

CONTENTS

S.No.	NAME OF SUB-HEAD	PAGE No.
A	BASIC RATES	
0.1	Hire Charges of Plants	3
0.2	Labour	6
0.3	Material for Building Work, Road Work & Services	8
B	SUB – HEADS	
1.	Carriage of Materials	71
2.	Earth Work	77
3.	Mortars	83
4.	Concrete Work	87
5.	Reinforced Cement Concrete	93
6.	Masonry Work	103
7.	Stone Work	109
8.	Cladding Work	115
9.	Wood and PVC Work	123
10.	Steel Work	149
11.	Flooring	155
12.	Roofing	167
13.	Finishing	181
14.	Repairs to Building	193
15.	Dismantling and Demolishing	203
16.	Road Work	211
17.	Horticulture and Landscaping	229

18.	Sanitary Installation	235
19.	Water Supply	249
20.	Drainage	269
21.	Pile Work	279
22.	Aluminium Work	285
23.	Water Proofing	291
24.	River and Canal Protection Work	299
25.	Canal Lining	303
26A.	Snow Clearance (by Manual Means)	307
26B.	Snow Clearance (by Mechanical Means)	311
27.	Slip Clearance	315
28.	Rain Water Harvesting and Tube wells	319
29.	Conservation of Heritage Buildings	325
30.	Structural Glazing & Aluminium Composite Panel	329
31.	New Technologies & Materials	335
C.	CEMENT CONSUMPTION STATEMENT	355
D.	BITUMEN CONSUMPTION STATEMENT	389

BASIC RATES

- 0.1 HIRE CHARGES OF PLANTS**
- 0.2 LABOUR**
- 0.3 MATERIAL FOR BUILDING
WORK, ROAD WORK AND
SERVICES**

BASIC RATES

BASIC RATES/ 0.1 HIRE CHARGES OF PLANT

Note :- These rates are exclusive of GST, contractor's profit and over heads etc.

Code No.	Description	Unit	Rate ₹
0001	Hire charges of Coaltar Boiler 900 to 1400 litres	day	800.00
0002	Hire charges of Concrete Mixer 0.25 to 0.40 cum with hopper	day	800.00
0003	Hire charges of Diesel Road Roller - 8 to 10 tonne	day	3000.00
0004	Production cost of concrete by batch mix plant	cum	400.00
0005	Hire charges of Diesel Truck - 9 tonne	day	3940.00
0006	Hire charges of Spraying machine including electric charges	day	250.00
0007	Hire charges of coaltar Sprayer	day	350.00
0008	Hire charges of Barber green, drying mixing and asphalt Plant, with accessories, capacity 30/45 tonne	day	7700.00
0009	Pumping charges of concrete including hire charges of pump/ piping work and accessories	cum	210.00
0010	Hire charges of Derrick monkey rope	day	750.00
0011	Hire charges of Pumpset of capacity 4000 litres/hour	day	700.00
0012	Vibrator (Needle type 40 mm)	day	350.00
0013	Machine for rubbing of floors	day	300.00
0014	Front end loader capacity 1.00 cum	day	6000.00
0015	Hire and running charges of Tripod and Mechanical Winch machine complete with power unit and accessories	day	3000.00
0016	Mastic cooker	day	750.00
0017	Hire and running charges of Tipper	day	3750.00
0018	Hire and running charges (A) Loader C.M. excavator B.L. 37 1/2 litre	hour	NA
	(B) C.M. excavator B.L. 220 18 1/2 litre	hour	NA
	(C) Hire and running charges of loader	day	6000.00
0019	Hand Grinder for Mirror Polish	day	250.00
0020	Hydraulic excavator (3D) with driver and fuel	day	7000.00
0021	Pin Vibrator	day	250.00
0022	Surface Vibrator	day	300.00
0023	Hot Bitumen Mixer 0.5 cum i/c hand cart	day	3500.00
0024	Boat (Capacity upto 20cum)	day	1050.00
0024.1	Hire and running charges of hydraulic piling rig with power unit etc. including complete accessories and shifting at site	day	35000.00
0025	Hire and running charges of light crane	day	3500.00
0026	Hire and running charges of Bentonite pump	day	3000.00
0027	Hire and running charges of Vibrating pile driving hammer complete with power unit and accessories	day	30000.00
0028	Hire and running charges of crane 20 tonne capacity	day	7000.00
0029	Carriage of concrete by transit mixer	km/cum	37.30
0030	Generator 250 KVA	day	3000.00
0031	Steam curing by using boiler /Heater	cum	500.00
0032	Stressing Machine (jack with pump)	day	11500.00
0033	Paint applicator	day	800.00
0034	Cutting saw machine	day	1350.00
0035	Strands Roller machinery for laying strands	day	3500.00

BASIC RATES

0036	Bed master (Pulling strands)	day	3000.00
0037	Mobile crane	day	4500.00
0038	Tractor with ripper attachment	day	1200.00
0039	Tractor with trolley	day	1600.00
0040	Air compressor 250 CFM with two leads for pneumatic cutter/hammers.	day	800.00
0041	Joint Cutting Machine with 2-3 blades.	day	800.00
0042	C.C Batch mix plant	day	10000.00
0043	Road sweeper	day	550.00
0044	Cost for crane upto 40 tonne capacity	day	8000.00
0045	Slip form paver with sensor	day	13000.00
0046	Water tanker 5000 ltr. Capacity	day	1200.00
0047	Concrete joint cutting machine	day	600.00
0048	Texturing machine	day	925.00
0049	Dozer D-80-A 12	hour	1500.00
0050	Motor Grader 3.35 metre blade	hour	2400.00
0051	Hydraulic excavator of 1 cum bucket	hour	800.00
0052	Front end loader 1 cum bucket capacity (incl.POL)	hour	1300.00
0053	Tipper- 5 cum/10 tonnes	toone km.	3.52
0054	Vibratory roller 8 to 10 tonne	hour	600.00
0055	Smooth wheeled Roller 8 to 10 tonne	hour	300.00
0056	Tandom Road Roller	hour	1200.00
0057	Water tanker 5 to 6 KL capacity	hour	200.00
0058	Air Compressor	hour	200.00
0059	Wet mix plant 60 TPH	hour	950.00
0060	Mechanical Broom Hydraulic	hour	450.00
0061	Emulsion Pressure Distributor of capacity 1750 sqm per hour	hour	700.00
0062	Hot mix plant- 120 TPH capacity	hour	19000.00
0063	Hot mix plant 100 TPH capacity	hour	18900.00
0064	Paver finisher Hydrostatic with sensor control 100 TPH	hour	1500.00
0065	Paver finisher Mechanical 100 TPH	hour	800.00
0066	Batching & mixing plant @ 75 cumper hour	hour	2400.00
0067	Cost for crane upto 80 tonne capacity	day	15000.00
0068	Concrete paver finisher with 40 HP Motor and sensor	hour	3000.00
0069	Generator 250 KVA	hour	400.00
0070	Generator 100 KVA/125 KVA	hour	300.00
0071	Truck 5.5. cum/10 tonne	tonne km.	3.30
0072	Cost for crane having capacity 50MT	day	8500.00
0075	Road sweeper (Mechanical Broom) @ 1250 sqm.per hour	hour	450.00
0076	Drum Type HMP of 60-90 TPH capacity @ 75 tonne per hour actual output	hour	18800.00
0080	Hire and running charges of drill machine upto 400 mm dia (including cost of Mobile oil, diesel consumption in ordinary soil and operator)	day	7500.00
0081	Pile Integrity testing equipment	day	3000.00
0082	Excavation of Diaphragm wall by Mechanical Grab	sqm	1500.00
0083	Hire charges of MINI TRUCK for local shifting.	day	1400.00
0084	Hire charges of diesel truck - 9 tonne (witout POL)	day	1800.00
0085	Using cost of Ultra Violet Radiation tube	Hour	190.00
0086	Compressor, gun, rubber pipes & other accessories- hire charge of		

BASIC RATES

	plant & machinery i/c necessary fuel	day	4000.00
0087	Hire Charges of Suction Jeting machine 2200 PSI machine i/c POL & operator	day	40000.00
0088	Hire charges of Drill machine upto 30 mm dia	day	160.00
0089	Hire charges of sand blasting equipment	day	400.00
0090	Hire charges of compressor	day	500.00
0091	Welding charges of shear key to existing reinforcement	each	5.00
0092	Hire charges of plant and Machinery that can inject 350 kg/day	day	200.00
0093	Hire Charges of Suction Jeting machine 1500 PSI machine i/c POL & operator	day	10000.00

Note :- 1. Above hire - charges (from item code 0001 to 0083) include cost of services of operating staff, Cost of lubricating oil, diesel / Petrol/ Kerosene oil , other consumables for running the plant and machinery and excluding GST.

