregate 20 mm nominal size) with 20 mm diameter round bar.	each	0.88
32.19A.1.1	Providing and fixing in position precast R.C.C manhole cover and frame of required shape and approved quality - LD - 2.5 - rectangular shape 600 x 450 mm internal dimensions.	each	12.80
32.19A.1.2	Providing and fixing in position precast R.C.C manhole cover and frame of required shape and approved quality - LD - 2.5 - square shape 450 mm internal dimensions	each	9.60
32.19A.1.3	Providing and fixing in position precast R.C.C manhole cover and frame of required shape and approved quality - LD - 2.5 - circular shape 450 mm internal diameter.	each	9.60
32.19A.2.1	Providing and fixing in position precast R.C.C manhole cover and frame of required shape and approved quality - MD - 10 - square 500 mm internal dimensions.	each	12.80

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
32.19A.2.2	Providing and fixing in position precast R.C.C manhole cover and frame of required shape and approved quality - MD - 10 - circular shape 500 mm internal diameter	each	9.60
32.19A.3.1	Providing and fixing in position precast R.C.C manhole cover and frame of required shape and approved quality - HD - 20 - circular shape 560 mm internal diameter. dimensions.	each	9.60
32.19A.4.1	Providing and fixing in position precast R.C.C manhole cover and frame of required shape and approved quality - EHD - 35 - circular shape 560 mm internal dia.	each	9.60
32.21.1	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 fine aggregate : 4 graded stone aggregate 40 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete. - for pipes 100 to 230 mm diameter.	each	5.54
32.21.2	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 fine aggregate : 4 graded stone aggregate 40 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete. - for pipes 250 to 300 mm diameter.	each	9.39
32.21.3	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 fine aggregate) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete. - for pipes 350 to 450 mm diameter.	each	15.21
32.22.1	Providing sand cast iron drop connection externally for 60 cm drop from branch sewer line to main sewer manhole including inspection and cleaning	each	28.53

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	eye with chain and lid, sand cast iron drop pipe and bend encased alround with cement concrete 1:5:10 (1 cement: 5 fine aggregate: 10 graded stone aggregate with 40 mm nominal size) with all centering and shuttering required, cutting holes in walls and making good with brick work in cement mortar 1:5 (1 cement : 5 fine cement) plastered with cement mortar 1:3 (1 cement : 3 fine aggregate) on inside of the manhole wall lead caulked joints between sand cast iron pipes and fittings, stiff cement mortar 1:1 (1 cement : 1 fine aggregate) joints between sand cast iron tee and S.W. pipe making required channels complete as per standard design and specification. - 100 mm dia. sand cast iron drop connection.		
32.22.2	Providing sand cast iron drop connection externally for 60 cm drop from branch sewer line to main sewer manhole including inspection and cleaning eye with chain and lid, sand cast iron drop pipe and bend encased alround with cement concrete 1:5:10 (1 cement: 5 fine aggregate: 10 graded stone aggregate with 40 mm nominal size) with all centering and shuttering required, cutting holes in walls and making good with brick work in cement mortar 1:5 (1 cement : 5 fine aggregate) plastered with cement mortar 1:3 (1 cement : 3 fine aggregate) on inside of the manhole wall lead caulked joints between sand cast iron pipes and fittings, stiff cement mortar 1:1 (1 cement : 1 fine aggregate) joints between sand cast iron tee and S.W. pipe making required channels complete as per standard design and specification. - 150 mm dia. sand cast iron drop connection.	each	37.44
32.23.1	Extra for depths beyond 60 cm of sand cast iron drop connection complete. - for 100 mm dia sand cast iron drop connection.	metre	20.80
32.23.2	Extra for depths beyond 60 cm of sand cast iron drop connection complete. - for 150 mm dia sand cast iron drop connection.	metre	26.00
32.26A	Providing R.C.C.spun vent shaft with cowl 140 mm and 200 mm internal and external dia. respectively at top 300 and 450 mm internal and external dia. respectively at bottom and 9.10 m overall length, bottom 1.25 m below ground level fixed in a pit 90 x 90 x 150 cm with cement concrete 1:4:8 (1 cement : 4 sand : 8 graded stone aggregate 20 mm nominal size) 25 cm in bed and minimum 20 cm alround with top 15 cm in cement concrete 1:2:4 (1 cement :	each	188.40

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	2 fine aggregate : 4 graded stone aggregate 20 mm nominal size), junction of vent shaft and concrete grouted with cement mortar 1:1 (1 cement : 1 fine aggregate) including making connection with sewer manhole with 150 mm dia. cement concrete pipe of required length complete as per standard design.		
32.27.2	Constructing brick masonry road gully chamber 50x45x60cm with bricks of class designation 35 in cement mortar 1:4 (1 cement : 4 fine aggregate) including 500x450mm precast R.C.C. horizontal grating with frame complete as per standard design:- With Class 3.5 designation bricks.	each	93.04
32.28.2	Constructing brick masonry road gully chamber 45x45x77.5cm with bricks of class designation 35 in cement mortar 1:4 (1 cement : 4 fine aggregate) with precast R.C.C. vertical grating complete as per standard design - with class designation 3.5 bricks.	each	101.75
32.29.2	Constructing brick masonry road gully chamber 110x50x77.5cm with bricks of class designation 35 in cement mortar 1:4 (1 cement : 4 fine aggregate) including 500x450mm precast R.C.C. horizontal grating with frame and vertical grating complete as per standard design:-with class designation 3.5 bricks.	each	170.25
32.33.1.2	Constructing brick masonry chamber for underground C.I.inspection chamber and bends with 35 class designation bricks in cement mortar 1:4 (1 cement : 4 fine aggregate) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) R.C.C. top slab with 1:2:4 mix (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) foundation concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement :3 fine aggregate) finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design - inside dimensions 455 x 610 mm and 45 cm deep for single pipe line. - With 3.5 class designation bricks.	each	89.56
32.33.2.2	Constructing brick masonry chamber for underground C.I.inspection chamber and bends with 35 class designation bricks in cement mortar 1:4 (1 cement : 4 fine aggregate) C.I. cover with frame (light duty) 455x 610 mm internal	each	111.31

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) R.C.C. top slab with 1:2:4 mix (1 cement : 2 fine aggregate : 4 graded stone aggregate 20 mm nominal size) foundation concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement :3 fine aggregate) finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design - inside dimensions 500 x 700 mm and 45 cm deep for pipe line with one or two inlets.		
32.33.3.2	Constructing brick masonry chamber for underground C.I.inspection chamber and bends with 35 class designation bricks in cement mortar 1:4 (1 cement : 4 fine aggregate) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) R.C.C. top slab with 1:2:4 mix (1 cement : 2 sand : 4 graded stone aggregate 20 mm nominal size) foundation concrete 1:5:10 (1 cement : 5 sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement :3 sand) finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design - inside dimensions 600 x 850 mm and 45 cm deep for pipe line with three or more inlets.	each	139.02
32.34.1.2	Extra for depth beyond 45 cm of brick masonry chamber - for 455x610 mm size with bricks of class designation 3.5	metre	86.40
32.34.2.2	Extra for depth beyond 45 cm of brick masonry chamber - for 500x700 mm size with bricks of class designation 3.5	metre	94.63
32.34.3.2	Extra for depth beyond 45 cm of brick masonry chamber - for 600 x 850 mm size with bricks of class designation 3.5	metre	110.70
32.35.1.2	Constructing brick masonry open surface drain with bricks of class designation 35 in cement mortar 1 : 4 (1 cement : 4 fine aggregate) including earth excavation, 10 cm thick bed concrete 1 : 5 : 10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40 mm nominal size and 25 mm thick cement concrete 1 : 2 : 4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm	metre	17.92

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	nominal size) for filling haunches including 12 mm cement plaster 1 : 4 (1 cement : 4 fine aggregate) with a floating coat of neat cement inside the drain, its top and exposed side including disposal of surplus earth complete as per standard design - 10 cm drain 20 cm average depth with class designation 3.5 bricks.		
32.35.2.2	Constructing brick masonry open surface drain with class designation 35 in cement mortar 1 : 4 (1 cement : 4 fine aggregate) including earth excavation, 10 cm thick bed concrete 1 : 5 : 10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40 mm nominal size and 25 mm thick cement concrete 1 : 2 : 4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size) for filling haunches including 12 mm cement plaster 1 : 4 (1 cement : 4 fine aggregate) with a floating coat of neat cement inside the drain, its top and exposed side including disposal of surplus earth complete as per standard design - 15 cm drain 20 cm average depth - with brick class designation 3.5	metre	19.16
32.35.3.2	Constructing brick masonry open surface drain with class designation 35 in cement mortar 1:4 (1 cement : 4 fine aggregate) including earth excavation, 10 cm thick bed concrete 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40 mm nominal size and 25 mm thick cement concrete 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate 12.5 mm nominal size) for filling haunches including 12 mm cement plaster 1:4 (1 cement : 4 fine aggregate) with a floating coat of neat cement inside the drain, its top and exposed side including disposal of surplus earth complete as per standard design - 25 cm drain 30 cm average depth - with brick class designation 3.5	metre	25.44
32.39.2	Making soak pit 2.5m diameter 3.0 metre deep with 45x45cm dry brick honey comb shaft with bricks of class designation 3.5 and S.W drain pipe 100mm diameter, 1.8m long complete as per standard design - with brick of class designation 3.5	each	8.09
32.45.1	Construction of manhole with foundation concrete for 200 mm thick in 1:4:8 (one cement, four sand and eight hard broken granite stone aggregate of 40 mm nominal size), side walls in brick work in C.M. 1:4 (one cement and four sand) using best available country bricks for 23 cm thickness as shown in detailed drawing, relieving arches in brick	no	393.44

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	work in C.M. 1:4 (one cement and four sand) shall be turned over pipes wherever it passes through walls, top R.C.C. slab in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) for 150mm thick and fixing 560 mm dia circular ductile iron manhole cover and frame) of heavy duty and weight not less than 80 kg in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) and fixing of C.I. Steps all as shown in drawings,but excluding cost of CI steps. Inside and outside plastering for 20mm thick with C.M. 1:3 (one cement and three sand) in making channels and benching as shown in drawings in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) rendered with C.M. 1:3 (one cement and three sand) for 20mm thick including curing and testing the manhole for its water tightness. A drop in water more than 50mm in 24 hours shall not be permitted. The rate includes the cost of D.I manhole cover with frame, centering, shuttering and reinforcement with TMT bars excluding the cost of earthwork excavation. - 800mm x 800mm x 1000mm deep		
32.45.1A	Extra/rebate for every additional / reduction in depth of 0.10 m in 23 cm thick wall or part thereof for manhole of size. - 800mm x 800mm x 1000mm deep.	no	19.56
32.45.2	Construction of manhole with foundation concrete for 200 mm thick in 1:4:8 (one cement, four sand and eight hard broken granite stone aggregate of 40 mm nominal size), side walls in brick work in C.M. 1:4 (one cement and four sand) using best available country bricks for 23 cm thickness as shown in detailed drawing, relieving arches in brick work in C.M. 1:4 (one cement and four sand) shall be turned over pipes wherever it passes through walls, top R.C.C. slab in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) for 150mm thick and fixing 560 mm dia circular ductile iron manhole cover and frame) of heavy duty and weight not less than 80 kg in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) and fixing of C.I. Steps all as shown in drawings,but excluding cost of CI steps. Inside and outside plastering for 20mm thick with C.M. 1:3 (one	no	533.36

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	cement and three sand) in making channels and benching as shown in drawings in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) rendered with C.M. 1:3 (one cement and three sand) for 20mm thick including curing and testing the manhole for its water tightness. A drop in water more than 50mm in 24 hours shall not be permitted. The rate includes the cost of D.I manhole cover with frame, centering, shuttering and reinforcement with TMT bars excluding the cost of earthwork excavation. - 900mm x 1200mm x 1000mm deep		
32.45.2A	Extra/rebate for every additional / reduction in depth of 0.10 m in 23 cm thick wall or part thereof for manhole of size - 900mm x 1200mm x 1000mm deep.	no	25.09
32.45.3	Construction of manhole with foundation concrete for 300 mm thick in 1:4:8 (one cement, four sand and eight hard broken granite stone aggregate of 40 mm nominal size), side walls in brick work in C.M. 1:4 (one cement and four sand) using best available country bricks in the 23 cm up to 1.50 m from ground level and exceeding 1.50 m 34 cm thickness as shown in detailed drawing, relieving arches in brick work in C.M. 1:4 (one cement and four sand) shall be turned over pipes wherever it passes through walls, top R.C.C. slab in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) for 150mm thick and fixing 560 mm dia circular ductile iron manhole cover and frame) of heavy duty and weight not less than 80 kg in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) and fixing of C.I. Steps all as shown in drawings,but excluding cost of CI steps. Inside and outside plastering for 20mm thick with C.M. 1:3 (one cement and three sand) in making channels and benching as shown in drawings in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) rendered with C.M. 1:3 (one cement and three sand) for 20mm thick including curing and testing the manhole for its water tightness. A drop in water more than 50mm in 24 hours shall not be permitted. The rate includes the cost of D.I manhole cover with frame, centering, shuttering and reinforcement with TMT bars excluding the cost of earthwork excavation. - 900mm x 1200mm x	no	803.50