2. The hire charges of plant machinery on per day basis are for single shift of eight working hours.

BASIC RATES

Basic Rates-contd / 0.2 Labour

Note :- These rates are exclusive of GST, contractor's profit and over heads and are inclusive of wages for weekly day of rest.

Code No.	Description	Unit	Rate ₹
0100	Bandhani	day	625.00
0101	Bhisti	day	625.00
0102	Blacksmith 1st class	day	806.00
0103	Blacksmith 2nd class	day	734.00
0107	Bullockman with single bullock	day	553.00
0111	Carpenter 1st class	day	806.00
0112	Carpenter 2nd class	day	734.00
0113	Chowkidar	day	553.00
0114	Beldar	day	553.00
0115	Coolie	day	553.00
0116	Fitter (Grade 1)	day	806.00
0117	Assistant Fitter or 2nd class Fitter	day	734.00
0119	Glazier	day	734.00
0122	Mason (for plaster of paris work) 1st class	day	806.00
0123	Mason (for brick work) 1st class	day	806.00
0124	Mason (for brick work) 2nd class	day	734.00
0125	Mason (for plain stone work) 2nd class	day	734.00
0126	Mason (for ornamental stone work) 1st class	day	806.00
0127	Driver for Road Roller, Concrete Mixer, Truck etc.	day	806.00
0128	mate	day	625.00
0129	Mali/ sewerman	day	553.00
0130	Mistry	day	806.00
0131	Painter	day	734.00
0132	Rock Excavator	day	625.00
0133	Rock Breaker	day	625.00
0134	Rock Hole Driller	day	625.00
0135	Stone Chiseller	day	625.00
0138	Sprayman (for bitumen, tar etc.)	day	625.00
0139	Skilled Beldar (for floor rubbing etc.)	day	625.00
0141	White washer	day	625.00
0154	Nozzel man/ gun man	day	734.00
0155*	Mason (average)	day	770.00
0156*	Carpenter (average)	day	770.00
0157	Operator (Pile / Special machines)	day	806.00
0159	Skilled Torch Operator for laying tack.	day	734.00
0160	Technician	day	806.00
0161	Helper (Technician)	day	553.00
0162	Labour for fabrication of uPVC extruded casement/ sliding windows and doors including drilling holes, fixing of fittings & hardware, hire charges of drill machine and electricity charges etc.	sqm	534.00
0162.1	Boatman	day	625.00

BASIC RATES

0163	Labour for installation of uPVC extruded casement/ sliding windows and doors including scaffolding	sqm	773.00
0164	Security guard without gun (8 hours shift duty per day)	day	625.00
0165	Security guard with gun (8 hours shift duty per day)	day	734.00

*** These rates are average of 1st class and 2nd class categories.**

This is for use in the analysis of rates only

BASIC RATES

Basic Rates-contd / 0.3 Materials for building work, road work & services

Note :- These rates are exclusive of GST, contractor's profit and over heads and carriage etc.

Code No.	Description	Unit	Rate ₹
0204	Asbestos Cement Curved barge board	each	NA
0205	Asbestos Cement Barge Board 2.44 metre long	each	NA
0206	Asbestos Cement Barge Board 1.83 metre long	each	NA
0207	Asbestos Cement one piece plain angular ridge 1.22 mtr long	each	NA
0208	Asbestos Cement serrated or plain wing each adjustable ridge 1.22 m long.	pair	NA
0209	Asbestos Cement close fittings adjustable ridge 1.10 m long	pair	NA
0210	Asbestos Cement North light adjustable ridge 1.22 m long	pair	NA
0211	Asbestos Cement ridge finals	pair	NA
0212	Asbestos Cement unserrated adjustable ridge for hips	pair	NA
0213	Asbestos Cement roof light (1.82 metre long)	each	NA
0214	Apron flashing pieces	each	NA
0215	Asbestos Cement eaves filler pieces	each	NA
0216	Asbestos Cement North light ventilator curves	each	NA
0219	Asbestos Cement expansion joint for North light curves	each	NA
0220	Asbestos Cement expansion joint for ridges	pair	NA
0221	Asbestos Cement louvers 'S' type (1.75m)	each	NA
0222	Seam bolts & nuts 6mm dia and 25mm long	10 nos.	16.00
0223	Fibre (reinforced by organic fibres and / or inorganic synthetic fibre) cement corrugated sheet 6 mm thick	sqm	225.00
0224	Fibre (reinforced by organic fibres and / or inorganic synthetic fibre) cement close fitting adjustable ridge	metre	210.00
0225	Fibre (reinforced by organic fibres and / or inorganic synthetic fibre) cement corrugate serrated adjustable ridge	metre	210.00
0226	Fibre (reinforced by organic fibres and / or inorganic synthetic fibre) cement plain wing adjustable ridge	metre	210.00
0227	Fibre (reinforced by organic fibres and / or inorganic synthetic fibre) cement unserrated adjustable ridge for hips	metre	210.00
0228	Fibre (reinforced by organic fibres and / or inorganic synthetic fibre) cement corrugated apron piece	metre	200.00
0229	Fibre (reinforced by organic fibres and / or inorganic synthetic fibre) cement eaves filler piece	each	175.00
0230	Fibre (reinforced by organic fibres and / or inorganic synthetic fibre) cement north light curves	metre	280.00
0231	Fibre (reinforced by organic fibres and / or inorganic synthetic fibre) cement ventilator curves	each	310.00
0232	Fibre (reinforced by organic fibres and / or inorganic synthetic fibre) cement barge boards 6 mm thick	metre	400.00
0233	Fibre (reinforced by organic fibres and / or inorganic synthetic fibre) cement ridge finial	pair	165.00
0234	Fibre (reinforced by organic fibres and / or inorganic synthetic fibre) cement special north light curves	each	555.00
0235	Fibre (reinforced by organic fibres and / or inorganic synthetic fibre) cement S type louvers	each	260.00

BASIC RATES

0236	Multi purpose fibre (reinforced by organic fibres and / or inorganic synthetic fibre) cement board 6 mm thick	sqm	210.00
0237	Multi purpose fibre (reinforced by organic fibres and / or inorganic synthetic fibre) cement board 8 mm thick	sqm	220.00
0238	6 mm thick heavy duty fiber cement board	sqm	255.00
0239	8mm thick heavy duty fiber cement board	sqm	300.00
0240	9 mm thick heavy duty fiber cement board	sqm	380.00
0241	12.5 mm thick Gypsum plaster board	sqm	180.00
0242	6 mm thick multipurpose cement bonded wood particle board conforming to IS : 14276	sqm	210.00
0243	8 mm thick multipurpose cement bonded wood particle board conforming to IS : 14276	sqm	290.00
0244	Factory made light weight composite non asbestos fibre reinforced aerated cement sandwiched wall/roof panel (50mm thick). The outer face on both sides of the panels will be non asbestos fibre cement board (minimum 4mm thick) confirming to IS 14862:2000	sqm	634.00
0245	Factory made light weight non asbestos fibre reinforced aerated cement sandwiched wall/roof panel (75mm thick). The outer face on both sides of the panels will be non asbestos fibre cement board (minimum 5mm thick) confirming to IS 14862:2000	sqm	789.00
0246	2mm thick sim pad	each	10.00
0247	5mm thick sim pad	each	15.00
0248	10mm thick sim pad	each	25.00
0285	Brick Aggregate (Single size) 63 mm nominal size	cum	600.00
0286	Brick Aggregate (Single size) 50 mm nominal size	cum	600.00
0287	Brick Aggregate (Single size) 40 mm nominal size	cum	600.00
0288	Brick Aggregate (Single size) 25 mm nominal size	cum	600.00
0289	Brick Aggregate (Single size) 20 mm nominal size	cum	600.00
0290	Stone Aggregate (Single size) 75 mm nominal size (A) Crushed (B) Nallah	cum	900.00 NA
0291	Stone Aggregate (Single size) 63 mm nominal size (A) Crushed (B) Nallah	cum	900.00 NA
0292	Stone Aggregate (Single size) 50 mm nominal size (A) Crushed (B) Nallah	cum	900.00 NA
0293	Stone Aggregate (Single size) 40 mm nominal size (A) Crushed (B) Nallah	cum	900.00 NA
0294	Stone Aggregate (Single size) 25 mm nominal size (A) Crushed (B) Nallah	cum	900.00 NA
0295	Stone Aggregate (Single size) 20 mm nominal size (A) Crushed (B) Nallah	cum	900.00 NA
0296	Stone Aggregate (Single size) 12.5 mm nominal size (A) Crushed (B) Nallah	cum	900.00 NA
0297	Stone Aggregate (Single size) 10 mm nominal size (A) Crushed (B) Nallah	cum	900.00 NA
0298	Stone Aggregate (Single size) 06 mm nominal size	cum	900.00
0300	Safeda ballies 80 mm diameter	metre	50.00
0301	Safeda ballies 100 mm diameter	metre	50.00

BASIC RATES

0302	Safeda ballies 125 mm diameter	metre	50.00
0303	Cowdung	Cum	250.00
0304	Bajri	cum	900.00
0305	Bamboo 25 mm dia 2.5 metre long	Score	400.00
0308	Bhusa	quintal	600.00
0309	Paving bituman of grade VG - 10 of approved quality	tonne	56302.00
0310	Bitumen Emulsion	tonne	55882.00
0312	Bitumen gradePMB - 40	tonne	74218.00
0313	Blown type petroleum bitumen of penetration 85 /25 approved quality	tonne	40950.00
0314	Bitumen hot sealing compound Grade A	Kilogram	40.00
0316	Bitumen solution primer of approved quality	litre	59.00
0317	Premoulded joint filler 12 mm thick.	sqm	360.00
0318	Bitumen felt fibre base (vegetable or animal):As per IS 7193 Grade I	sqm	70.00
0319	Bitumen felt as per IS 7193 Grade II	sqm	80.00
0322	Bitumen felt :Type 3 grade 1	sqm	70.00
0323	Separation Membrane of impermeable plastic sheeting 125 micron thick	sqm	12.00
0324	Coal Tar	litre	40.00
0325	Blasting powder	kilogram	40.00
0326	Blasting fuse (fuse wire)	each	15.00
0328	12 mm thick White face insulating board	sqm	325.00
0329	18 mm thick White face insulating board	sqm	NA
0332	12 mm thick Natural colour insulating board	sqm	235.00
0333	18 mm thick Natural colour insulating board	sqm	NA
0336	Flame retardant face insulating board 12mm thick	sqm	365.00
0337	Flame retardant face insulating board 18mm thick	sqm	NA
0339	Flame retardant face insulating, Impregnated fibre board 12 mm thick	sqm	425.00
	Flat pressed 3 layer particle board medium density Grade I		
0341	12 mm thick	sqm	255.00
0342	18 mm thick	sqm	430.00
0343	25 mm thick	sqm	595.00
0346	Extra for veneered paticle board with Teak veneering on one side and commercial veneering on other side	sqm	237.00
0347	Extra for veneered paticle board with commercial veneering on both side	sqm	158.00
0348	Extra for veneered paticle board with Teak Veneering on both sides	sqm	500.00
0349	Curing compound	litre	45.00
0351	Integral crystalline slurry	kg	195.00
0352	Integral crystalline admixture	kg	230.00
0353	Crystalline mortar	kg	190.00
0354	Integral crystalline dry shake	kg	280.00
0355	Swellable type water stop tape	meter	365.00
0356	Primer for swellable type water stop tape	litre	1540.00
0357	Polymer modified adhesive mortar	kg	18.00
0362	Brick bats	cum	550.00
0364	Wire brush	each	32.00
0365	Soft brush	each	29.00
0366	Caustic Soda	kilogram	60.00

BASIC RATES

0367	Portland Cement (OPC-43 Grade)	tonne	7033.20
0368	White cement	tonne	14844.00
0369	Plastic sheet,1.25 mm thick for dowel bars	sqm	26.00
0370	Coal (Steam)	quintal	450.00
0371 A	Empty Cement Poly Bags	each	2.00
0371 B	Sealant primer	kg	157.00
0373	Cramp Gun metal 25x6x300 mm	each	80.00
0374	Pre moulded Joint filler, 25 mm thick for expansion joint.	sqm	439.00
0378	125x70x4 mm Brass Butt hinges (Light/Ordinary type)	ten	850.00
0379	100x70x4 mm Brass Butt hinges (Light/Ordinary type)	ten	680.00
0380	75x40x2.5 mm Brass Butt hinges (Light/Ordinary type)	ten	420.00
0381	50x40x2.5 mm Brass Butt hinges (Light/Ordinary type)	ten	175.00
0382	125x85x5.5 mm (0.70 kg) Brass Butt hinges (heavy type)	ten	1440.00
0383	100x85x5.5 mm (0.56 kg) Brass Butt hinges (heavy type)	ten	1100.00
0384	Brass butt hinges (heavy type) :75x65x4.0 mm (weighing not less than 0.20 kg)	ten	920.00
0385	Brass parlimentary hinges 150x125x27x5 mm	ten	2870.00
0386	Brass parlimentary hinges 125x125x27x5 mm	ten	2530.00
0387	Brass parlimentary hinges 100x125x27x5 mm	ten	2300.00
0388	Brass parlimentary hinges 75x100x20x3.2 mm	ten	2000.00
0389	Brass single acting spring hinges 150 mm	each	460.00
0390	Brass single acting spring hinges 125 mm	each	320.00
0391	Brass single acting spring hinges 100 mm	each	300.00
0392	Brass double acting spring hinges 150 mm	each	530.00
0393	Brass double acting spring hinges 125 mm	each	450.00
0394	Brass double acting spring hinges 100 mm	each	420.00
0395	Brass butt hinges (heavy) bush type 75x10 mm	ten	NA
0400	Brass tower bolts (barrel type) 250x10 mm	each	257.00
0401	Brass tower bolts (barrel type) 200x10 mm	each	205.00
0402	Brass tower bolts (barrel type) 150x10 mm	each	154.00
0403	Brass tower bolts (barrel type) 100x10 mm	each	103.00
0404	Brass flush bolts 250 mm	each	150.00
0405	Brass flush bolts 150 mm	each	130.00
0406	Brass flush bolts 100 mm	each	90.00
0408	Brass handles 125 mm with plate 175x32 mm	each	165.00
0409	Brass handles 100 mm with plate 150x32 mm	each	155.00
0410	Brass handles 75 mm with plate 125x32 mm	each	120.00
0411	Brass door latch 300x16x5 mmweighing not less than 0.380 kg	each	200.00
0412	Brass door latch 250x16x5 mm weighing not less than 0.350 kg	each	195.00
0413	Brass Mortice latch and lock 100 x 65 mm with 6 levers and a pair of brass lever handles	each	440.00
0414	Brass Mortice latch and lock 100 x 65 mm with a pair of brass lever handles	each	350.00
0415	Brass Rim latch and lock 100 mm	each	NA
0417	Brass 150 mm floor door stopper weighing not less than 0.357kg	each	185.00
0418	300 mm Brass hard drawn hooks and eyes	ten	700.00
0419	250 mm Brass hard drawn hooks and eyes	ten	680.00
0420	200 mm Brass hard drawn hooks and eyes	ten	510.00

BASIC RATES

0421	150 mm Brass hard drawn hooks and eyes	ten	400.00
0422	100 mm Brass hard drawn hooks and eyes	ten	345.00
0423	Brass casement window fastener	each	45.00
	Brass casement stays (straight peg type)		
0424	300 mm weighing not less than 0.33 kg	each	150.00
0425	250 mm weighing not less than 0.28 kg	each	100.00
0426	200 mm weighing not less than 0.24 kg	each	100.00
0427	Brass quadrant stays 300 mm	each	110.00
0428	Brass fanlight catch	ten	200.00
0429	Brass fanlight pivot	ten	200.00
0430	Brass chain with hook for fan light catch	ten	40.00
0431	Brass hasps and staples (safety type) 150mm	ten	850.00
0432	Brass hasps and staples (safety type) 115 mm	ten	750.00
0433	Brass hasps and staples (safety type) 90 mm	ten	650.00
0438	Brass night latch	each	660.00
0439	Brass piano hinges	metre	NA
0440	Brass furniture handles (cupboard handle)	each	NA
0442	Brass helical spring 150 mm	each	NA
0443	Brass curtain rod 12 mm dia 1.25 mm thick	metre	NA
0444	Brass curtain rod 20 mm dia 1.25 mm thick	metre	150.00
0445	Brass curtain rod 25 mm dia 1.25 mm thick	metre	210.00
0446	Brass brackets (curtain rods) 20 mm	each	50.00
0447	Brass cupboard knob or ward robe knob 50 mm	each	40.00
0448	Brass curtain rails with roller stop ends and brackets	metre	NA
0449	Brass screw 50 mm	cent	265.00
0450	Brass screw 40 mm	cent	170.00
0451	Brass screw 30 mm	cent	140.00
0452	Brass screw 25 mm	cent	100.00
0453	Brass screw 20 mm	cent	110.00
0454	Stainless steel SS grade 304 , curtain rod 20 mm dia 1.20mm thick	meter	145.00
0455	Stainless steel SS grade 304 , curtain rod 25 mm dia 1.20mm thick	meter	180.00
0456	Stainless steel SS grade 304, brackets (curtain rod) 20 mm dia 1.20mm thick	each	55.00
0457	Stainless steel SS grade 304, brackets (curtain rod) 25 mm dia 1.20mm thick	each	60.00
0458	plastic sleeves for screw	each	2.00
0524	Chromium plated Brass butt hinges (heavy) type 75x65x4 mm weighing not less than 200gms	10 Nos.	995.00
0525	C.P. brass Butt hinges light/ordinary type 125x70x4 mm	10 Nos.	805.00
0526	C.P. brass Butt hinges light/ordinary type 100x70x4 mm	10 Nos.	720.00
0527	C.P. brass Butt hinges light/ordinary type 75x40x2.5 mm	10 Nos.	460.00
0528	C.P. brass Butt hinges light/ordinary type 50x40x2.5 mm	10 Nos.	200.00
0552	75mm SS fancy handles for kitchen cabinet	10 Nos.	255.00
0553	100mm SS fancy handles for kitchen cabinet	10 Nos.	470.00
0554	125mm SS fancy handles for kitchen cabinet	10 Nos.	650.00
0555	C.P. brass 125 mm with plate 175 x 32 mm handles	each	190.00
0556	C.P. brass 100 mm with plate 150 x 32 mm handles	each	170.00
0557	C.P. brass 75 mm with plate 125 x 32 mm handles	each	145.00
0558	Mortice latch and lock 100 x 65 mm with 6 levers and a		