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	1600mm deep		
32.45.3A	Extra/rebate for every additional / reduction in depth of 0.10 m in 34 cm thick wall or part thereof for manhole of size - 900mm x 1200mm x 1600mm deep.	no	32.95
32.45.4	Construction of manhole with foundation concrete for 300 mm thick in 1:4:8 (one cement, four sand and eight hard broken granite stone aggregate of 40 mm nominal size), side walls in brick work in C.M. 1:4 (one cement and four sand) using best available country bricks in the 23 cm up to 1.50 m from ground level and exceeding 1.50 m 34 cm thickness as shown in detailed drawing, relieving arches in brick work in C.M. 1:4 (one cement and four sand) shall be turned over pipes wherever it passes through walls, top R.C.C. slab in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) for 150mm thick and fixing 560 mm dia circular ductile iron manhole cover and frame) of heavy duty and weight not less than 80 kg in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) and fixing of C.I. Steps all as shown in drawings,but excluding cost of CI steps. Inside and outside plastering for 20mm thick with C.M. 1:3 (one cement and three sand) in making channels and benching as shown in drawings in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) rendered with C.M. 1:3 (one cement and three sand) for 20mm thick including curing and testing the manhole for its water tightness. A drop in water more than 50mm in 24 hours shall not be permitted. The rate includes the cost of D.I manhole cover with frame, centering, shuttering and reinforcement with TMT bars excluding the cost of earthwork excavation. - 900mm x 1200mm x 2100mm deep	no	951.95
32.45.4A	Extra/rebate for every additional / reduction in depth of 0.10 m in 34 cm thick wall or part thereof for manhole of size - 900mm x 1200mm x 2100mm deep.	no	32.95
32.45.5	Construction of circular manhole of 1.40m internal diameter and to the depth detailed below with R.C.C. kerb in 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) with a overall size of 500 x 340 mm	no	1373.28

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	and shaped at bottom as shown in drawing to receive M.S. angle of size 100 x 100 x 10 mm as cutting edge, with reinforcement not less than 70 kg as indicated in drawing, and with vertical rods of 12 mm diameter at 60 cm c/c, 120 cm long to bind the steining wall and kerb, bottom plugging to a depth of 0.50 m with plain cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) with walls as detailed below. Providing relieving arch over the sewer pipe wherever it passes through the walls of the manholes, fixing of C.I. Rungs,excluding cost of CI rungs, fixing of D.I. manhole cover and frame) of heavy duty of size 560 mm diameter and weight not less than 80 kg in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) all shown in drawing, the rate includes cost of manhole cover with frame, centering, shuttering and reinforcement with TMT bars excluding the cost of earth work excavation. Plastering both inside and outside for 20 mm thick with CM 1:3 (one cement and three sand) and making channels in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) all as shown in drawing , rendered with cement mortar 1:3 (one cement and three sand) for 20 mm thick etc., complete including curing and testing the manhole for water tightness. A drop in water level more than 50 mm in 24 hours will not be permitted - For Manhole 2.5m deep with wall of 23cm thick upto 1.5m and 34cm thick for depth greater than 1.5m of brick masonry using best available country bricks in cement mortar 1:4 (1 cement & 4 sand).		
32.45.5A	Extra/rebate for every additional/reduction in depth of 0.10m or part thereof in 34cm thick wall for the circular manhole of 1.40m internal dia. and 2.5m deep.	no	32.68
32.45.6	Construction of circular manhole of 1.40m internal diameter and to the depth detailed below with R.C.C. kerb in 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) with a overall size of 500 x 340 mm and shaped at bottom as shown in drawing to receive M.S. angle of size 100 x 100 x 10 mm as cutting edge, with reinforcement not less than 70 kg as indicated in drawing, and with vertical rods of 12 mm diameter at 60 cm c/c, 120 cm long to bind the steining wall and kerb, bottom plugging to a depth of 0.50 m with plain cement concrete 1:1.5:3	no	2991.89

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	(one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) with walls as detailed below. Providing relieving arch over the sewer pipe wherever it passes through the walls of the manholes, fixing of C.I. Rungs,excluding cost of CI rungs, fixing of D.I. manhole cover and frame) of heavy duty of size 560 mm diameter and weight not less than 80 kg in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) all shown in drawing, the rate includes cost of manhole cover with frame, centering, shuttering and reinforcement with TMT bars excluding the cost of earth work excavation. Plastering both inside and outside for 20 mm thick with CM 1:3 (one cement and three sand) and making channels in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) all as shown in drawing , rendered with cement mortar 1:3 (one cement and three sand) for 20 mm thick etc., complete including curing and testing the manhole for water tightness. A drop in water level more than 50 mm in 24 hours will not be permitted - For manhole 5m deep with wall 23 cm thick upto 1.5m and 34 cm thick for depth from 1.5m and upto 2.8m and 45cm thick for depth greater than 2.8m of brick masonry using best available country bricks in cement mortar 1:4 (1 cement and 4 sand).		
32.45.6A	Extra/rebate for every additional/reduction in depth of 0.10m or part thereof in 34cm thick wall for the circular manhole of 1.40m internal dia. and 5.0m deep.	no	31.73
32.45.7	Construction of flushing tank of internal size 2000 x 1200 x 1000 mm deep with R.C.C. top slab of 150 mm thick in R.C.C 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) with reinforcement as shown in detailed drawing, foundation concrete of 200 mm thick in 1:4:8 (one cement, four sand and eight hard broken granite stone aggregate of 40 mm nominal size) with 230 mm thick wall in brick masonry using country bricks in CM 1:4 (one cement and four sand) inside and outside plastering with 20 mm thick CM 1:3 (one cement and three sand) making flooring for 40 mm thick in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) and rendered with CM 1:3 (one cement and three sand) 20 mm thick ,conveying and fixing circular ductile iron manhole cover and frame) of heavy duty of	no	882.60

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	size of 560 mm diameter and weight not less than 80 kg in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) (all as shown in drawing) providing and fixing of C.I. pipes and specials for flushing pipe of 200 mm diameter and overflow pipe of 150 mm diameter conforming to IS 1536 and IS 1538, jointing of socket and spigot of C.I. pipes and specials shall be in molten lead and encasing them in CC 1:4:8 (one cement, four sand, eight HBG metal) block of size 1000 x 600 x 800 mm.The cost includes curing and testing the flushing tank for its water tightness. A drop in water more than 50mm in 24 hours shall not be permitted. The rate includes the cost of D.I manhole cover with frame, centering, shuttering and reinforcement with TMT bars, but excluding the cost of earth work excavation.		
32.45.7A	Extra/rebate for every additional/reduction in depth of 0.10m or part thereof in 23cm thick wall for the flush tank of size 2000x1200x1000mm deep.	no	47.65
32.46.1	Construction of intercepting chamber of the size 600 x 850 x 1100 mm deep with R.C.C. top slab of 100mm thick in R.C.C 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) as shown in drawings, foundation in PCC 1:4:8 mix (one cement, four sand and eight hard broken granite stone aggregate of 40 mm nominal size), side wall of 23 cm thick in brick, inside and outside plastering with 20 mm thick in CM 1:3 (one cement and three sand) and making channel for house service connection in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) rendered with CM 1:3 (one cement and three sand) 20mm thick complete. Conveying and fixing of rectangular ductile iron manhole cover and frame) of medium duty size 450 x 600 mm and weight not less than 70 kg in cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size).The cost includes curing and testing of the intercepting chamber for its water tightness. A drop in water more than 50 mm in 24 hours shall not be permitted. The rate includes cost of rectangular D.I cover with frame, centering, shuttering and reinforcement with TMT bars,but excluding the cost of earth work excavation.	no	357.57
32.46.1A	Extra/rebate for every additional/reduction in depth	no	18.75

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	of 0.10m or part thereof in 23cm thick wall for the intercepting chamber of size 600x850x1100mm deep		
32.47.1	Making C.I. vent shaft using 150 mm diameter C.I class LA conforming to IS 1536 with C.I cowl / wire guard balloon at top, having an over all length of 5.50 m long and fixing from bottom and overflow pipe size of 150mm dia,extending to a depth of 1.25 m below ground level, with C.I. bend of 150 mm dia medium class conforming to IS 1538 at bottom and resting over the CC block of size 650 x 650 x 250 mm in 1:4:8 mix (one cement, four sand and eight hard broken granite stone aggregate of 40 mm nominal size) encasing all round the pipe with CC 1:4:8 mix (one cement, four sand and eight hard broken granite stone aggregate of 40 mm nominal size) to form a block of 650 x 650 x 1000 mm and top is finishing with cement concrete 1:1.5:3 (one cement ,one and half sand and three HBG stone aggregate of 20 mm nominal size) for 250 mm thick including fixing of M.S. foundation bolts and nuts of 20 mm diameter and 600 mm long with split up end and bottom to receive the C.I. pedestal of 175 mm internal diameter and 600 mm height and weight not less than 150kg to join above and below ground level.The rate includes the cost of C.I. specials and C.I. Pedestal etc.,complete.	no	115.80
32.47.2	Fixing of 150 mm wide cast iron steps in the manholes with 200 x 200 x 100 mm CC block in cement concrete 1:1.5:3 (one cement ,one and half sand and three hard broken granite stone aggregate of 20 mm nominal size) all as shown in drawings.	no	3.20
32.48.1	Jointing the C.I./D.I. pipes with manhole including dismantling of brick work to the required extent and making good the angular space with brick work in CM 1:3 (one cement and three sand) and encasing with cement concrete 1:1.5:3 (one cement ,one and half sand and three hard broken granite stone aggregate of 20 mm nominal size) etc. complete. - 450 mm dia pipe.	no	25.40
32.48.2	Jointing the C.I./D.I. pipes with manhole including dismantling of brick work to the required extent and making good the angular space with brick work in CM 1:3 (one cement and three sand) and encasing with cement concrete 1:1.5:3 (one cement ,one and half sand and three hard broken granite stone aggregate of 20 mm nominal size) etc. complete. -	no	35.40

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	600 mm dia pipe.		
32.50.1A	Raising of intercepting chamber by dismantling the old R.C.C. slab, removing the I.C. cover and frame from the chamber and raising the chamber height with brick work in cement mortar 1:4 (one cement and four sand), refixing the frame in position by laying reinforced cement concrete 1:1.5:3 (One cement one and half sand and three HBG metal) including curing but excluding the cost of reinforcement, finishing the top, inside and outside plastering with 20mm thick in cement mortar 1:3(one cement three sand), the rate includes all materials, providing barricading, caution board, watch and ward etc., complete till the completion of work with minimum hindrance to the traffic.- 30cm height.	no	97.24
32.50.1B	Raising of various types of manholes and flushing tank by cutting around the manhole cover, removing the frame and cover from the manhole by cutting the B.T., W.B.M., surface, raising the manhole to the required height with brick work in cement mortar 1:4 (One cement and four sand), refixing the frame in position by laying cement concrete 1:1.5:3 (One cement one and half sand and three 20mm HBG metal) including curing, but excluding the cost of reinforcement, finishing the top, inside and outside plastering with 20mm thick in cement mortar 1:3(one cement three sand), the rate includes all materials, providing barricading, caution board, watch and ward etc., complete till the completion of work with minimum hindrance to the traffic.- 30cm height.	no	72.05
32.51.1	Providing salt glazed stoneware pipe with spigot and sockets ends, conforming to IS 651 with standard length of 60 cm, laying to level or slope to the depth required and jointing with spun yarn soaked with cement slurry or tarred gasket shall be passed round the joints and inserted into the joint by means of caulking tool and filled the joint with stiff mixture of CM in proportion 1:1 (one cement and one sand), including the cost of testing the pipe, joints etc., complete. - 100 mm dia	metre	2.27
32.51.1A	Providing salt glazed stoneware pipe with spigot and sockets ends, conforming to IS 651 with standard length of 60 cm, laying to level or slope to the depth required and jointing with spun yarn soaked with cement slurry or tarred gasket shall be passed round the joints and inserted into the joint	metre	2.27

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	by means of caulking tool and filled the joint with stiff mixture of CM in proportion 1:1 (one cement and one sand),including the cost of testing the pipe, joints etc., complete. - 150 mm dia		
32.51.1B	Providing salt glazed stoneware pipe with spigot and sockets ends, conforming to IS 651 with standard length of 60 cm, laying to level or slope to the depth required and jointing with spun yarn soaked with cement slurry or tarred gasket shall be passed round the joints and inserted into the joint by means of caulking tool and filled the joint with stiff mixture of CM in proportion 1:1 (one cement and one sand),including the cost of testing the pipe, joints etc., complete. - 200 mm dia	metre	3.27
32.51.1C	Providing salt glazed stoneware pipe with spigot and sockets ends, conforming to IS 651 with standard length of 60 cm, laying to level or slope to the depth required and jointing with spun yarn soaked with cement slurry or tarred gasket shall be passed round the joints and inserted into the joint by means of caulking tool and filled the joint with stiff mixture of CM in proportion 1:1 (one cement and one sand),including the cost of testing the pipe, joints etc., complete. - 250 mm dia	metre	3.83
32.51.1D	Providing salt glazed stoneware pipe with spigot and sockets ends, conforming to IS 651 with standard length of 60 cm, laying to level or slope to the depth required and jointing with spun yarn soaked with cement slurry or tarred gasket shall be passed round the joints and inserted into the joint by means of caulking tool and filled the joint with stiff mixture of CM in proportion 1:1 (one cement and one sand),including the cost of testing the pipe, joints etc., complete. - 300 mm dia	metre	5.00
32.51.1E	Providing salt glazed stoneware pipe with spigot and sockets ends, conforming to IS 651 with standard length of 60 cm, laying to level or slope to the depth required and jointing with spun yarn soaked with cement slurry or tarred gasket shall be passed round the joints and inserted into the joint by means of caulking tool and filled the joint with stiff mixture of CM in proportion 1:1 (one cement and one sand),including the cost of testing the pipe, joints etc., complete. - 375 mm dia	metre	10.60
32.52.1A	Providing stoneware specials – ‘Y’ junction with spigot and socket ends conforming to I.S.651 with a standard length of 60 cm, laying to level or slope to	no	1.36