BASIC RATES

	pair of brass lever handles	each	550.00
0568	C.P. brass Casement window fastner	each	90.00
	C.P. brass Casement Stays (straight-peg type)		
0569	300 mm weighing not less than 0.33 kg.	each	155.00
0570	250 mm weighing not less than 0.28 kg.	each	135.00
0571	200 mm weighing not less than 0.24 kg.	each	120.00
0575	Chain with hook for fanlight catch	each	NA
0576	Cupboard lock (six levers) 65 x 35 mm	ten	NA
0583	chromium plated brass. Night latch	each	550.00
0584	Chromium plated brass wardrobe knob 50 mm	each	90.00
0585	Chromium plated brass screws 50 mm	cent	330.00
0586	Chromium plated brass screws 40 mm	cent	320.00
0587	Chromium plated brass screws 30 mm	cent	265.00
0588	Chromium plated brass screws 25 mm	cent	200.00
0589	Chromium plated brass screws 20 mm	cent	175.00
0590	C.P. brass Rod (curtain rods of 1.25 mm thick) 12 mm diameter	metre	205.00
0591	C.P. brass Rod (curtain rods of 1.25 mm thick) 20 mm diameter	metre	285.00
0592	C.P. brass Rod (curtain rods of 1.25 mm thick) 25 mm diameter	metre	375.00
0593	C.P. Brass Extension Nipple (1/2"x2" size)	each	45.00
	Mild steel fittings bright finished or black enamelled		
0594	125x65x2.12 mm butt hinges	ten	165.00
0595	100x58x1.90 mm butt hinges	ten	100.00
0596	75x47x1.70 mm butt hinges	ten	65.00
0597	50x37x1.50 mm butt hinges	ten	55.00
0607	100 mm double acting spring hinges	each	180.00
0608	Nickel plated bright finished mild steel piano hinges 1 mm thick 25 mm wide	metre	45.00
0610	300 x 115 x 2.24 mm Tee hinges bright finished or / and black enameled.	ten	NA
0611	250 x 115 x 2.24 mm Tee hinges bright finished or / and black enameled.	ten	NA
0616	250x10 mm tower bolts (barrel type)	each	45.00
0617	200x10 mm tower bolts (barrel type)	each	40.00
0618	150x10 mm tower bolts (barrel type)	each	36.00
0619	100x10 mm tower bolts (barrel type)	each	29.00
0620	125 mm handles	each	20.00
0621	100 mm handles	each	18.00
0622	75 mm handles	each	16.00
0626	150 mm hooks and eyes	ten	250.00
0627	100 mm hooks and eyes	ten	225.00
0634	Helical door spring 150 mm	each	72.00
0635	Bright finished or black enamelled mild steel 50 mm Screws	cent	85.00
0636	Bright finished or black enamelled mild steel 45 mm Screws	cent	75.00
0637	Bright finished or black enamelled mild steel 40 mm Screws	cent	70.00
0638	Bright finished or black enamelled mild steel 30 mm Screws	cent	52.00
0639	Bright finished or black enamelled mild steel 25 mm Screws	cent	40.00
0640	Bright finished or black enamelled mild steel 20 mm Screws	cent	35.00
0641	Mild steel bright finished or black enamelled bolts and nuts of size 50x6 mm	each	8.00
0642	125x65x2.12 mm Oxidised mild steel butt hinges	ten	145.00
0643	100x58x1.90mm Oxidised mild steel butt hinges	ten	110.00

BASIC RATES

0644	75x47x1.70mm Oxidised mild steel butt hinges	ten	75.00
0645	50x37x1.50mm Oxidised mild steel butt hinges	ten	63.00
0646	150x125x27x2.80 mm Oxidised mild steel parlimentary hinges	ten	360.00
0647	125x125x27x2.80 mm Oxidised mild steel parlimentary hinges	ten	325.00
0648	100x125x27x2.80 mm Oxidised mild steel parlimentary hinges	ten	275.00
0649	75x100x20x2.24 mm Oxidised mild steel parlimentary hinges	ten	225.00
0650	150 mm Oxidised mild steel single acting spring hinges	each	160.00
0651	125 mm Oxidised mild steel single acting spring hinges	each	140.00
0652	100 mm Oxidised mild steel single acting spring hinges	each	118.00
0653	150 mm Oxidised mild steel double acting spring hinges	each	180.00
0654	125 mm Oxidised mild steel double acting spring hinges	each	160.00
0655	100 mm Oxidised mild steel double acting spring hinges	each	140.00
0656	Mild steel Piano hinges 1 mm thick 35 mm finished with nickle plating .	metre	52.00
0660	Oxidised mild steel sliding door bolts 300x16 mm	each	107.00
0661	Oxidised mild steel sliding door bolts 250x16 mm	each	96.00
0662	Oxidised mild steel sliding door latch 300x20x6 mm	each	60.00
0663	Oxidised mild steel sliding door latch 250x20x6 mm	each	45.00
0664	Oxidised mild steel tower bolts (barrel type) 250x10 mm	each	50.00
0665	Oxidised mild steel tower bolts (barrel type) 200x10 mm	each	42.00
0666	Oxidised mild steel tower bolts (barrel type) 150x10 mm	each	35.00
0667	Oxidised mild steel tower bolts (barrel type) 100x10 mm	each	25.00
0668	Oxidised mild steel handles 125 mm	each	25.00
0669	Oxidised mild steel handles 100 mm	each	18.00
0670	Oxidised mild steel handles 75 mm	each	15.00
0671	Oxidised mild steel hooks and eyes 300 mm	ten	NA
0672	Oxidised mild steel hooks and eyes 250 mm	ten	NA
0673	Oxidised mild steel hooks and eyes 200 mm	ten	NA
0674	Oxidised mild steel hooks and eyes 150 mm	ten	NA
0675	Oxidised mild steel hooks and eyes 100 mm	ten	100.00
0676	Oxidised mild steel door latch fan light catch	ten	90.00
0677	Oxidised mild steel fan light pivot	ten	98.00
0678	Oxidised mild steel chain with hook for fan light catch 300 mm	each	NA
0679	Oxidised mild steel hasps and staples (safety type) 150 mm	ten	148.00
0680	Oxidised mild steel hasps and staples (safety type) 115 mm	ten	124.00
0681	Oxidised mild steel hasps and staples (safety type) 90 mm	ten	90.00
0682	Oxidised mild steel screws 50 mm	cent	90.00
0683	Oxidised mild steel screws 40 mm	cent	76.00
0684	Oxidised mild steel screws 30 mm	cent	59.00
0685	Oxidised mild steel screws 25 mm	cent	46.00
0686	Oxidised mild steel screws 20 mm	cent	42.00
0687	Anodised Aluminium butt hinges of 125x75x4 mm	ten	500.00
0688	Anodised Aluminium butt hinges of 125x63x4 mm	ten	450.00
0689	Anodised Aluminium butt hinges of 100x75x4 mm	ten	450.00
0690	Anodised Aluminium butt hinges of 100x63x3.2 mm	ten	380.00
0691	Anodised Aluminium butt hinges 100x63x4 mm	ten	380.00
0692	Anodised Aluminium butt hinges 75x63x4 mm	ten	330.00
0693	Anodised Aluminium butt hinges 75x63x3.2 mm	ten	263.00