32 . Sewerage (Public Health)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	the depth required and jointing with spun yarn socked with cement slurry or tarred gasket shall be passed round the joints by means of caulking tools and filled the joint with stiff mixture of CM in proportion 1:1 (one cement and one sand),including the cost of testing the pipe, joints etc, complete - 150 x 150 mm 'Y'		
32.52.1B	Providing stoneware specials – 'Y' junction with spigot and socket ends conforming to I.S. 651 with a standard length of 60 cm, laying to level or slope to the depth required and jointing with spun yarn socked with cement slurry or tarred gasket shall be passed round the joints by means of caulking tools and filled the joint with stiff mixture of CM in proportion 1:1 (one cement and one sand),including the cost of testing the pipe, joints etc, complete - 200 x 150 mm 'Y'	no	1.96
32.52.1C	Providing stoneware specials – 'Y' junction with spigot and socket ends conforming to I.S. 651 with a standard length of 60 cm, laying to level or slope to the depth required and jointing with spun yarn socked with cement slurry or tarred gasket shall be passed round the joints by means of caulking tools and filled the joint with stiff mixture of CM in proportion 1:1 (one cement and one sand),including the cost of testing the pipe, joints etc, complete - 250 x 150 mm 'Y'	no	2.30
32.52.1D	Providing stoneware specials – 'Y' junction with spigot and socket ends conforming to I.S. 651 with a standard length of 60 cm, laying to level or slope to the depth required and jointing with spun yarn socked with cement slurry or tarred gasket shall be passed round the joints by means of caulking tools and filled the joint with stiff mixture of CM in proportion 1:1 (one cement and one sand),including the cost of testing the pipe, joints etc, complete - 300 x 150 mm 'Y'	no	3.00

7 . Culverts

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
7.1A.MO	Cement concrete 1:4:8 mix with stone aggregate 40mm nominal size in foundation upto a depth of 1.5 metres below ground level and upto height of 1.5 above ground/bed level.	cum	170.00
7.1B.MO	Cement concrete 1:3:6 mix with stone aggregates 20mm nominal size mechanically mixed and vibrated in foundation upto a depth of 1.5 metres below ground level and 1.5 metres ground/bed level.	cum	220.00
7.2.MO	Plain cement concrete m-15 mix with stone aggregates 20mm nominal size mechanically mixed and vibrated in foundation upto a depth of 1.50 metres below ground level and/or 1.50 metres above ground/bed level.	cum	330.00
7.3.MO	Plain cement concrete m-15 mix with stone aggregates 20mm nominal size mechanically mixed and vibrated in superstructure upto 4.00 metre above, 1.50 metre from ground/bed level.	cum	330.00
7.4.MO	Reinforced cement concrete m-20 mix with stone aggregate 20mm nominal size mechanically mixed and vibrated for reinforced concrete work in slab excluding steel reinforcement, but including centering and shuttering, laid in position.	cum	400.00
7.5.MO	Reinforced cement concrete m-20 mix with stone aggregate 20mm nominal size mechanically mixed and vibrated for bed plates excluding steel reinforcement, but including centering and shuttering, laid in position.	cum	400.00
7.7.MO	First class brick in cement mortar 1:3 upto a depth of 1.50 metres below ground and above 1.50 from bed/ground level.	cum	107.00
7.9.MO	Brick or edge flooring with 1st class bricks including cement slurry in cement fine aggregate mortar 1:4.	sqm	11.40
7.10.MO	Coursed rubble stone masonry in cement fine aggregate mortar 1:3 in foundation upto a depth of 1.50 metres and also 1.50 metres above ground/bed level.	cum	153.00
7.12.MO	Random rubble masonry (coursed) in cement fine aggregate mortar 1:3 in foundation upto a depth of	cum	168.50

7 . Culverts

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	1.50 metres and 1.50 above ground/bed level.		
7.14.MO	Cement pointing 1:2 deep variety (cut or weather) on brick and tile work.	sqm	2.00
7.15.MO	Cement pointing 1:2 flush on brick on edge floor.	sqm	2.25
7.16.MO	Cement plaster 12mm thick in cement mortar 1:3	sqm	7.50
7.17.MO	Laying reinforced cement concrete pipes NP-3 for culverts including pointing ends and fixing collar with cement mortar 1:2 - 900mm dia.	metre	5.00
7.18.MO	Laying reinforced cement concrete pipes NP-3 for culverts including pointing ends and fixing collar with cement mortar 1:2 - 1200mm dia.	metre	6.80
7.19.MO	Rubble stone laid in cement fine aggregate mortar 1:3 in flooring.	cum	168.50
7.24.MO	Reinforced cement concrete M30 mix with minimum cement content 450 kg /cum using stone aggregate 20 mm nominal size mechanically mixed and vibrated for reinforced concrete work in slab excluding steel reinforcement, but including centering and shuttering, laid in position.	cum	450.00
7.28.MO	Boring, providing and installing bored cast -in-situ reinforced cement concrete pile of specified diameter using approved drilling method to the required depth up to the cut off level in pile cap in RCC M20 grade with a minimum cement content of 400 kg / cum using Blue metal of 20mm and down gauge to carry a safe working load not less than the specified, excluding the cost of steel reinforcement but including the cost of boring with casing from Natural / formed ground level, bentonite mud circulation of approved specific gravity and the length of pile to be embedded in the pile cap. The cost shall include the cost of dismantling of laitenance / week concrete as per BIS norms, removal of dismantled debris and the waste bore mug from the site . The rate shall include all machineries required for boring, genset, skilled labour etc. (Length of pile for payment shall be measured upto the bottom of pile cap) -1000 mm dia pile.	metre	313.92

7 . Culverts

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Req'd. per unit in Kg</i>
7.29.MO	Boring, providing and installing bored cast -in-situ reinforced cement concrete pile of specified diameter using approved drilling method to the required depth up to the cut off level in pile cap in RCC M20 grade with a minimum cement content of 400 kg / cum using Blue metal of 20mm and down gauge to carry a safe working load not less than the specified, excluding the cost of steel reinforcement but including the cost of boring with casing from Natural / formed ground level, bentonite mud circulation of approved specific gravity and the length of pile to be embedded in the pile cap. The cost shall include the cost of dismantling of laitenance / week concrete as per BIS norms, removal of dismantled debris and the waste bore mug from the site . The rate shall include all machineries required for boring, genset, skilled labour etc. (Length of pile for payment shall be measured upto the bottom of pile cap) -750 mm dia pile.	metre	176.58

4 . Granular Sub-base

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
4.5	Providing, Laying and spreading soil on a prepared sub-grade, pulverising, adding the designed quantity of cement to the spread soil ,mixing in place with rotavator, grading with the motor grader and compacting with the road roller at OMC to achieve the desired unconfined compressive strength and to form a layer of sub-base / base. (As per MoRTH specification, 4th Revision)	cum	70.00
4.6.1	Providing, Laying and spreading material on a prepared sub-grade, adding the designed quantity of cement to the spread material, mixing in place with rotavator, grading with the motor grader and compacting with the road roller at OMC to achieve the desired unconfined compressive strength and to form a layer of sub-base. Grading of material for sub-base course. (As per MoRTH specification, 4th Revision)	cum	80.00
4.6.2	Providing, Laying and spreading material on a prepared sub-grade, adding the designed quantity of cement to the spread material, mixing in place with rotavator, grading with the motor grader and compacting with the road roller at OMC to achieve the desired unconfined compressive strength and to form a layer of base. Grading of material for base course. (As per MoRTH specification, 4th Revision)	cum	80.00
4.16	Construction of footpath / separator by providing a 150mm compacted granular sub-base as per clause 401 and 25mm thick cement concrete grade M15, overlaid with precast concrete tiles in cement mortar 1:3 including provision of all drainage arrangements but excluding kerb channel. (As per MoRTH specification, 4th Revision)	sqm	12.37

6 . Cement Concrete Pavement

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Req'd. per unit in Kg</i>
6.1	Construction of dry lean cement concrete Sub-base over a prepared sub - grade with coarse and fine aggregate conforming to IS:383, the size of coarse aggregates not exceeding 25 mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per Table 600-1, cement content not to be less than 150 kg /cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site , laid with a paver with electronic sensor, compacting with 8-10 tonne vibratory roller, finishing and curing.	cum	150.00
6.2	Construction of un-reinforced, dowel jointed, plain cement concrete pavement over a prepared sub-base with 43 grade cement @ 400 kg per cum, coarse and fine aggregate conforming to IS 383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a batching and mixing plant as per approved mix design, transported to site, laid with a fixed form or slip form paver, spread, compacted and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, dowel bar, tie rod, admixtures as approved, curing compound, finishing to lines and grades as per drawing.	cum	394.29
6.3	Construction of rolled cement concrete base course with coarse and fine aggregate conforming to IS :383, the size of coarse aggregate not exceeding 25mm with minimum, aggregate cement ratio 15:1 and minimum cement content of 200 kg/cum, aggregate gradation to be as per Table 600-4 after blending, mixing in batching plant at optimum moisture content, transporting to site, laying with a paver with electronic sensor, compacting with 8-10 tonnes smooth wheeled vibratory roller to achieve, the designed flexural strength finishing and curing.	cum	200.00
6.5	Construction of base/sub-base using cement, fine aggregate, flyash and coarse aggregates proportioned as per table 4 of IRC:74-1979 and with water content ratio, slump and compressive	cum	150.00

6 . Cement Concrete Pavement

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Req'd. per unit in Kg</i>
	strength as defined in the said table, mix prepared in a batching and mixing plant and compacted with a vibratory roller 8-10 tonnes capacity within the time limit laid down vide Clause 7.6.3 of IRC:74-1979, construction joints properly formed at the end of day's work, cured for 14 days, all as specified in IRC:74-1979 and as per approved plans.		
6.6	Construction of un-reinforced, dowel jointed, plain cement concrete pavement over a prepared sub-base with 43 grade cement, coarse and fine aggregate conforming to IS:383, maximum size of coarse aggregate not exceeding 25mm, replacing cement by flyash to the extent of 15% and fine aggregate by 10%, mixed in a batching and mixing plant as per approved mix design, transported to site, laid with a fixed form or slip form paver spread, compacted and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, dowel bar, tie rod, admixtures as approved, curing compound, finishing to lines and grades as per drawing.	cum	340.00

8 . Traffic Signs,Markings & Other Road Appurtenances

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Req'd.</i>
8.1A	Construction of cement concrete kerb with top and bottom width 115 & 165 mm respectively, 250mm high in M20 Grade PCC on M10 grade foundation 150mm thick, foundation having 50mm projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually, all complete as per Clause 408 (Using concrete mixer)	Rmt	15.83
8.1B	Construction of cement concrete kerb with top and bottom width 115 & 165 mm respectively, 250mm high in M20 Grade PCC on M10 grade foundation 150mm thick, foundation having 50mm projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually, all complete as per Clause 408 (Using concrete batching and mixing plant)	Rmt	15.83
8.2A	Construction of cement concrete kerb with channel with top and bottom width 115 & 165 mm respectively, 250mm high in M20 Grade PCC on M10 grade foundation 150mm thick, kerb channel 300mm wide, 50 mm thick in PCC M20 grade, sloped towards the kerb, kerb stone with channel laid with kerb laying machine, foundation concrete laid manually, all complete as per Clause 408 (Using concrete mixer)	Rmt	30.03
8.2B	Construction of cement concrete kerb with channel with top and bottom width 115 & 165 mm respectively, 250mm high in M20 Grade PCC on M10 grade foundation 150mm thick, kerb channel 300mm wide, 50 mm thick in PCC M20 grade, sloped towards the kerb, kerb stone with channel laid with kerb laying machine, foundation concrete laid manually, all complete as per Clause 408 (Using concrete batching and mixing plant)	Rmt	30.03
8.4A	Providing and fixing of retro - reflectorised cautionary, mandatory & informatory sign as per IRC:67 made of aluminium sheet encapsulated lens with high intensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 75 mm X 75 mm X 6 mm (3.8 mtrs height - 6.8kg/mtr = 25.84kg , with board support angle 35x35x6mm - 3.5 mtrs 3kg/mtr = 10.5kg and anchor flats 0.5kg) firmly fixed to the ground by means of properly	each	39.60