BASIC RATES

0694	Anodised Aluminium butt hinges 75x45x3.2 mm	ten	235.00
0695	Anodised Aluminium butt hinges 50x35x3.2 mm	ten	NA
0696	Anodised Aluminium sliding door bolt 300 x16 mm	each	175.00
0697	Anodised Aluminium sliding door bolt 250 x16 mm	each	140.00
0698	Anodised Aluminium tower bolt (barrel type) 300 x10 mm	ten	615.00
0699	Anodised Aluminium tower bolt (barrel type) 250 x10 mm	ten	500.00
0700	Anodised Aluminium tower bolt (barrel type) 200 x10 mm	ten	400.00
0701	Anodised Aluminium tower bolt (barrel type) 150 x10 mm	ten	350.00
0702	Anodised Aluminium tower bolt (barrel type) 100 x10 mm	ten	250.00
0703	Anodised Aluminium handles 125 mm with plate 175x32 mm	ten	380.00
0704	Anodised Aluminium handles 100 mm with plate 150x32 mm	ten	320.00
0705	Anodised Aluminium handles 75 mm with plate 125x32 mm	ten	270.00
0706	Anodised Aluminium Kicking plate 50cm long 100x3.15 mm .	each	160.00
Block board construction			
0713	35 mm thick flush door teak wood ply on both faces	sqm	2044.00
0714	30 mm thick flush door teak wood ply on both faces	sqm	1850.00
0715	25 mm thick flush door teak wood ply on both faces	sqm	1721.00
0717	35 mm thick Commercial ply on both faces flush door	sqm	1180.00
0718	30 mm thick Commercial ply on both faces flush door.	sqm	1132.00
0719	25 mm thick Commercial ply on both faces flush door.	sqm	1075.00
0721	35 mm thick Commercial ply on one face	sqm	920.00
0722	30 mm thick Commercial ply on one face	sqm	710.00
0723	25 mm thick Commercial ply on one face	sqm	620.00
0752	Block board construction flush door lipping 25 mm thick	sqm of door area	300.00
0753	Square vision panel (upto 0.10 sqm) in blackboard construction flush door,	sqm of door area	145.00
0754	Circular vision panel (upto 0.10 sqm.)in blackboard construction flush door,	sqm of door area	145.00
0755	Louvers decorative type (upto 0.20 sqm) in blackboard construction flush door.	sqm of door area	290.00
0757	Rebate cutting in black board construction flush door.	sqm of door area	80.00
0759	Decorative plywood 4 mm	sqm	340.00
0761	Fuel wood	quintal	590.00
0763	Glue	kilogram	75.00
0764	Calcium silicate base compound for jointing calcium silicate tiles	kilogram	30.00
0765	Hessian cloth	sqm	35.00
0767	Galvanised steel hooks (for Brass cleats) 7 to 10 cm size	each	NA
0768	50 mm thick Jali (cement concrete)	sqm	400.00
0769	40 mm thick Jali (cement concrete)	sqm	350.00
0770	25 mm thick Jali (cement concrete)	sqm	275.00
0771	Kerosine oil	litre	50.00
0772	White cement based polymer modified self curing compound in powder form	kg	16.00
0773	Un slaked lime	quintal	500.00
0775	Dehradun white lime	quintal	850.00
0776	Satna lime	quintal	NA

BASIC RATES

0777	Dry hydrated lime (factory made)	quintal	290.00
0784	Marble dust / powder	cum	1130.00
0785	White & black marble chips upto 4mm and down size	quintal	423.00
0786	Chocloate, gey / yellow marble chips upto 4 mm and down size	quintal	475.00
0787	Baroda green marble chips upto 5 mm and down size	quintal	480.00
0788	Large size above 4 mm, white & black marble chips	quintal	485.00
0789	Marble pieces for crazy flooring	quintal	385.00
0801	Silicon and acrylic emulsion	litre	118.00
0802	Acrylic distemper 1st quality, having VOC content less than 50gm/litre	kg	40.00
0803	Acrylic emulsion , having VOC content less than 50 gm/litre.	litre	94.00
0804	Premiun acrylic emulsion of interior grade having VOC content less than 50 gm/litre	litre	200.00
0805	Synthetic enamel paint ,having VOC (Volatile Orgnic compound) content less than 150 gm/litre.	litre	NA
0806	Ready mixed pink or grey primer on wood work (hard and soft wood) having VOC cotent less than 50 gms/litre	litre	144.00
0807	Ready mixed red oxide zinc chromatic on steel/iron work having VOC content less than 250 gms/litre	litre	127.00
0808	Water thinnable cement primer for interior wall surface, having VOC content less than 50 grams/ litre	litre	82.00
0808 A	Metallic floor hardener	quintal	NA
0809	Exterior primer	kg	140.00
0810	Moorum	cum	500.00
0811	Mud (dry)	cum	165.00
0815	Dry Distemper	kilogram	35.00
0816	Ist quality Acrylic distemper(Ready mix) having VOC content less than 50 grams/ litre/ oil bound washable distemper	kilogram	50.00
0818	Linseed oil (double boiled)	litre	220.00
0820	Cement primer	litre	110.00
0821	Distemper primer	litre	85.00
0823	Pink primer (for wood)	litre	152.00
0824	white Cement base putty	kg	22.00
0826	Aluminium paint	litre	228.00
0827	Acid proof paint (chocolate or black)	litre	225.00
0828	Anticorrosive bituminous paint (black)	litre	125.00
0829	Black Japan paint	litre	110.00
0830	Enamel paint	litre	186.00
0831	Floor enamel paint in all shades except green	litre	250.00
0833	Synthetic enamel paint in black or chocolate shade	litre	207.00
0834	Synthetic enamel paint in all shades except black or chocolate	litre	208.00
0835	Plastic acrylic emulsion paint	litre	220.00
0836	100% Premium acrylic dirt resistance, Silicone additives exterior paint	litre	290.00
0837	Acrylic Exterior Primer	litre	124.00
0843	Ready mix paint	litre	280.00
0844	Roofing paint for iron sheets in white, grey or geen shade	litre	180.00
0845	Roofing paint for iron sheets in red colour	litre	220.00
0848	Red oxide primer	litre	145.00

BASIC RATES

0850	White lead	kilogram	170.00
0851	Water proofing cement paint	kilogram	45.00
0855	Wax polish (ready made)	kilogram	235.00
0856	Ordinary varnish	litre	195.00
0857	Superior copal varnish	litre	203.00
0858	Superior spar varnish	litre	220.00
0859	Oil type wood preservative paint	litre	195.00
0860	Paint remover	litre	128.00
0863	Putty for wood work	kilogram	30.00
0865	Pig lead	kilogram	174.00
0868	Pre-mixed super white Gypsum plaster	kilogram	11.00
0869	Plaster of paris (POP)	kilogram	13.00
0870	Plug	each	15.00
0873	Pins-Copper pins 6 mm dia 7.5 cm long	each	15.00
0874	Black colour dark shade pigments	kilogram	85.00
0875	Red, chocolate, orange, buff/yellow (red oxide of iron) light shade pigments	kilogram	110.00
0876	Green or blue medium shade pigments	kilogram	85.00
0882	A.C. pipe 150mm dia	each	NA
0886	150mm dia Standard holdar bat clamps for S.C.I. or C.I. Pipes	each	50.00
0966	150mm dia Sand cast iron plain shoe	each	285.00
0967	Plate - Copper	Kilogram	630.00
0969	25 mm dia pulleys	each	55.00
0971	Rivets	quintal	7000.00
0972	Road Reflector	each	
0973	Rolling shutter made of 80 x1.25 mm thick machine rolled laths	sqm	1600.00
0974	Top cover for rolling shutters 1.25 mm thick.	metre	950.00
0975	27.5 cm long wire spring grade no 2 for rolling shutters	each	350.00
0976	Ball bearing for rolling shutters	each	330.00
	Extra for mechanical devices chain and cranked operation for operating rolling shutters.		
0977	Exceeding 10.00 sqm and upto 16.80 sqm area of door	sqm	880.00
0978	Exceeding 16.80 sqm area of door	sqm	880.00
0979	Royalty for good earh	cum	20.00
0980	Royalty for sludge	cum	NA
0982	Coarse sand zone III	cum	770.00
0983	Fine sand zone IV	cum	770.00
0984	Empty cement bags (jute)	each	3.00
0989	Glass sheet (pin head) 3 mm thick	sqm	350.00
0990	Glass sheet (wired) 6 mm thick	sqm	520.00
0992	Galvanised steel plain sheets	quintal	5500.00
0993	FY-1860 grade wire strands	quintal	5700.00
0994	Standard quality hard board sheet 3 mm thick	sqm	130.00
0995	Standard quality hard board sheet 4 mm thick	sqm	150.00
0996	Standard quality hard board sheet 4.5 mm thick	sqm	230.00
0999	Shellac	kilogram	350.00
1000	Spirit	litre	48.00
1001	Spun yarn	kilogram	50.00