8 . Traffic Signs,Markings & Other Road Appurtenances

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd.</i>
	designed foundation with M15 Grade cement concrete 45 cm X 45 cm X 60 cm , 60cm below ground level as per approved drawing. - 90 cm equilateral triangle . (including cost of angle iron towards cost of drilling holes , nuts , bolts etc.,)		
8.4B	Providing and fixing of retro - reflectorised cautionary, mandatory & informatory sign as per IRC:67 made of aluminium sheet encapsulated lens with high intensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 75 mm X 75 mm X 6 mm (3.5 mtrs height - 6.8kg/mtr = 23.8kg , with board support angle 35x35x6mm- 2.30 mtrs - 3kg/mtr = 6.9kg and anchor flat - 0.5kg)firmly fixed to the ground by means of properly designed foundation with M15 Grade cement concrete 45 cm X 45 cm X 60 cm , 60cm below ground level as per approved drawing. - 60 cm equilateral triangle . (including cost of angle iron towards cost of drilling holes , nuts , bolts etc.,)	each	39.60
8.4C	Providing and fixing of retro - reflectorised cautionary, mandatory & informatory sign as per IRC:67 made of aluminium sheet encapsulated lens with high intensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 75 mm X 75 mm X 6 mm (3.6 mtrs height - 6.8kg/mtr = 24.48 kg with board support angle 35x35x6mm - 2.49 mtrs - 3kg/mtr = 7.47kg and anchor flat - 0.50kg)firmly fixed to the ground by means of properly designed foundation with M15 Grade cement concrete 45 cm X 45 cm X 60 cm , 60cm below ground level as per approved drawing. - 60cm Circular .(including cost of angle iron towards cost of drilling holes , nuts , bolts etc.,)	each	39.60
8.4D	Providing and fixing of retro - reflectorised cautionary, mandatory & informatory sign as per IRC:67 made of aluminium sheet encapsulated lens with high intensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 75 mm X 75 mm X 6 mm (3.8 mtrs height - 6.8kg/mtr = 25.84 kg with board support angle 35x35x6mm - 2.8 mtrs - 3kg/mtr = 8.4kg and anchor flats - 0.5kg) firmly fixed to the ground by means of properly	each	39.60

8 . Traffic Signs,Markings & Other Road Appurtenances

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd.</i>
	designed foundation with M15 Grade cement concrete 45 cm X 45 cm X 60 cm , 60cm below ground level as per approved drawing. - 80cm X 60cm rectangular . (including cost of angle iron towards cost of drilling holes , nuts , bolts etc.,)		
8.4E	Providing and fixing of retro - reflectorised cautionary, mandatory & informatory sign as per IRC:67 made of aluminium sheet encapsulated lens with high intensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 75 mm X 75 mm X 6 mm (3.6 mtrs height - 6.8kg/mtr = 24.48kg , with board support angle 2.10 mtrs - 3kg/mtr = 6.3 kg and anchor flat 0.50kg)firmly fixed to the ground by means of properly designed foundation with M15 Grade cement concrete 45 cm X 45 cm X 60 cm , 60cm below ground level as per approved drawing. - 60 cm X 45cm rectangular . (including cost of angle iron towards cost of drilling holes , nuts , bolts etc.,)	each	39.60
8.4F	Providing and fixing of retro - reflectorised cautionary, mandatory & informatory sign as per IRC:67 made of aluminium sheet encapsulated lens with high intensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 75 mm X 75 mm X 6 mm (3.6 mtrs - 6.8kg/mtr = 24.48kg , with board support angle 35x35x6mm 2.4mtrs - 3kg / mtr =7.2kg and anchor flat 0.50kg)firmly fixed to the ground by means of properly designed foundation with M15 Grade cement concrete 45 cm X 45 cm X 60 cm , 60cm below ground level as per approved drawing. - 60 cm X 60cm square . (including cost of angle iron towards cost of drilling holes , nuts , bolts etc.,)	each	39.60
8.4G	Providing and fixing of retro - reflectorised cautionary, mandatory & informatory sign as per IRC:67 made of aluminium sheet encapsulated lens with high intensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 75 mm X 75 mm X 6 mm (3.90 mtrs height - 6.8kg / mtr = 26.52kg , with board support angle 35x35x6mm 2.88 mtrs - 3kg/mtr = 8.64kg and anchor flat - 0.50 kg)firmly fixed to the ground by means of properly	each	39.60

8 . Traffic Signs,Markings & Other Road Appurtenances

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Req'd.</i>
	designed foundation with M15 Grade cement concrete 45 cm X 45 cm X 60 cm , 60cm below ground level as per approved drawing. - 90 cm high octagon . (including cost of angle iron towards cost of drilling holes , nuts , bolts etc.,)		
8.5	Providing and erecting direction and place identification retro-reflectorised sign as per IRC:67 made of aluminium sheet encapsulated lens reflective (diamond grade sheet) with high intensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 2mm thick with area not exceeding 0.9sqm supported on a mild steel single angle iron post 75 X 75 X 6mm (3.9mtrs height - 6.8kg/mtr = 26.52kg ,with board support angle 35x35x6mm - 3.8mtrs - 3kg/mtr = 11.40kg and anchor flat 0.50kg)firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 45 X 45 X 60 cm, 60cm below ground level.	sqm	44.00
8.6	Providing and erecting direction and place identification retro-reflectorised sign as per IRC:67 made of aluminium sheet encapsulated lens reflective sheet (diamond grade) with high intensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 2mm thick with area exceeding 0.9sqm supported on a mild steel angle iron post 75 X 75 X 6mm , (3.5 mtrs height x2 mtrs) = 7mtrs x 6.8kg/mtr =47.60kg, with board support angle 35x35x6mm 3mtrs-3.5kg/mtr = 10.50kg with anchor flats -0.50kg)2 nos firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 45 X 45 X 60 cm, 60cm below ground level.	sqm	52.80
8.11.3A	Supplying and fixing of cantilever type destination sign boards with diamond graded reflective sheeting in rectangular shape of size 1.20 m x 0.9 m of double sided board including the cost and conveyance of reflective sheeting and providing symbols and letterings by high intensity grade reflective white sheeting fixed over the aluminium plates of all sizes not less than 2 mm thick suitably framed and supported by M.S. angles of size 40 mm X 40 mm X 6 mm with required bolt and nuts. The rectangular board is fixed in the post pipe of 100 mm dia M.S. Heavy vertically 4.8 mts height	each	184.32

8 . Traffic Signs,Markings & Other Road Appurtenances

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Req'd.</i>
	and horizontally 1.2 m and both the vertical and horizontal are connected by a 100 mm dia M.S. heavy bend with inner support sleeves welded firmly and a base plate of size 30 cm X 30 cm welded at the bottom with necessary anchoring supports. The board and the post pipe are connected by 32 mm dia M.S. pipe with suitable bolts and clamps of 12 cm length by horizontally 3 places and vertically 2 places and a cross tie flat is provided at the bottom of the board with pipe post to hold the hanging strength. Finally the board frame and the post pipe are painted by Zinc chromate primer and aluminium paint and embedded in ground pit of size 0.8m X 0.8 m X 0.9 m with PCC 1:2:4 complete		
8.11.3B	Fabrication, supply and fixing of informatory board of size 1.2 m X 0.6 m of diamond graded reflective sheeting encapsulated on aluminium sheets of not less than 2 mm thick suitably supported and framed by M.S angles of size 40 mm X 40 mm X 6mm. The informatory lettering and the symbols will be provided by high intensity white grade white sheeting. The board is supported by a post pipe of size 80 mm dia M.S. heavy for a height of 3.6 m and extended and supported to the extreme width of the board on the rear side. This board frames and post pipes will be painted by Zinc chromate primer and white colour enamel paint and embedded in ground pit of size 0.6m X 0.6 m X 0.6 m with PCC 1:2:4. Rate includes all materials, labour charges conveyance concreting, painting	each	69.12
8.14A	Reinforced cement concrete M15 grade kilometre stone of standard design as per IRC:8-1980,fixing in position including painting and printing etc-5th kilometre stone(precast)	Nos	129.25
8.14B	Reinforced cement concrete M15 grade kilometre stone of standard design as per IRC:8-1980,fixing in position including painting and printing etc-ordinary kilometre stone(precast)	Nos	88.86
8.14C	Reinforced cement concrete M15 grade kilometre stone of standard design as per IRC:8-1980,fixing in position including painting and printing etc-Hectometre stone(precast)	Nos	15.80

8 . Traffic Signs,Markings & Other Road Appurtenances

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Req'd.</i>
8.16	Reinforced cement concrete M15 grade boundary pillars of standard design as per IRC:25-1967, fixed in position including finishing and lettering but excluding painting.	each	7.24
8.20	Providing, fixing and erecting 50mm dia steel pipe railing in 3 rows duly painted on medium weight steel channels (ISMC series) 100 mmX 50 mm, 1.2 metre high above ground, 2m center to centre, complete as per approved drawings.	Rmt	21.38
8.21	Providing, fencing and erecting 50mm dia painted steel pipe railing in 3 rows on precast M20 grade RCC vertical posts 1.8 metre high (1.2 m above GL) with 3 holes 50 mm dia pipe, fixed 2 metre centre to, complete as per approved drawing.	Rmt	21.38
8.25	Supply and installation of solar powered LED Amber blinkers 24 hours operation with Ultra bright Amber/ Red Solid State LED's. the operating voltage is 24 V and the battery and the LED's array enclosure is 300 mm dia with protection glass. The system shall blink 30 blinks per minute. Battery shall be of SMF and expected life shall be 2 years and panel life shall be expected 10 years. The visibility shall be 800 mts. The blinker shall be fixed in G.I. pipe class B of 4" dia reduced to 3" dia G.I. pipe class B. the rate shall include fixing below ground level of 1.20mts depth embedded in CC 1:2:4 of size 50 cm X 50 cm, pipe painted with primer and two or more coat enamel paint of required colour all as directed	each	96.00
8.30	Tile work in skirting raising of steps and dado (upto 2m height) over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 fine aggregate) and jointed with grey cement slurry at 3.3kg / 1sqm, including grooves joints 10mm wide and 10mm deep on all sides of tiles etc., complete flamed granite tiles 10mm thick.	Sqm	10.44

9 . Pipe Culverts

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Req'd. per unit in Kg</i>
9.1	Plain cement concrete 1:3:6 mix with crushed stone aggregate 40mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days.	cum	220.00
9.2A	Laying reinforced cement concrete pipe Np4/ prestressed concrete pipe for culverts on first class bedding of granular material in single row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets- 1000mm dia.	metre	4.00
9.2B	Laying reinforced cement concrete pipe Np4/ prestressed concrete pipe for culverts on first class bedding of granular material in single row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets- 1200mm dia.	metre	5.60
9.3A	Laying reinforced cement concrete pipe Np4/ prestressed concrete pipe for culverts on first class bedding of granular material in double row including fixing collar with cement mortar 1:2 but excluding excavation, protection works back filling, concrete and masonry works in head walls and parapets - 1000mm. Dia .	metre	8.00
9.3B	Laying reinforced cement concrete pipe Np4/ prestressed concrete pipe for culverts on first class bedding of granular material in double row including fixing collar with cement mortar 1:2 but excluding excavation, protection works back filling, concrete and masonry works in head walls and parapets - 1200mm. Dia.	metre	11.20

11 . Horticulture

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
11.14	Half brick circular tree guard in 2nd class brick internal diameter 1.25 m and height 1.2 m above ground and 0.20 m below ground, bottom two courses laid dry and top three courses in cement mortar 1:6 (1 cement: 6 fine aggregate) and the intermediate courses being in dry honey comb masonry as per design complete.	each	6.25

12 . Foundation

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Req'd. per unit in Kg</i>
12.4	Plain Cement Concrete 1:3:6 nominal mix in foundation with crushed stone aggregate 40 mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including the cost of labour, material, hire charge for concrete mixer, electric gen set, water tanker and overhead charges.	cum	230.00
12.5	Brick Masonry in Cement Mortar 1:3 in foundation complete excluding Pointing and Plastering, as per drawing and technical specifications including the cost of labour, material and overhead charges.	cum	122.40
12.6	Cement Mortar 1:3 (1 Cement : 3 fine aggregate) including the cost of labour, material and overhead charges.	cum	510.00
12.7A	Stone Masonry work in cement mortar 1:3 in foundation complete as per drawing and Technical specifications - Square rubble coursed rubble masonry (First sort) including the cost of labour, material and overhead charges.	cum	153.00
12.7B	Stone Masonry work in cement mortar 1:3 in foundation complete as per drawing and Technical specifications - Random rubble masonry (coursed / uncoursed) including the cost of labour, material and overhead charges.	cum	158.10
12.8A	Plain cement concrete in open foundation complete as per drawing and technical specifications - PCC Grade M15 with a minimum cement content of 275 kg / cum including the cost of labour, material hire charge for concrete mixer, electric gen set, form work and overhead charges.	cum	275.33
12.8B	Plain cement concrete in open foundation complete as per drawing and technical specifications - PCC Grade M20 with a minimum cement content of 344 kg / cum including the cost of labour, material, hire charge for concrete mixer, electric gen set, form work and overhead charges.	cum	344.00
12.8C.1	Reinforced cement concrete in open foundation complete as per drawing and technical specifications - RCC Grade M20 with a minimum cement content 347 kg / cum - Using concrete	cum	347.33