BASIC RATES

	Steel		
1002	Mild steel round bar 12 mm dia and below	quintal	7130.00
1003	Mild steel round bar above 12 mm dia	quintal	7130.00
1004	Average rate of Mild steel round bars for reinforcement	quintal	6790.00
1005	Twisted steel/ deformed TMT bars Fe-500D	quintal	7350.00
1006	Mild steel square bars	quintal	7130.00
1007	Structural steel such as tees, angles, channels and R.S. joists	quintal	7000.00
1008	Flats upto 10 mm in thickness	quintal	7500.00
1009	Flats exceeding 10 mm in thickness	quintal	7500.00
1010	Mild steel plates	quintal	8000.00
1011	Steel glazed door, window/ ventilator, all members viz.F7D,F4B K11 & K1 2B etc.	kg	61.00
1012	Pregalvanized high tensile steel confirming to IS:277-199	kg	100.00
1013	Mild steel sheets of 1.00 mm thickness for tanks	quintal	6790.00
1014	Mild steel barbed wire	quintal	5500.00
1015	Mild steel expanded metal 20x60 mm strands 3.25 mm wide 1.60 mm thick	sqm	360.00
1016	20x6 mm mild steep clamps 15 cm long (for securing chikcs)	each	NA
1017	Mild steel ring 40 mm dia 6 mm round bar	each	10.00
1019	Mild steel hooks	each	35.00
1020	Mild steel rivets	quintal	8400.00
1021	Hard drawn steel wire fabric 75 x 25 mm mesh of weight not less than 7.75 kg/sqm	sqm	440.00
1022	Galvanised steel bolts and nuts 6 mm dia. and 25 mm long round head with slots	ten	48.00
1023	Galvanised steel J or L hooks 8 mm dia	ten	130.00
1024	Galvanised steel bolts and nuts 10 mm dia. and 125 mm long round head with slots	each	12.00
1025	Mild steel bolts 6 mm dia and 25 mm long with hexagonal head	ten	12.00
1027	Erection Bolts (Minimum 04 nos for each element)	each	30.00
1028	Straining bolts	each	90.00
1029	Galvanised steel barbed wire of 9.8 kg /100metre	quintal	5500.00
1030	Galvanised steel turn buckles	each	25.00
1031	Galvanised steel bolts & nuts 10 mm dia 27 cm long both sides threaded with 4 galvanised steel nuts	each	25.00
1032	Galvanised steel bolts 10 mm dia 7 cm long with nuts	each	8.00
1033	Galvanised steel bolts 8 mm dia 7 cm long with nuts.	each	6.00
1034	bolts and nuts upto 300 mm in length	quintal	4800.00
1035	bolts and nuts above 300 mm in length	quintal	5200.00
1036	Iron Pintels including welded pin	each	40.00
1143	Steel Beading size 10x10x1.6 mm (box type)	metre	35.00
1144	Aluminium beading	metre	27.00
1145	Aluminium Plain Strip edging 38x12x3mm	metre	90.00
1146	Aluminium strip 10 mm	kilogram	240.00
1147	Aluminium strip 25 mm	kilogram	240.00
1149	Glass strips 4 mm thick 40 mm deep	metre	17.00
1150	Glass strips 6 mm thick 40 mm deep	metre	21.00
1151	Boundry stone top chisel dressed 15x15x90 cm	each	80.00
1154	Through and bond stone size 24x24x39 cm	cent	5000.00

BASIC RATES

1155	Stone boulder (quarry) nominal size 225 mm (Stack measurements reduced by 15%)	cum	1175.00
1156	Stone boulder (nallah) nominal size 225 mm (Stack measurements reduced by 15%)	cum	700.00
1157	Stone for masonry work (quarry)	cum	2400.00
1157.1	Stone for masonry work (nallah split)	cum	700.00
1157.2	Devri Stone		
	(A) Devri Stone (Fine Chissel Dressed Quarry)	cum	46626.00
	(B) Devri Stone (Rough Chissel Dressed Quarry)	cum	39453.00
	(C) Devri Stone (Rough Chissel Dressed Quarry)	meter	1804.00
1158	Stone for pitching 15x22.5 cm	cum	700.00
1159	Stone dust	cum	770.00
1160	Red sand stone block	10 cudm	80.00
1161	White sand stone block	10 cudm	220.00
1163	White sand stone slab 75 mm thick (un-dressed)	sqm	800.00
1164	Red sand stone slab 40 mm thick (undressed)	sqm	230.00
1165	White sand stone slab 40 mm thick (undressed)	sqm	250.00
1166	Red sand stone slab 30 mm thick (undressed)	sqm	220.00
1168	Kota stone slab 20 mm to 25 mm thick (semi-polished)	sqm	484.00
1169	Kota stone slab 25 mm thick (rough chiselled)	sqm	500.00
1170	Kota stone slab 30 mm to 40 mm thick (semi-polished)	sqm	NA
1172	Kota stone slab 45 mm to 50 mm thick (semi-polished)	sqm	NA
1174	Red sand stone slab 45 to 50 mm thick (undressed)	sqm	260.00
1175	White sand stone slab 45mm to 50 mm thick (undressed)	sqm	300.00
1177	Stone grit 6 mm & down size or pea sized gravel	cum	700.00
1179	Crushed stone 2.36 mm to 12.5 mm size	cum	900.00
1182	Surkhi	cum	700.00
1186	Superior class teak wood such as Dandeli, Balarshahor Malabar in planks	cum	NA
1187	First Class teak wood in Scantling	cum	120141.00
1188	First Class teak wood in planks	cum	121908.00
1189	Second class teak wood in scantling	cum	98900.00
1190	Second class teak wood in planks	cum	100706.00
1191	First class deodar wood in scantling	cum	100570.00
1192	First class deodar wood in planks	cum	101671.00
1193	Second class deodar wood in scantling	cum	91488.00
1194	Second class deodar wood in planks	cum	76905.00
1195	First class Kail wood in scantling	cum	61500.00
1196	First class kail wood in planks	cum	62500.00
1197	Second class kail wood in scantling	cum	55966.00
1198	Second class kail wood in planks	cum	51700.00
1199	Sal wood in scantling	cum	85000.00
1199(A)	Budloo / Fir wood (a) Scantling	cum	20267.00
	(b) Planks	cum	17019.00
1200	Kiln seasoned selected sheesham wood planks	cum	70800.00
1201	Precast terrazo tiles 22 mm thick (light shade)	sqm	375.00
1202	Precast terrazo tiles 22 mm thick (medium shade)	sqm	355.00
1203	Precast terrazo tiles 22 mm thick (dark shade)	sqm	345.00

BASIC RATES

1204	Precast heat resistant terrace tiles (size 300x300 mm) and 20 mm thick	sqm	430.00
1207	G.I. limpet washer	cent	50.00
1208	Bitumen washer	cent	55.00
1209	G.I. plain washer thick	cent	45.00
1210	G.I. plain washer thin	cent	35.00
1211	G.I. plain washer for seam bolts	cent	40.00
1213	Water proofing material.	kilogram	38.00
1214	Welding by gas plant	cm	9.00
1215	Welding by electric plant	cm	4.00
1216	Whiting	quintal	635.00
1217	GI Wire mesh 100x100 mm	kg	80.00
1218	Shear stud	each	54.00
1219	Wire nails	kilogram	68.00
1220	Wire mesh (Rabbit)	sqm	45.00
1221	20 mm dia holding down bolts	quintal	6750.00
1222	Mild steel sheets with bolts and nuts to rest on pintels	each	130.00
1223	Steel weld mesh	sqm	165.00
1224	Hard drawn steel wire	quintal	5250.00
1225	Mild steel flat strap fitting	quintal	4710.00
1226	Pull bolt (locking bolt) with screws complete	each	NA
1227	Chequered terrazo tiles 22 mm thick (light shade)	sqm	390.00
1228	Chequered terrazo tiles 22 mm thick (medium shade)	sqm	370.00
1229	Chequered terrazo tiles 22 mm thick (dark shade)	sqm	360.00
1231	Extra for selected planks of second class teak wood	cum	16500.00
1234	Aluminium plain strip edging 57x12x3 mm	metre	142.00
1235	Diesel oil	litre	92.05
1236	Soling stone	cum	700.00
1237	Cutting marble or sand stone slab upto 50 mm thick by mechanical device	metre	14.00
1238	Extra for selected planks of first class teak wood	10 cudm	175.00
1239	18 mm thick Flamed finish granite stone slab	sqm	2200.00
1240	18 mm thick Italian Marble stone slab, Perlato (slab area up to 0.5 sqm).	sqm	3580.00
1241	LPG (Commercial Cylinder)	kg	105.00
1242	Glass mosaic tiles (20 mm x 20 mm x 4 mm).	sqm	2049.00
1243	Tile fixing chemical adhesive	kg	20.00
1244	Cement Polymer Grout Compound	kg	65.00
1245	Acid for cleaning tiles	litre	50.00
1246	Silicon based Joint Sealant for Tiles	kg	195.00
1247	Rubber base Adhesive	kg	228.00
1248	Epoxy based sealing Compound	kg	600.00
1249	Acrylic based sealing compound	kg	550.00
1250	Non woven reinforcement Tape	metrre	0.15
1251	M-60 grade cementitious grout (Non Shrink)	kg	35.00
1252	Cementitious polymer base adhesive confirming to EOTA ETAG 004 (European Technical Approval)	kg	37.00
1253	Polypropylene mechanical fastener with plastic pin confirming to EOTA ETAG 014 (European Technical Approval) having dia 10mm &		