12 . Foundation

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Req'd. per unit in Kg</i>
	mixer including the cost of labour, material, hire charge for electric genset, formwork and overhead charges.		
12.8C.2	Reinforced cement concrete in open foundation complete as per drawing and technical specifications - RCC Grade M20 with a minimum cement content of 347 kg / cum - With Batching Plant, Transit Mixer and Concrete Pump, electric gen set, front end loader including the cost of labour, material, formwork and overhead charges.	cum	347.17
12.8D.1	Plain cement concrete in open foundation complete as per drawing and technical specifications - PCC Grade M25 with a minimum cement content of 400 kg / cum - Using Concrete Mixer and electric genset including the cost of labour and material, formwork and overhead charges.	cum	399.33
12.8D.2	Plain cement concrete in open foundation complete as per drawing and technical specifications - PCC Grade M25 with a minimum cement content of 400 kg / cum - With Batching Plant, Transit Mixer and Concrete Pump, front end loader, electric gen set including the cost of labour, material, formwork and overhead charges.	cum	399.58
12.8E.1	Reinforced cement concrete in open foundation complete as per drawing and technical specifications - RCC Grade M25 with a minimum cement content of 403 kg / cum - Using Concrete Mixer and electric gen set including the cost of labour, material, form work and overhead charges.	cum	403.33
12.8E.2	Reinforced cement concrete in open foundation complete as per drawing and technical specifications - RCC Grade M25 with a minimum cement content of 403 kg / cum - With Batching Plant, Transit Mixer and Concrete Pump, front end loader, electric gen set including the cost of labour, material, formwork and overhead charges.	cum	403.17
12.8F.1	Plain cement concrete in open foundation complete as per drawing and technical specifications - PCC Grade M30 with a minimum cement content of 405 kg / cum - using Concrete Mixer and electric gen set including the cost of labour, material, formwork and overhead charges.	cum	405.33

12 . Foundation

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Req'd. per unit in Kg</i>
12.8F.2	Plain cement concrete in open foundation complete as per drawing and technical specifications - PCC Grade M30 with a minimum cement content of 405 kg / cum - Using Batching Plant, Transit Mixer and Concrete Pump, front end loader, electric gen set including the cost of labour, material, formwork and overhead charges.	cum	405.00
12.8G.1	Reinforced Cement Concrete in open foundation complete as per drawing and technical specifications - RCC Grade M30 with a minimum cement content of 407 kg / cum - Using Concrete Mixer and electric gen set including the cost of labour, material, formwork and overhead charges.	cum	406.67
12.8G.2	Reinforced Cement Concrete in open foundation complete as per drawing and technical specifications - RCC Grade M30 with a minimum cement content of 407 kg / cum - Using Batching Plant, Transit Mixer and Concrete Pump, front end loader, electric gen set including the cost of labour material, formwork and overhead charges.	cum	406.67
12.8H.1	Reinforced Cement Concrete in open foundation complete as per drawing and technical specifications - RCC Grade M35 with a minimum cement content of 422 kg / cum - Using Concrete Mixer and electric gen set including the cost of labour, material, formwork and overhead charges.	cum	422.00
12.8H.2	Reinforced Cement Concrete in open foundation complete as per drawing and technical specifications - RCC Grade M35 with a minimum cement content of 422 kg / cum - Using Batching Plant, Transit Mixer and Concrete Pump, front end loader, electric gen set including the cost of labour, material, formwork and overhead charges.	cum	422.00
12.11C.4.1	Plain Cement Concrete, in Well Foundation complete as per Drawing and Technical Specifications - Bottom Plug - PCC Grade M35 with a minimum cement content of 419 kg / cum - Using Concrete Mixer	cum	419.33
12.11C.4.2	Plain Cement Concrete, in Well Foundation complete as per Drawing and Technical Specifications - Bottom Plug - PCC Grade M35 with	cum	419.00

12 . Foundation

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	a minimum cement content of 419 kg / cum - Using Batching Plant, Transit Mixer and Crane / Concrete Pump, front end loader, electric gen set including the cost of labour, material, admixtures and overhead charges.		
12.11F.4.1	Reinforced cement concrete, in well foundation complete as per drawing and technical specifications - well cap - RCC grade M35 with a minimum cement content of 422 kg / cum - Using concrete mixer and electric gen set including the cost of labour, material, formwork and overhead charges.	cum	422.00
12.11F.4.2	Reinforced cement concrete, in well foundation complete as per drawing and technical specifications - well cap - RCC grade M35 with a minimum cement content of 422 kg / cum - Using Batching plant , transit mixer and concrete pump, front end loader, electric gen set including the cost of labour, material, formwork and overhead charges.	cum	422.00
12.22.1	Boring, providing and installing bored cast - in - situ reinforced cement concrete pile of specified diameter using approved drilling method to the required depth up to the cut off level in pile cap in RCC M35 grade with a minimum cement content of 419 kg / cum using Blue metal of 20mm and down gauge to carry a safe working load not less than the specified, excluding the cost of steel reinforcement but including the cost of boring with casing from Natural / formed ground level, bentonite mud circulation of approved specific gravity and the length of pile to be embedded in the pile cap. The cost shall include the cost of dismantling of laitance / weak concrete as per BIS norms, removal of dismantled debris and the waste bore mug from the site with all lifts and lead upto 1000m - as directed by the Engineer - in - charge. The rate shall include all machineries required for boring, genset, skilled labour etc. (Length of pile for payment shall be measured upto the bottom of pile cap) - pile diameter - 450mm (Using concrete mixer)	metre	66.67
12.23.1	Boring, providing and installing bored cast - in - situ reinforced cement concrete pile of specified diameter using approved drilling method to the required depth up to the cut off level in pile cap in	metre	185.07

12 . Foundation

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	RCC M35 grade with a minimum cement content of 419 kg / cum using Blue metal of 20mm and down gauge to carry a safe working load not less than the specified, excluding the cost of steel reinforcement but including the cost of boring with casing from Natural / formed ground level, bentonite mud circulation of approved specific gravity and the length of pile to be embedded in the pile cap. The cost shall include the cost of dismantling of laitance / week concrete as per BIS norms, removal of dismantled debries and the waste bore mug from the site with all lifts and lead upto 1000m - as directed by the Engineer - in - charge. The rate shall include all machineries required for boring, genset, skilled labour etc. (Length of pile for payment shall be measured upto the bottom of pile cap) - pile diameter - 750mm (Using concrete mixer)		
12.24.1	Boring, providing and installing bored cast - in - situ reinforced cement concrete pile of specified diameter using approved drilling method to the required depth up to the cut off level in pile cap in RCC M35 grade with a minimum cement content of 419 kg / cum using Blue metal of 20mm and down gauge to carry a safe working load not less than the specified, excluding the cost of steel reinforcement but including the cost of boring with casing from Natural / formed ground level, bentonite mud circulation of approved specific gravity and the length of pile to be embedded in the pile cap. The cost shall include the cost of dismantling of laitance / week concrete as per BIS norms, removal of dismantled debries and the waste bore mug from the site with all lifts and lead upto 1000m - as directed by the Engineer - in - charge. The rate shall include all machineries required for boring, genset, skilled labour etc. (Length of pile for payment shall be measured upto the bottom of pile cap) - pile diameter - 1000mm (Using concrete mixer)	metre	329.18
12.25.1	Boring, providing and installing bored cast - in - situ reinforced cement concrete pile of specified diameter using approved drilling method to the required depth up to the cut off level in pile cap in RCC M35 grade with a minimum cement content of 419 kg / cum using Blue metal of 20mm and down gauge to carry a safe working load not less than the	metre	473.85

12 . Foundation

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	specified, excluding the cost of steel reinforcement but including the cost of boring with casing from Natural / formed ground level, bentonite mud circulation of approved specific gravity and the length of pile to be embedded in the pile cap. The cost shall include the cost of dismantling of laitenance / week concrete as per BIS norms, removal of dismantled debries and the waste bore mug from the site with all lifts and lead upto 1000m - as directed by the Engineer - in - charge. The rate shall include all machineries required for boring, genset, skilled labour etc. (Length of pile for payment shall be measured upto the bottom of pile cap) - pile diameter -1200mm (Using concrete mixer)		
12.26.1	Driven cast -in -place vertical M35 grade with a minimum cement content of 419 kg / cum R.C.C. pile excluding reinforcement complete as per drawing and technical specifications - 750 mm diameter (Using concrete mixer)	metre	186.03
12.27.1	Driven cast -in -place vertical M35 grade with a minimum cement content of 419 kg / cum R.C.C. pile excluding reinforcement complete as per drawing and technical specifications - 1000 mm diameter (Using concrete mixer)	metre	330.78
12.28.1	Driven cast -in -place vertical M35 grade with a minimum cement content of 419 kg / cum R.C.C. pile excluding reinforcement complete as per drawing and technical specifications - 1200 mm diameter (Using concrete mixer)	metre	476.43
12.29.1	Driven precast vertical M 35 grade with a minimum cement content of 419 kg / cum R.C.C piles excluding reinforcement complete as per drawing and technical specifications - 500 mm diameter pile (using crane, vibrating pile driving hammer with power unit) including the cost of materials, labour and transportation cost @ 1% of material and machinery.	metre	82.85
12.30.1	Driven precast vertical M 35 grade with a minimum cement content of 419 kg / cum RCC piles excluding reinforcement complete as per drawing and technical specifications - 750mm diameter pile (Using crane, vibrating pile drawing hammer with	metre	186.36

12 . Foundation

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Req'd. per unit in Kg</i>
	power unit) including the cost of materials, labour and transportation cost @ 1% of materials and machinery.		
12.31.1	Driven precast vertical M 35 grade with a minimum cement content of 419 kg / cum RCC piles excluding reinforcement complete as per drawing and technical specifications - 1000mm diameter pile.(using crane and vibrating pile driving hammer with power unit including the cost of materials, labour and transportation cost @ 1% of material and machinery.	metre	331.27
12.32.1	Driven precast vertical M35 grade with a minimum cement content of 419 kg / cum RCC piles excluding reinforcement complete as per drawing and technical specifications - size of pile 300mm x 300mm.(Using crane and vibrating pile driving hammer with power unit including the cost of materials, labour and transportation cost @ 1% of material and machinery.	metre	37.98
12.33.1	Driven precast vertical M 35 grade with a minimum cement content of 419 kg / cum RCC piles excluding reinforcement complete as per drawing and technical specifications - size of pile 500 mm x 500 mm (Using crane and vibrating pile driving hammer with power unit including the cost of materials, labour and transportation cost @ 1% of material and machinery.	metre	105.50
12.34.1	Driven precast vertical M 35 grade with a minimum cement content of 419 kg / cum RCC piles excluding reinforcement complete as per drawing and technical specifications - size of pile 750 mm x 750mm.(Using crane, vibrating pile driving hammer with power unit) including the cost of materials, labour and transportation cost @ 1% of material and machinery.	metre	237.38
12.38A.1	Cement concrete for reinforced concrete in pile cap complete as per drawing and technical specifications - RCC grade M20 with a minimum cement content of 341 kg / cum (Using Concrete mixer and electric genset) including all machineries and formwork.	cum	341.33
12.38A.2	Cement concrete for reinforced concrete in pile cap	cum	341.33

12 . Foundation

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	complete as per drawing and technical specifications - RCC grade M20 with a minimum cement content of 341 kg / cum - (Using Batching plant , Transit mixer and Concrete pump) including all machineries and formwork.		
12.38B.1	Cement concrete for reinforced concrete in pile cap complete as per drawing and technical specifications - RCC grade M25 with a minimum cement content of 399 kg / cum -(Using concrete mixer) including all machineries and formwork.	cum	399.33
12.38B.2	Cement concrete for reinforced concrete in pile cap complete as per drawing and technical specifications - RCC grade M25 with a minimum cement content of 399 kg / cum -(Using Batching plant, Transit Mixer and Concrete Pump) including all machineries and formwork.	cum	399.33
12.38C.1	Cement concrete for reinforced concrete in pile cap complete as per drawing and technical specifications - RCC grade M30 with a minimum cement content of 407 kg / cum -(Using concrete mixer)including all machineries and formwork.	cum	406.67
12.38C.2	Cement concrete for reinforced concrete in pile cap complete as per drawing and technical specifications - RCC grade M30 with a minimum cement content of 407 kg / cum -(Using Batching plant, Transit Mixer and Concrete pump) including all machineries and formwork.	cum	406.67
12.38D.1	Cement concrete for reinforced concrete in pile cap complete as per drawing and technical specifications - RCC grade M35 with a minimum cement content of 422 kg / cum -(Using Concrete mixer) including all machineries and formwork.	cum	422.00
12.38D.2	Cement concrete for reinforced concrete in pile cap complete as per drawing and technical specifications - RCC grade M35 with a minimum cement content of 422 kg / cum -(Using Batching plant , Transit Mixer and Concrete Pump) including all machineries and formwork.	cum	422.00
12.39	Providing and laying of PCC M15 with a minimum cement content of 275 kg / cum levelling course 100mm thick below the pile cap (Using concrete	cum	275.33

12 . Foundation

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	mixer and electric genset)		

13 . Substructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
13.1	Brick masonry work in cement mortar 1:3 (One cement and three fine aggregate) in substructure complete excluding pointing and plastering, as per drawing and technical specification- including the cost of labour, material and formwork	cum	122.40
13.2	Pointing with cement mortar 1:3 (one cement and three fine aggregate) on brick work in substructure as per technical specification-including the cost of labour, material.	sqm	1.53
13.3	Plastering with cement mortar 1:3 (one cement and three fine aggregate) on brick work in substructure as per Technical specifications-including the cost of labour and material.	sqm	7.34
13.4A	Stone masonry work in cement mortar 1:3 (one cement and three fine aggregate) for substructure complete as per drawing and technical specifications) - Random rubble masonry-including the cost of labour, material and formwork.	cum	168.30
13.4B	Stone masonry work in cement mortar 1:3 (one cement and three fine aggregate) for substructure complete complete as per drawing and technical specifications) - Coursed rubble masonry (first sort)-including the cost of labour, material and formwork.	cum	153.00
13.4C	Stone masonry work in cement mortar 1:3 (one cement and three fine aggregate) for substructure complete complete as per drawing and technical specifications) - Ashlar masonry (first sort)-including the cost of labour ,material and formwork.	cum	168.30
13.5A	Plain Cement Concrete in substructure complete as per drawing and technical specification - PCC Grade M15 with a minimum cement content 275 kg / cum upto 5 metre height-including the cost of labour, material, machinery and formwork.	cum	275.33
13.5B	Plaing Cement Concrete in substructure complete as per drawing and technical specification - PCC Grade M20 with a minimum cement content 344 kg / cum upto 5 metre height-including the cost of labour ,material,machinery and formwork.	cum	344.00
13.5C.1.1	Plaing Cement Concrete in substructure complete	cum	399.33

13 . Substructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	as per drawing and technical specification - PCC Grade M25 with a minimum cement content 399 kg / cum upto 5 metre height-Using concrete mixer(Formwork-10%).		
13.5C.1.2	Plain Cement Concrete in substructure complete as per drawing and technical specification - PCC Grade M25 with a minimum cement content 400 kg / cum up to 5m height- Using batching plant(Formwork-10%).	cum	399.58
13.5C.2.1	Plain Cement Concrete in substructure complete as per drawing and technical specification - PCC Grade M25 with a minimum cement content 399 kg / cum - For height above 5m height and upto 10m - Using concrete mixer (Form work 12 % + Extra lift 2 %)	cum	399.33
13.5C.2.2	Plain Cement Concrete in substructure complete as per drawing and technical specification - PCC Grade M25 with a minimum cement content 400 kg / cum for height above 5m and upto 10m using batching plant (Form work 12% + Extra lift 2%)	cum	399.58
13.5C.3.1	Plain Cement Concrete in substructure complete as per drawing and technical specification - PCC Grade M25 with a minimum cement content 399 kg / cum for height above 10m using concrete mixer (Form work 15% + Extra lift 4%)	cum	399.33
13.5C.3.2	Plain Cement Concrete in substructure complete as per drawing and technical specification - PCC Grade M25 with a minimum cement content 400 kg / cum for height above 10m using batching plant (Form work 15% + Extra lift 4%)	cum	399.58
13.5D.1.1	Plain Cement Concrete in substructure complete as per drawing and technical specification - PCC Grade M30 with a minimum cement content 405 kg / cum upto 5m height - using concrete mixer (Formwork-10%).	cum	405.33
13.5D.1.2	Plain Cement Concrete in substructure complete as per drawing and technical specification - PCC Grade M30 with a minimum cement content 405 kg / cum upto 5m height- Using batching plant (Formwork-10%).	cum	405.00

13 . Substructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Req'd. per unit in Kg</i>
13.5D.2.1	Plain Cement Concrete in substructure complete as per drawing and technical specification - PCC Grade M30 with a minimum cement content 405 kg / cum for height above 5m and upto 10m using concrete mixer (Formwork 12% + Extra lift 2%)	cum	405.33
13.5D.2.2	Plain Cement Concrete in substructure complete as per drawing and technical specification - PCC Grade M30 with a minimum cement content 405 kg / cum For height above 5m and upto 10m height using batching plant (Form work 12% + Extra lift 2%)	cum	405.00
13.5D.3.1	Plain Cement Concrete in substructure complete as per drawing and technical specification - PCC Grade M30 with a minimum cement content 405 kg / cum for height above 10m -Using concrete mixer (Form work 15% + Extra lift 4%)	cum	405.33
13.5D.3.2	Plain Cement Concrete in substructure complete as per drawing and technical specification - PCC Grade M30 with a minimum cement content 405 kg / cum for height above 10m -Using batching plant (Form work 15% + Extra lift 4%)	cum	405.00
13.5E.1.1	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M20 with a minimum cement content 347 kg / cum up to 5m height - Using concrete mixer	cum	347.33
13.5E.1.2	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M20 with a minimum cement content 347 kg / cum up to 5m height - Using batching plant	cum	347.17
13.5E.2.1	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M20 with a minimum cement content 347 kg / cum for height above 5m and upto 10m -Using concrete mixer (Form work 12% + Extra lift 2%)	cum	347.33
13.5E.2.2	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M20 with a minimum cement content 347 kg / cum for height above	cum	347.17

13 . Substructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Req'd. per unit in Kg</i>
	5m and upto 10m -Using batching plant (Form work 12% + Extra lift 2%)		
13.5E.3.1	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M20 with a minimum cement content 347 kg / cum for height above 10m - Using concrete mixer (Form work 15% + Extra lift 4%)	cum	347.33
13.5E.3.2	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M20 with a minimum cement content 347 kg / cum for height above 10m - Using batching plant (Form work 15% + Extra lift 4%)	cum	347.17
13.5F.1.1	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M25 with a minimum cement content 403 kg / cum for upto height 5m - Using concrete mixer	cum	403.33
13.5F.1.2	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M25 with a minimum cement content 403 kg / cum for upto height 5m - Using batching plant	cum	403.17
13.5F.2.1	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M25 with a minimum cement content 403 kg / cum for height above 5m and upto 10m height - Using concrete mixer (Form work 11.8% + Extra lift 1.8%)	cum	403.33
13.5F.2.2	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M25 with a minimum cement content 403 kg / cum for height above 5m and upto 10m height - Using batching plant (Form work 11.8% + Extra lift 1.8)	cum	403.17
13.5F.3.1	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M25 with a minimum cement content 405 kg / cum for height above 10m - Using concrete mixer (Form work 15% +	cum	405.33

13 . Substructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	Extra lift 4%)		
13.5F.3.2	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M25 with a minimum cement content 403 kg / cum for height above 10m - Using batching plant (Form work 15% + Extra lift 4%)	cum	403.17
13.5G.1.1	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M30 with a minimum cement content 407 kg / cum upto 5m height - Using concrete mixer (Formwork-10%)	cum	406.67
13.5G.1.2	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M30 with a minimum cement content 407 kg / cum upto 5m height - Using batching plant (Formwork-10%).	cum	406.67
13.5G.2.1	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M30 with a minimum cement content 407 kg / cum for height above 5m and upto 10m height - Using concrete mixer (Form work 11.5% + Extra lift 1.6%)	cum	406.67
13.5G.2.2	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M30 with a minimum cement content 407 kg / cum for height above 5m and upto 10m height - Using batching plant (Form work 11.5% + Extra lift 1.6 %)	cum	406.67
13.5G.3.1	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M30 with a minimum cement content 407 kg / cum for height above 10m - Using concrete mixer (Form work 14% + Extra lift 3.5%)	cum	406.67
13.5G.3.2	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M30 with a minimum cement content 407 kg / cum for height above 10m - Using batching plant (Form work 14% + Extra lift 3.5%)	cum	406.67

13 . Substructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Req'd. per unit in Kg</i>
13.5H.1.1	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M35 with a minimum cement content 422 kg / cum for height upto 5m - Using concrete mixer (Formwork-10%).	cum	422.00
13.5H.1.2	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M35 with a minimum cement content 422 kg / cum for height upto 5m - Using batching plant (Formwork-10%).	cum	422.00
13.5H.2.1	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M35 with a minimum cement content 422 kg / cum for height above 5m and upto 10m - Using concrete mixer (Form work 11% + Extra lift 1.4%)	cum	422.00
13.5H.2.2	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M35 with a minimum cement content 422 kg / cum for height above 5m and upto 10m - Using batching plant (Form work 11% + Extra lift 1.4%)	cum	422.00
13.5H.3.1	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M35 with a minimum cement content 422 kg / cum for height above 10m - Using concrete mixer (Form work 13% + Extra lift 3%)	cum	422.00
13.5H.3.2	Reinforced Cement Concrete in substructure complete as per drawing and technical specification -RCC Grade M35 with a minimum cement content 422 kg / cum for height above 10m - Using batching plant (Form work 13% + Extra lift 3%)	cum	422.00
13.8	Providing weep holes in brick masonry /plain/reinforced concrete abutment, wing wall / return wall with 100 mm dia AC pipe, extending through the full width of the structure with slope of 1V:20H towards drawing face. Complete as per drawing and technical specifications.	nos	0.85

14 . Superstructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Req'd. per unit in Kg</i>
14.1A.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M20 with a minimum cement content 341kg / cum - Using concrete mixer - for solid slab superstructure - height upto 5m including all machineries and formwork etc.	cum	341.33
14.1A.1.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M20 with a minimum cement content 341 kg / cum - Using concrete mixer - for T-beam & slab superstructure - height upto 5m including all machineries and formwork, etc.	cum	341.33
14.1A.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M20 with a minimum cement content 341 kg / cum - Using concrete mixer -for solid slab superstructure - for height above 5m upto 10m-including all machineries and formwork etc.	cum	341.33
14.1A.2.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M20 with a minimum cement content 341 kg / cum - Using concrete mixer -for T-beam & slab superstructure -for height above 5m upto 10m-including all machineries and formwork etc.	cum	341.33
14.1A.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M20 with a minimum cement content 341kg / cum - Using concrete mixer -for solid slab superstructure - for height above 10m-including all machineries and formwork etc.	cum	341.33
14.1A.3.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M20 with a minimum cement content 341 kg / cum - Using concrete mixer -for T-beam & slab superstructure -for height above 10m-including all machineries and formwork etc.	cum	341.33

14 . Superstructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Req'd. per unit in Kg</i>
14.1B.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M25 with a minimum cement content 399 kg / cum - Using concrete mixer - for solid slab superstructure - height upto 5m including all machineries and formwork, etc.	cum	399.33
14.1B.1.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M25 with a minimum cement content 399 kg / cum - Using concrete mixer and electric gen set - for T-beam & slab superstructure - height upto 5m including all machineries and formwork, etc.	cum	399.33
14.1B.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M25 with a minimum cement content 399 kg / cum - Using concrete mixer -for solid slab superstructure - height above 5m and upto 10m including all machineries and formwork, etc.	cum	399.33
14.1B.2.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M25 with a minimum cement content 399 kg / cum - Using concrete mixer -for T-beam & slab superstructure - height above 5m and upto 10m- including all machineries and formwork, etc.,	cum	399.33
14.1B.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M25 with a minimum cement content 399 kg / cum - Using concrete mixer -for solid slab superstructure - height above 10m- including all machineries and formwork, etc.,	cum	399.33
14.1B.3.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M25 with a minimum cement content 399 kg / cum - Using concrete mixer -for T-beam & slab superstructure - height above 10m- including all machineries and formwork, etc.,	cum	399.33
14.1C.1	Furnishing and placing reinforced cement concrete	cum	406.67

14 . Superstructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	in superstructure as per drawing and technical specifications - RCC grade M30 with a minimum cement content 407 kg / cum - Using concrete mixer - for solid slab superstructure - height upto 5m including all machineries and formwork, etc.		
14.1C.1.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M30 with a minimum cement content 407 kg / cum - Using concrete mixer - for T-beam & slab superstructure - height upto 5m including all machineries and formwork, etc.	cum	406.67
14.1C.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M30 with a minimum cement content 407 kg / cum - Using concrete mixer -for solid slab superstructure - height above 5m to 10m-including all machineries and formwork, etc.,	cum	406.67
14.1C.2.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M30 with a minimum cement content 407 kg / cum - Using concrete mixer -for T-beam & slab superstructure - height above 5m to 10m-including all machineries and formwork,etc.,	cum	406.67
14.1C.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M30 with a minimum cement content 407 kg / cum - Using concrete mixer -for solid slab superstructure - height above 10m-including all machineries and formwork,etc.,	cum	406.67
14.1C.3.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M30 with a minimum cement content 407 kg / cum - Using concrete mixer -for T-beam & slab superstructure - height above 10m-including all machineries and formwork,etc.,	cum	406.67
14.1D.1.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35	cum	422.00

14 . Superstructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	with a minimum cement content 422 kg / cum - Using concrete mixer - for solid slab superstructure - height upto 5m including all machineries and formwork, etc.		
14.1D.1.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using concrete mixer -for T-beam & slab superstructure - height upto 5m-including all machineries and formwork,etc.,	cum	422.00
14.1D.1.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using concrete mixer -for box girder and balanced cantilever - height upto 5m-including all machineries and formwork,etc.,	cum	422.00
14.1D.2.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using concrete mixer -for solid slab superstructure - height above 5m and upto 10m- including all machineries and formwork,etc.,	cum	422.00
14.1D.2.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using concrete mixer -for T-beam & slab superstructure - height above 5m to 10m-including all machineries and formwork,etc.,	cum	422.00
14.1D.2.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using concrete mixer -for box girder and balanced cantilever - height above 5m and upto 10m- including all machineries and formwork,etc.,	cum	422.00
14.1D.3.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35	cum	422.00