BASIC RATES

	L=200mm	each	35.00
1254	Moisture cure Polyurethane Foam	750 ml	660.00
1255	PVC Corner Bead of size 25mmx25mm fixed with glass fibre mesh (100mm x 100mm)	meter	98.00
1256	Cementitious polymer base coat confirming to EOTA ETAG 004 (European Technical Approval)	kg	45.00
1257	Fiberglass mesh with alkali-resistant coating having mass per unit area ?145 g/m2, mesh size: 3.9x4.0 mm ±10%	sqm	82.50
1301	Bleaching powder	quintal	2100.00
1304	Box (Surface) for stop cock	each	125.00
1305	Box (Surface) for sluice valve	each	210.00
1305.1	C.I. surface box with hinged cover (100x100x75mm) inside	each	NA
1307	Box (Surface) for water meter	each	255.00
1308	Bracket C.I. for flushing cistern	pair	70.00
1309	Bracket C.I. for wash basin and sinks	pair	70.00
1313	8 mm dia C.P. Brass/ S.S. Jet with flexible tube upto 1 metre long with S.S. triangular plate for European type W.C.	each	280.00
1314	C.P. brass chain with 32 mm dia rubber plug	each	70.00
1315	C.P. brass chain with 40 mm dia rubber plug	each	90.00
1316	50mmx50mm hardwood plug	each	75.00
1329	Holder bat clamp 32 mm	each	NA
1330	Clamps and M.S. stays including bolts and nuts for 100 mm pipe	each	70.00
1331	M.S. Holder bat clamp of approved design 100 mm S.C.I. pipe	each	32.00
1332	M.S. Holder bat clamp of approved design 75 mm S.C.I. pipe	each	31.00
1334	Clamps and M.S. stays including bolts and nuts for 50 mm pipe	each	35.00
1335	Clamps and M.S. stays including bolts and nuts for 75 mm pipe	each	50.00
1336	100 mm dia Clearing eye with chain and lid	each	44.00
1337	150 mm dia Clearing eye with chain and lid	each	50.00
1339	15 mm dia Brass bib cock	each	230.00
1340	20 mm dia Brass bib cock	each	255.00
1342	Brass stop cock 15 mm dia	each	230.00
1343	Brass stop cock 20 mm dia	each	260.00
1350	Mosquito proof coupling of approved design	each	34.00
1352	C.I. cover and frame 300x300 mm inside	each	495.00
1353	C.I. cover without frame 300x300mm inside including cover of 4.50 kg	each	495.00
1354	Cover L.D. Rectangular 455x610mm with frame	each	1410.00
1355	Cover L.D. Rectangular 455x610mm without frame	each	1160.00
1356	500 mm dia cover with frame (medium duty)	each	4400.00
1357	501 mm dia cover without frame (medium duty)	each	2450.00
1360	Ferrule Brass, C.I. Mouth 15 mm dia	each	160.00
1361	Ferrule Brass, C.I. Mouth 20 mm dia	each	190.00
1362	Ferrule Brass, C.I. Mouth 25 mm dia	each	260.00
1363	Vitreous china foot rests 250x130x30	pair	NA
1364	Grating (C.I.) 100x100 mm	each	50.00
1365	Grating (C.I.) 125x125 mm	each	60.00
1366	Grating (C.I.) 150x150 mm	each	65.00
1367	Grating (C.I.) 180x180 mm	each	75.00

BASIC RATES

1369	Grating (S.C.I.) for gully or Nahni 100 mm dia	each	35.00
1373	Rubber insertions for 75 mm dia pipe joints	each	20.00
1374	Insertions of Rubber for 100 mm dia pipe joints	each	25.00
1375	Insertions of Rubber for 125 mm dia pipe joints	each	32.00
1376	Insertions of Rubber for 150 mm dia pipe joints	each	40.00
1377	Insertions of Rubber for 200 mm dia pipe joints	each	55.00
1378	Insertions of Rubber for 250 mm dia pipe joints	each	65.00
1379	Insertions of Rubber for 300 mm dia pipe joints	each	80.00
1380	Insertions of Rubber for 350 mm dia pipe joints	each	92.00
1381	Insertions of Rubber for 400 mm dia pipe joints	each	115.00
1382	Insertions of Rubber for 450 mm dia pipe joints	each	128.00
1383	Insertions of Rubber for 500 mm dia pipe joints	each	150.00
1384	Insertions of Rubber for 600 mm dia pipe joints	each	170.00
1392	Mirror of superior make glass 60x45 cm	each	600.00
1396	Vitreous china pedestal for wash basin	each	900.00
1397	Pig lead	kilogram	200.00
1464	S&S C.I. standard specials upto 300 mm dia (heavy class)	quintal	3900.00
1466	S&S C.I. standard specials over 300 mm dia (heavy class)	quintal	4000.00
1468	Flanged C.I. standard specials upto 300 mm dia (heavy class)	quintal	6000.00
1470	Flanged C.I. standard specials over 300 mm dia (heavy class)	quintal	6200.00
1472	Casing pipe 100 mm dia	metre	365.00
Flush pipe with union spreaders and clamps all in C.P. Brass for			
1532	Single stall	each	310.00
1533	Double stall	each	435.00
1534	Range of three stall	each	535.00
1535	Range of four stall	each	620.00
Flush pipe (G.I.) and spreaders for squatting plate urinal			
1540	Single set of one plate	each	195.00
1541	Range of two plates	each	280.00
1542	Range of three plates	each	322.00
1543	Range of four plates	each	455.00
1545	15 mm dia G.I. Pipes (a) Light	metre	115.00
	(b) Medium.	metre	135.00
1546	20 mm dia G.I. Pipes (a) Light	metre	150.70
	(b) Medium.	metre	170.70
1547	25 mm dia G.I. Pipes (a) Light	metre	203.90
	(b) Medium.	metre	223.90
1548	32 mm dia G.I. Pipes (a) Light	metre	256.70
	(b) Medium.	metre	276.70
1549	40 mm dia G.I. Pipes (a) Light	metre	285.65
	(b) Medium.	metre	325.65
1550	50 mm dia G.I. Pipes (a) Light	metre	357.54
	(b) Medium.	metre	557.54
1551	65 mm dia G.I. Pipes (a) Light	metre	487.14
	(b) Medium.	metre	687.14
1552	80 mm dia G.I. Pipes (a) Light	metre	584.70

BASIC RATES

		(b) Medium.	metre	784.70
1552.1	100 mm dia G.I. Pipes	(a) Light	metre	832.92
		(b) Medium.	metre	964.00
1552.2	150 mm dia G.I. Pipes	(a) Light	metre	NA
		(b) Medium.	metre	1517.00
1553	15 mm dia G.I. back (Jam) nuts		each	NA
1554	20 mm dia G.I. back (Jam) nuts		each	NA
1555	25 mm dia G.I. back (Jam) nuts		each	17.00
1556	32 mm dia G.I. back (Jam) nuts		each	NA
1557	40 mm dia G.I. back (Jam) nuts		each	NA
1558	50 mm dia G.I. back (Jam) nuts		each	NA
1559	65 mm dia G.I. back (Jam) nuts		each	32.00
1560	80 mm dia G.I. back (Jam) nuts		each	NA
1561	15 mm dia G.I. back 90 degree		each	30.00
1562	20 mm dia G.I. back 90 degree		each	40.00
1563	25 mm dia G.I. back 90 degree		each	46.00
1564	32 mm dia G.I. back 90 degree		each	72.00
1565	40 mm dia G.I. back 90 degree		each	95.00
1566	50 mm dia G.I. back 90 degree		each	130.00
1567	65 mm dia G.I. back 90 degree		each	NA
1568	80 mm dia G.I. back 90 degree		each	NA
1569	15 mm dia G.I. crosses		each	51.00
1570	20 mm dia G.I. crosses		each	58.00
1571	25 mm dia G.I. crosses		each	100.00
1572	32 mm dia G.I. crosses		each	157.00
1573	40 mm dia G.I. crosses		each	200.00
1574	50 mm dia G.I. crosses		each	310.00
1577	15 mm dia G.I. elbows		each	25.00
1578	20 mm dia G.I. elbows		each	40.00
1579	25 mm dia G.I. elbows		each	55.00
1580	32 mm dia G.I. elbows		each	85.00
1581	40 mm dia G.I. elbows		each	115.00
1582	50 mm dia G.I. elbows		each	200.00
1583	65 mm dia G.I. elbows		each	325.00
1584	80 mm dia G.I. elbows		each	430.00
1593	15 mm dia G.I. plugs		each	14.00
1594	20 mm dia G.I. plugs		each	21.00
1595	25 mm dia G.I. plugs		each	31.00
1596	32 mm dia G.I. plugs		each	48.00
1597	40 mm dia G.I. plugs		each	68.00
1598	50 mm dia G.I. plugs		each	105.00
1599	65 mm dia G.I. plugs		each	135.00
1600	80 mm dia G.I. plugs		each	165.00
1601	20 mm to 15 mm G.I. sockets (reducing)		each	28.00
1602	25 mm to any smaller size G.I. sockets (reducing)		each	35.00
1603	32 mm to any smaller size G.I. sockets (reducing)		each	52.00
1604	40 mm to any smaller size G.I. sockets (reducing)		each	64.00