14 . Superstructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	with a minimum cement content 422 kg / cum - Using concrete mixer -for solid slab superstructure - height above 10m-including all machineries and formwork,etc.,		
14.1D.3.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using concrete mixer -for T-beam & slab superstructure - height above 10m-including all machineries and formwork,etc.,	cum	422.00
14.1D.3.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using concrete mixer -for box girder and balanced cantilever - height above 10m-including all machineries and formwork,etc.,	cum	422.00
14.1E.1.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M40 with a minimum cement content 430 kg / cum - Using concrete mixer - for solid slab superstructure- height upto 5m including all machineries and formwork, etc.	cum	430.00
14.1E.1.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M40 with a minimum cement content 430 kg / cum - Using concrete mixer -for T-beam & slab superstructure- height upto 5m-including all machineries and formwork,etc.,	cum	430.00
14.1E.2.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M40 with a minimum cement content 430 kg / cum - Using concrete mixer -for solid slab superstructure- height above 5m and upto 10m-including all machineries and formwork,etc.,	cum	430.00
14.1E.2.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M40 with a minimum cement content 430 kg / cum - Using concrete	cum	430.00

14 . Superstructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Req'd. per unit in Kg</i>
	mixer -for T-beam & slab superstructure- height above 5m and upto 10m-including all machineries and formwork,etc.,		
14.1E.3.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M40 with a minimum cement content 430 kg / cum - Using concrete mixer -for solid slab superstructure- height above 10m-including all machineries and formwork,etc.,	cum	430.00
14.1E.3.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M40 with a minimum cement content 430 kg / cum - Using concrete mixer -for T-beam & slab superstructure- height above 10m-including all machineries and formwork,etc.,	cum	430.00
14.1F.1.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M45 with a minimum cement content 465 kg / cum - Using batching plant, transit mixer and concrete pump -for solid slab superstructure - height upto 5m- including all machineries and formwork, etc.,	cum	465.00
14.1F.1.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M45 with a minimum cement content 465 kg / cum - Using batching plant, transit mixer and concrete pump -for I - beam and slab including launching of precast girders by launching truss upto 40m span - height upto 5m-including all machineries and formwork, etc.,	cum	465.00
14.1F.1.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M45 with a minimum cement content 465 kg / cum - Using batching plant, transit mixer and concrete pump -for cast - in - situ box girder, segmental construction and balanced cantilever - height upto 5m-including all machineries and formwork, etc.,	cum	465.00
14.1F.2.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical	cum	465.00

14 . Superstructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Req'd. per unit in Kg</i>
	specifications - PSC grade M45 with a minimum cement content 465 kg / cum - Using batching plant, transit mixer and concrete pump -for solid slab superstructure - height above 5m and upto 10m-including all machineries and formwork, etc.,		
14.1F.2.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M45 with a minimum cement content 465 kg / cum - Using batching plant,transit mixer and concrete pump -for I - beam and slab including launching of precast girders by launching truss upto 40m span - height above 5m and upto 10m-including all machineries and formwork, etc.,	cum	465.00
14.1F.2.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M45 with a minimum cement content 465 kg / cum - Using batching plant, transit mixer and concrete pump -for cast - in - situ box girder, segmental construction and balanced cantilever - height above 5m and upto 10m-including all machineries and formwork, etc.,	cum	465.00
14.1F.3.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M45 with a minimum cement content 465 kg / cum - Using batching plant, transit mixer and concrete pump -for solid slab superstructure - height above 10m-including all machineries and formwork, etc.,	cum	465.00
14.1F.3.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M45 with a minimum cement content 465 kg / cum - Using batching plant, transit mixer and concrete pump -for I - beam and slab including launching of precast girders by launching truss upto 40m span - height above 10m-including all machineries and formwork, etc.,	cum	465.00
14.1F.3.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M45 with a minimum cement content 465 kg / cum - Using batching plant,transit mixer and concrete pump -for cast -	cum	465.00

14 . Superstructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Req'd. per unit in Kg</i>
	in - situ box girder, segmental construction and balanced cantilever - height above 10m-including all machineries and formwork, etc.,		
14.1G.1.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M50 with a minimum cement content 490 kg / cum - Using batching plant, transit mixer and concrete pump -for cast - in - situ box girder, segmental construction and balanced cantilever - height upto 5m-including all machineries and formwork, etc.,	cum	490.00
14.1G.2.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M50 with a minimum cement content 490 kg / cum - Using batching plant, transit mixer and concrete pump -for cast - in - situ box girder, segmental construction and balanced cantilever - height above 5m to 10m-including all machineries and formwork, etc.,	cum	490.00
14.1G.3.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M50 with a minimum cement content 490 kg / cum - Using batching plant, transit mixer and concrete pump -for cast - in - situ box girder, segmental construction and balanced cantilever - height above 10m-including all machineries and formwork, etc.,	cum	490.00
14.1H.1.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M55 with a minimum cement content 529 kg / cum - Using batching plant, transit mixer and concrete pump -for cast - in - situ box girder, segmental construction and balanced cantilever - height upto 5 m-including all machineries and formwork, etc.,	cum	529.17
14.1H.2.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M55 with a minimum cement content 529 kg / cum - Using batching plant, transit mixer and concrete pump -for cast - in - situ box girder, segmental construction and balanced cantilever - height above 5m to 10m-including all machineries and formwork, etc.,	cum	529.17

14 . Superstructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Req'd. per unit in Kg</i>
14.1H.3.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M55 with a minimum cement content 529 kg / cum - Using batching plant, transit mixer and concrete pump -for cast - in - situ box girder, segmental construction and balanced cantilever - height above 10m-including all machineries and formwork, etc.,	cum	529.17
14.2A.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M20 with a minimum cement content 341kg / cum - Using batching plant, transit mixer and concrete pump-for solid slab superstructure -for height upto 5m- including all mahineries and formwork,etc.,	cum	341.00
14.2A.1.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M20 with a minimum cement content 341kg / cum - Using batching plant, transit mixer and concrete pump-for T-beam & slab superstructure -for height upto 5m-including all machineries and formwork.	cum	341.00
14.2A.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M20 with a minimum cement content 341kg / cum - Using batching plant , transit mixer and concrete pump-for solid slab superstructure -for height above 5m and upto 10m-including all machineries and formwork,etc.,	cum	341.00
14.2A.2.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M20 with a minimum cement content 341 kg / cum - Using batching plant, transit mixer and concrete pump-for T-beam & slab superstructure -for height above 5m and upto 10m-including all machineries and formwork, etc.,	cum	341.00
14.2A.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M20 with a minimum cement content 341kg / cum - Using batching plant, transit mixer and concrete pump -for solid	cum	341.00

14 . Superstructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Req'd. per unit in Kg</i>
	slab superstructure -for height above 10m		
14.2A.3.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M20 with a minimum cement content 341kg / cum - Using batching plant , transit mixer and concrete pump-for T-beam & slab superstructure -for height above 10m- including all machineries and formwork etc.,	cum	341.00
14.2B.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M25 with a minimum cement content 400 kg / cum - Using batching plant,transit mixer an concrete pump -for solid slab superstructure - height upto 5m- including all machineries and formwork, etc.,	cum	399.58
14.2B.1.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M25 with a minimum cement content 400 kg / cum - Using batching plant, transit mixer and concrete pump -for T-beam & slab superstructure - height upto 5m- including all machineries and formwork,etc.,	cum	399.58
14.2B.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M25 with a minimum cement content 400 kg / cum - Using batching plant, transit mixer and concrete pump-for solid slab superstructure - height above 5m and upto 10m- including all machineries and formwork, etc.,	cum	399.58
14.2B.2.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M25 with a minimum cement content 400 kg / cum - Using batching plant, transit mixer and concrete pump -for T-beam & slab superstructure - height above 5m and upto 10m-including all machineries and formwork,etc.,	cum	399.58
14.2B.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M25 with a minimum cement content 400 kg / cum - Using batching plant, transit mixer and concrete pump -for solid slab superstructure - height above 10m- including	cum	399.58

14 . Superstructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Req'd. per unit in Kg</i>
	all machineries and formwork,etc.,		
14.2B.3.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M25 with a minimum cement content 400 kg / cum - Using batching plant, transit mixer and concrete pump -for T-beam & slab superstructure - height above 10m -including all machineries and formwork, etc.,	cum	399.58
14.2C.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M30 with a minimum cement content 407 kg / cum - Using batching plant, transit mixer and concrete pump -for solid slab superstructure - height upto 5m- including all machineries and formwork, etc.,	cum	406.58
14.2C.1.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M30 with a minimum cement content 407 kg / cum - Using batching plant -for T-beam & slab superstructure - height upto 5m	cum	406.58
14.2C.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M30 with a minimum cement content 407 kg / cum - Using batching plant,transit mixer and concrete pump -for solid slab superstructure - height above 5m to 10m- including all machineries and formwork, etc.,	cum	406.58
14.2C.2.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M30 with a minimum cement content 407 kg / cum - Using batching plant, transit mixer and concrete pump -for T-beam & slab superstructure - height above 5m and upto 10m-including all machineries and formwork,etc.,	cum	406.58
14.2C.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M30 with a minimum cement content 407 kg / cum - Using batching plant, transit mixer and concrete pump -for solid slab superstructure - height above 10m-including all machineries and formwork, etc.,	cum	406.58

14 . Superstructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Req'd. per unit in Kg</i>
14.2C.3.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M30 with a minimum cement content 407 kg / cum - Using batching plant, transit mixer and concrete pump -for T-beam & slab superstructure - height above 10m- including all machineries and formwork, etc.,	cum	406.58
14.2D.1.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using batching plant, transit mixer and concrete pump - for solid slab superstructure - height upto 5m-including all machineries and formwork,etc.,	cum	422.00
14.2D.1.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using batching plant, transit mixer and concrete pump -for T-beam & slab superstructure - height upto 5m-including all machineries and formwork,etc.,	cum	422.00
14.2D.1.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using batching plant, transit mixer and concrete pump -for box girder and balanced cantilever-height upto 5m-including all machineries and formwork,etc.,	cum	422.00
14.2D.2.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using batching plant, transit mixer and concrete pump - for solid slab superstructure - height above 5m to 10m-including all machineries and formwork,etc.,	cum	422.00
14.2D.2.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum -	cum	422.00

14 . Superstructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Req'd. per unit in Kg</i>
	Using batching plant,transit mixer and concrete pump -for T-beam & slab superstructure - height above 5m and upto 10m-including all machineries and formwork,etc.,		
14.2D.2.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using batching plant, transit mixer and concrete pump -for box girder and balanced cantilever-height above 5m and upto 10m-including all machineries and formwork,etc.,	cum	422.00
14.2D.3.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using batching plant, transit mixer and concrete pump, etc., - for solid slab superstructure - height above 10m-including all machineries and formwork,etc.,	cum	422.00
14.2D.3.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using batching plant, transit mixer and concrete pump -for T-beam & slab superstructure - height above 10m- including all machineries and formwork,etc.,	cum	422.00
14.2D.3.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - RCC grade M35 / PSC grade M35 with a minimum cement content 422 kg / cum - Using batching plant, transit mixer and concrete pump -for box girder and balanced cantilever-height above 10m-including all machineries and formwork,etc.,	cum	422.00
14.2E.1.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M40 with a minimum cement content 430 kg / cum - Using batching plant, transit mixer and concrete pump -for solid slab superstructure- height upto 5m-including all machineries and formwork,etc.,	cum	430.00

14 . Superstructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
14.2E.1.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M40 with a minimum cement content 430 kg / cum - Using batching plant, transit mixer and concrete pump -for I - beam and slab superstructure including launching of precast girders by launching truss upto 40m span- height upto 5m-including all machineries and formwork,etc.,	cum	430.00
14.2E.1.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M40 with a minimum cement content 430 kg / cum - Using batching plant, transit mixer and concrete pump -for cast - in-situ box girder, segmental construction and balanced cantilever - height upto 5m- including all machineries and formwork, etc.,	cum	430.00
14.2E.2.1	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M40 with a minimum cement content 430 kg / cum - Using batching plant,transit mixer and concrete pump -for solid slab superstructure- height above 5m and upto 10m- including all machineries and formwork, etc.,	cum	430.00
14.2E.2.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M40 with a minimum cement content 430 kg / cum - Using batching plant, transit mixer and concrete pump -for I - beam and slab superstructure including launching of precast girders by launching truss upto 40m span- height above 5m and upto 10m- including all machineries and formwork,etc.,	cum	430.00
14.2E.2.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M40 with a minimum cement content 430 kg / cum - Using batching plant, transit mixer and concrete pump -for cast - in-situ box girder, segmental construction and balanced cantilever - height above 5m and upto 10m-including all machineries and formwork,etc.,	cum	430.00
14.2E.3.1	Furnishing and placing reinforced cement concrete	cum	430.00

14 . Superstructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Reqd. per unit in Kg</i>
	in superstructure as per drawing and technical specifications - PSC grade M40 with a minimum cement content 430 kg / cum - Using batching plant -for solid slab superstructure- height above 10m		
14.2E.3.2	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M40 with a minimum cement content 430 kg / cum - Using batching plant, transit mixer and concrete pump -for I - beam and slab superstructure including launching of precast girders by launching truss upto 40m span- height above 10m- including all machineries and formwork,etc.,	cum	430.00
14.2E.3.3	Furnishing and placing reinforced cement concrete in superstructure as per drawing and technical specifications - PSC grade M40 with a minimum cement content 430 kg / cum - Using batching plant, transit mixer and concrete pump -for cast - in-situ box girder, segmental construction and balanced cantilever - height above 10m- including all machineries and formwork,etc.,	cum	430.00
14.4	Providing and laying cement concrete wearing coat M30 grade with a minimum cement content 405 kg / cum including reinforcement complete as per drawing and technical specification	cum	405.00
14.6	Construction of precast RCC railing of M30 grade with a minimum cement content 407 kg / cum , aggregate size not exceeding 12mm, true to line and grade, tolerance of vertical RCC post not to exceed 1 in 500, centre to centre spacing between vertical post not to exceed 2000 mm, leaving adequate space between vertical post for expansion, complete as per approved drawings and technical specifications	Rmt	34.67
14.7	Construction of RCC railing of M30 grade with a minimum cement content 407 kg / cum cast- in-situ with 20mm nominal size aggregate, true to line and grade, tolerance of vertical RCC post not to exceed 1 in 500, centre to centre spacing between vertical post not to exceed 2000mm, leaving adequate space between vertical post for expansion, complete as per approved drawings and technical	Rmt	34.67

14 . Superstructure

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Req'd. per unit in Kg</i>
	specifications		
14.10	PCC M15 with a minimum cement content 275 kg / cum grade levelling course below approach slab complete as per drawing and technical specifications	cum	275.00
14.11A	Reinforced cement concrete M30 grade with a minimum cement content 407 kg / cum approach slab including reinforcement and formwork complete as per drawing and technical specifications - Using concrete mixer	cum	406.67
14.11B	Reinforced cement concrete M30 grade with a minimum cement content 407 kg / cum approach slab including reinforcement and formwork complete as per drawing and technical specifications - Using batching plant, transit mixer and concrete pump.	cum	406.67

15 . River Training and Protection Works

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Req'd.</i>
15.3	Providing and laying of apron with cement concrete blocks of size 0.5x0.5x0.5 m cast-in-situ and made with nominal mix of M15 grade cement concrete with a minimum cement content of 250kg/cum as per IRC:21-2000 (add 2 percent of cost to account for excavation for preparation of bed,nominal surface reinforcement and filling of granular material in recesses between blocks)	cum	275.33
15.4B	Providing and laying pitching on slopes laid over prepared filter media including boulder apron laid dry in front of toe of embankment complete as per drawing and technical specifications - Cement concrete blocks of size 0.3 x 0.3 x 0.3 m cast in cement concrete of grade M15 (add 2 percent of cost to account for excavation for preparation of bed,nominal surface reinforcement and filling of granular material in recesses between blocks)	cum	275.33
15.10A	Curtain wall complete as per drawing and technical specifications - Stone masonry in cement mortar 1:3	cum	153.00
15.10B	Curtain wall complete as per drawing and technical specifications - cement concrete grade M15	cum	275.33

16 . Repair and Rehabilitation

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Cement Req'd. per unit in Kg</i>
16.5A	Sealing of cracks / porous concrete by injection process through nipples/ grouting complete as per technical specifications- Cement grout	kg	1.32
16.5B	Sealing of cracks / porous concrete by injection process through nipples / grouting complete as per technical specifications - cement mortar (1:1) grouting	kg	0.66
16.9	Removal of defective concrete , cleaning the surface thoroughly, applying the shotcrete mixture mechanically with compressed air under pressure, comprising of cement, fine aggregate, coarse aggregates, water and quick setting compound in the proportion as per clause 2807.1, fine aggregate and coarse aggregates conforming to IS: 383 and Table 1 of IS: 9012 respectively, water cement ratio ranging from 0.35 to 0.50, density of gunite not less than 2000 kg / cum, strength not less than 25 Mpa and workmanship conforming to clause 2807.6.	sqm	12.00
16.17	Replacement of expansion joints complete as per drawings	Rmt	121.60
16.21	Repair of concrete crash barrier with cement concrete of M30 grade by cutting and trimming the damaged portion to a regular shape, cleaning the area to be repaired thoroughly, applying cement concrete after erection of proper formwork	Rmt	12.16
16.22	Repair of RCC railing (Carrying out repair of RCC railing to bring it to the original shape)	Rmt	4.07

BITUMEN CONSUMPTION STATEMENT

6. Bituminous Construction (MoST)

Code No.	Description	Unit	Bitumen Req'd.per unit in Kg.
6.5E.1	Providing and applying tack coat on the prepared surface, heating bitumen in boiler and spraying the bitumen with spray set fitted on bitumen boiler – on black topped bitumen @ 5kg / 10 sqm.	Sqm	0.50
6.5F.1	Providing and applying tack coat on the prepared surface, heating bitumen in boiler and spraying the bitumen with spray set fitted on bitumen boiler – on black topped bitumen @ 10kg / 10 sqm.	Sqm	1.00
6.5G.1	Providing and applying tack coat on the prepared surface, spraying the bitumen emulsion with spray set at 2.50 kg / 10sqm. As per clause 503 of Most specification.	Sqm	0.25
6.5H.1	Providing and applying tack coat on the prepared surface, spraying the bitumen emulsion with spray set at 4.00 kg / 10sqm. As per clause 503 of Most specification.	Sqm	0.40
6.11A	Providing and laying open graded premix carpet with specified graded crushed aggregates for wearing course including loading of aggregates with i.e. loader, heating binder and aggregates in hot mix plant 30 to 40 tonne, transporting the mixed material with tipper and laying with paver finisher to the required level and grade, rolling with power roller 8 to 10 tonne but excluding cost of tack and seal coat with lead for mix of material 1 km. As per clause no 509 of MOST specification.	Sqm	1.46
6.11B	Providing and laying open graded premix carpet 20mm thick on prepared surface in a single course as wearing course composed of specified size of stone aggregates premix with a bituminous binder in mini hot mix plant 6 to 10 tonne laying manually and rolling with power roller 8 to 10 tonne but excluding cost of primer/tack coat. As per clause no 509 of MOST specification.	Sqm	1.46
6.11C	Providing and laying open graded premix carpet of 25mm thick on prepared surface in a single course as wearing course composed of specified size of stone aggregates premix with a bituminous binder in mini hot mix plant 6-10 tonne laying manually and rolling with power roller 8-10 tonne but excluding cost of primer/tack coat. As per clause no 509 of MOST specification.	Sqm	1.82

Code No.	Description	Unit	Bitumen Req'd.per unit in Kg.
6.16	Providing and applying liquid seal coat, type 'A' comprising of a layer of bituminous binder, followed by a cover of stone chipping of specified grading and rolling with power roller 8 to 10 tonne. As per clause no 513 of MOST specification.	Sqm	0.98
6.17	Providing and applying premixed seal coat type 'B' comprising of thin application of fine aggregate premix with bitumen binder in mini hot mix plant, carriage manually of mixed material and laying and rolling with power roller 8 to 10 tonne. As per clause no 513 of MOST specification.	Sqm	0.68

5. Base and Bituminous Construction (MoRTH)

<i>Code No.</i>	<i>Description</i>	<i>Unit</i>	<i>Bitumen Req'd.per unit in Kg.</i>
5.1	Providing and applying primer coat with bitumen emulsion on prepared surface of granular base including clearing of road surface and spraying primer at the rate of 0.60 kg/sqm using mechanical means. (As per MORTH specification, 4th Revision)	Sqm	0.60
5.2	Providing and applying tack coat with bitumen emulsion using emulsion pressure distributor at the rate of 0.20 kg. per sqm. on the prepared bituminous / granular surface cleaned with mechanical broom. (As per MORTH specification, 4th Revision)	Sqm	0.20
5.3A	Providing and laying bituminous macadam with hot mix plant of capacity not less than 40 to 60 TPH using crushed aggregates of specified grading premixed with bituminous binder, transported to site, laid over a previously prepared surface with paver finisher to the required grade, level and alignment and rolled as per clauses 501.6 and 507.7 of MORTH specification, 4th Revision, to achieve the desired compaction.- Using grade I metal and bitumen 60/70 grade.	Cum	76.829
5.3B	Providing and laying bituminous macadam with hot mix plant of capacity not less than 40 -60 TPH using crushed aggregates of specified grading premixed with bituminous binder, transported to site, laid over a previously prepared surface with paver finisher to the required grade, level and alignment and rolled as per clauses 501.6 and 507.7 of MORTH specification, 4th Revision, to achieve the desired compaction. - Using grade II metal and bitumen 60/70 grade.	Cum	76.829
5.5	Providing, laying and rolling of built-up spray grout layer over prepared base consisting of a two layer composite construction of compacted crushed coarse aggregates using motor grader for aggregates. Key stone chips spreader may be used with application of bituminous binder after each layer and with key aggregates placed on top of the second layer to serve as a base conforming to the line, grades and cross-section specified, the compacted layer thickness being 75mm. (As per MORTH specification, 4th Revision)	Sqm	3.00

Code No.	Description	Unit	Bitumen Req'd.per unit in Kg.
5.6A	Providing and laying dense graded bituminous macadam with HMP of capacity not less than 40 to 60 TPH using crushed aggregates of specified grading, premixed with bituminous binder @ 4.0 to 4.5 per cent by weight of total mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per Clause 507 of MORTH specification, 4 th Revision, complete in all respects – Using grade-I materials.	Cum	98.10
5.6B	Providing and laying dense graded bituminous macadam with HMP of capacity not less than 40 to 60 TPH using crushed aggregates of specified grading, premixed with bituminous binder @ 4.0 to 4.5 per cent by weight of total mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per Clause 507 of MORTH specification, 4 th Revision, complete in all respects – Using grade-II materials.	Cum	98.10
5.7A	Providing and laying semi-dense bituminous concrete with HMP of capacity not less than 40 – 60 TPH using crushed aggregates of specified grading, premixed with bituminous binder @ 4.5 to 5 percent of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per clause 508 of MORTH specification, 4 th Revision, complete in all respects – Using grade-I material and bitumen 60/70 grade.	Cum	109.615
5.8A	Providing and laying bituminous concrete with HMP of capacity not less than 40 to 60 TPH using crushed aggregates of specified grading, premixed with bituminous binder @ 5.4 to 5.6 percent of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per clause 509 of MORTH specification, 4 th Revision, complete in all respects – Using grade-I material.	Cum	117.80

Code No.	Description	Unit	Bitumen Req'd.per unit in Kg.
5.8B	Providing and laying bituminous concrete with HMP of capacity not less than 40 to 60 TPH using crushed aggregates of specified grading, premixed with bituminous binder @ 5.4 to 5.6 percent of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per clause 509 of MORTH specification, 4th Revision, complete in all respects - Using grade-II material.	Cum	117.80
5.9A	Providing and laying surface dressing as wearing course in single coat using crushed stone aggregate of specified size on a layer of bituminous binder laid on prepared surface and rolling with 8-10 tonne smooth wheeled steel roller - Using 19mm nominal chipping size. (As per MORTH specification, 4th Revision)	Sqm	1.20
5.9B	Providing and laying surface dressing as wearing course in single coat using crushed stone aggregate of specified size on a layer of bituminous binder laid on prepared surface and rolling with 8-10 tonne smooth wheeled steel roller - Using 13mm nominal chipping size. (As per MORTH specification, 4th Revision)	Sqm	1.00
5.10A	Providing, laying and rolling of open graded premix surfacing of 20mm thickness composed of 13.2mm to 5.6mm aggregates either using penetration grade bitumen or cut-back or emulsion to required line, grade and level to serve as wearing course on a previously prepared base, including mixing in a suitable plant, laying and rolling with a smooth wheeled roller 8-10 tonne capacity, finished to required level and grades - Mechanical method using penetration grade bitumen and HMP of appropriate capacity not less than 40 to 60 tonne/hour. (As per MORTH specification, 4th Revision)	Sqm	1.46
5.10B	Providing, laying and rolling of open graded premix surfacing of 20mm thickness composed of 13.2mm to 5.6mm aggregates either using penetration grade bitumen or cut-back or emulsion to required line, grade and level to serve as wearing course on a previously prepared base, including mixing in a suitable plant, laying and rolling with a smooth wheeled roller 8-10 tonne capacity, finished to required level and grades - Open graded premix surfacing using cationic bitumen emulsion. (As per MORTH specification, 4th Revision)	Sqm	2.155

Code No.	Description	Unit	Bitumen Req'd.per unit in Kg.
5.11A	Providing, laying and rolling of close-graded premix surfacing materials of 20mm thickness composed of 11.2mm to 0.09mm (Type-A) aggregates using penetration grade bitumen to the required line, grade and level to serve as wearing course on a previously prepared base, including mixing in a suitable plant, laying and rolling with a smooth wheeled roller 8-10 tonne capacity, and finishing to required level and grade - Using Type A materials. (As per MORTH specification, 4th Revision)	Sqm	2.195
5.11B	Providing, laying and rolling of close-graded premix surfacing materials of 20mm thickness composed of 13.2mm to 0.09mm (Type-B) aggregates using penetration grade bitumen to the required line, grade and level to serve as wearing course on a previously prepared base, including mixing in a suitable plant, laying and rolling with a smooth wheeled roller 8-10 tonne capacity, and finishing to required level and grade - Using Type B materials. (As per MORTH specification, 4th Revision)	Sqm	1.90
5.12A	Providing and laying seal coat sealing the voids in a bituminous surface laid to the specified levels, grades and cross fall using Type A seal coat. (As per MORTH specification, 4th Revision)	Sqm	0.98
5.12B	Providing and laying of premix sand seal coat with HMP of appropriate capacity not less than 40 to 60 tonne/hour using crushed stone chipping 6.7 mm size and penetration bitumen of suitable grade - Type B (As per MORTH specification, 4th Revision)	Sqm	0.679