BASIC RATES

1605	50 mm to any smaller size G.I. sockets (reducing)	each	100.00
1606	15 mm G.I. Tee (equal)	each	31.00
1607	20 mm G.I. Tee (equal)	each	49.00
1608	25 mm G.I. Tee (equal)	each	67.00
1609	32 mm G.I. Tee (equal)	each	104.00
1610	40 mm G.I. Tee (equal)	each	140.00
1611	50 mm G.I. Tee (equal)	each	220.00
1612	65 mm G.I. Tee (equal)	each	380.00
1613	80 mm G.I. Tee (equal)	each	545.00
1614	G.I. inlet connection	each	63.00
Sand cast iron soil, waste vent pipes			
1615	50 mm Single socketed pipe 1.80 metres long	each	958.00
1616	75 mm Single socketed pipe 1.80 metres long	each	1080.00
1617	100 mm Single socketed pipe 1.80 metres long	each	1211.00
1618	150 mm Single socketed pipe 1.80 metres long	each	2572.00
1620	S.C.I 75 mm with plain bend	each	262.00
1621	S.C.I 100 mm with plain bend	each	332.00
1622	S.C.I 150 mm with plain bend	each	755.00
1624	S.C.I 75 mm with access door bend.	each	297.00
1625	S.C.I 100 mm with access door bend.	each	382.00
1627	S.C.I. plain 75x75x75 mm dia Single equal junctions	each	504.00
1628	S.C.I. plain 100x100x100 mm dia Single equal junctions	each	676.00
1630	S.C.I.75x75x75 mm dia Single equal junctions plain with access door	each	655.00
1631	S.C.I 100x100x100mm dia Single equal junctions plain with access door	each	756.00
1633	S.C.I. plain 75x75x75x75 mm dia Double equal junctions	each	787.00
1634	S.C.I. plain 100x100x100x100 mm dia Double equal junctions	each	978.00
1636	S.C.I. 75x75x75x75 mm dia Double equal junctions with access door	each	827.00
1637	S.C.I.100x100x100x100mm dia Double equal junctions with access door	each	1029.00
1639	75 mm dia Slotted Cowl (terminal quard)	each	201.00
1640	100 mm dia Slotted Cowl (terminal quard)	each	252.00
1641	15 mm nominal bore G.I. Unions	each	48.00
1642	20 mm nominal bore G.I. Unions	each	66.00
1643	25 mm nominal bore G.I. Unions	each	90.00
1644	32 mm nominal bore G.I. Unions	each	135.00
1645	40 mm nominal bore G.I. Unions	each	165.00
1646	50 mm nominal bore G.I. Unions	each	253.00
1647	65 mm nominal bore G.I. Unions	each	475.00
1648	80 mm nominal bore G.I. Unions	each	619.00
1649	Polyethylene water storage tank with cover and suitable locking arrangement	per litre capacity	6.10
1653	S.C.I. 100x100x75 mm dia S&S plain Single unequal junctions	each	568.00
1656	S.C.I. 100x100x75 mm dia S&Sv Single unequal junctions plain with access door	each	656.00
1659	S.C.I. 100x100x75x75 mm dia S&S plain Double unequal junctions	each	707.00
1662	S.C.I. 100x100x75x75 mm dia S&S Double unequal junctions plain with access door	each	827.00
1666	S.C.I Heal rest bend of 75 mm dia	each	315.00

BASIC RATES

1667	S.C.I. Heal rest bend of 100 mm dia	each	400.00
1669	S.C.I. 75x75x75 mm dia Single equal invert branch of required degree	each	368.00
1670	S.C.I. 100x100x100 mm dia Single equal invert branch of required degree	each	435.00
1672	S.C.I. 75x75x75x75 mm dia Double equal invert branch of required degree	each	425.00
1673	S.C.I. 100x100x100x100 mm dia Double equal invert branch of required degree	each	550.00
1674	S.C.I. 100x100x75 mm dia Single unequal invert branch of required degree	each	500.00
1677	S.C.I. 100x100x75x75 mm dia Double unequal invert branch of required degree	each	600.00
1682	75 mm dia Sand cast iron door pieces	each	285.00
1683	100 mm dia Sand cast iron door pieces	each	485.00
1685	S.C.I. 75 mm dia Collar	each	180.00
1686	S.C.I. 100 mm dia Collar	each	270.00
Unplasticised P.V.C. connection pipe with brass			
1687	15 mm bore for 30 cm long Union	each	50.00
1688	20 mm bore for 30 cm long Union	each	60.00
1689	15 mm bore for 45 cm long Union	each	55.00
1690	20 mm bore for 45 cm long Union	each	65.00
1693	S.C.I. hand pump	each	770.00
RCC pipes and collars			
1700	100 mm dia R.C.C. Pipes NP 2 Class	metre	200.00
1701	150 mm dia R.C.C. Pipes NP 2 Class	metre	270.00
1702	250 mm dia R.C.C. Pipes NP 2 Class	metre	340.00
1703	300 mm dia R.C.C. Pipes NP 2 Class	metre	400.00
1704	450 mm dia R.C.C. Pipes NP 2 Class	metre	560.00
1705	500 mm dia R.C.C. Pipes NP 2 Class	metre	725.00
1706	600 mm dia R.C.C. Pipes NP 2 Class	metre	920.00
1707	700 mm dia R.C.C. Pipes NP 2 Class	metre	1250.00
1709	800 mm dia R.C.C. Pipes NP 2 Class	metre	1400.00
1710	900 mm dia R.C.C. Pipes NP 2 Class	metre	1600.00
1711	1000 mm dia R.C.C. Pipes NP 2 Class	metre	1960.00
1712	1100 mm dia R.C.C. Pipes NP 2 Class	metre	2080.00
1713	1200 mm dia R.C.C. Pipes NP 2 Class	metre	2200.00
1714	100 mm dia NP 2 Class Collars R.C.C.	each	35.00
1715	150 mm dia NP 2 Class Collars R.C.C.	each	40.00
1716	250 mm dia NP 2 Class Collars R.C.C.	each	60.00
1717	300 mm dia NP 2 Class Collars R.C.C.	each	124.00
1718	450 mm dia NP 2 Class Collars R.C.C.	each	150.00
1719	500 mm dia NP 2 Class Collars R.C.C.	each	175.00
1720	600 mm dia NP 2 Class Collars R.C.C.	each	250.00
1721	700 mm dia NP 2 Class Collars R.C.C.	each	275.00
1722	750 mm dia NP 2 Class Collars R.C.C.	each	300.00
1723	800 mm dia NP 2 Class Collars R.C.C.	each	325.00
1724	900 mm dia NP 2 Class Collars R.C.C.	each	350.00
1725	1000 mm dia NP 2 Class Collars R.C.C.	each	500.00

BASIC RATES

1726	1100 mm dia NP 2 Class Collars R.C.C.	each	550.00
1727	1200 mm dia NP 2 Class Collars R.C.C.	each	600.00
1728	RCC pipe 450 mm dia NP-3 spigot	metre	1280.00
1729	RCC pipe 600 mm dia NP-3 spigot	metre	1600.00
1730	RCC pipe 900 mm dia NP-3 spigot	metre	2640.00
1731	RCC pipe 1000 mm dia NP-3 spigot	metre	3080.00
1732	RCC pipe 1200 mm dia NP-3 spigot	metre	4798.00
1733	RCC pipe 1800 mm dia NP-3 spigot	metre	8890.00
1734	RCC pipe 450 mm dia NP-4 spigot	metre	1629.00
1735	RCC pipe 600 mm dia NP-4 spigot	metre	2170.00
1736	RCC pipe 900 mm dia NP-4 spigot	metre	4232.00
1737	RCC pipe 1000 mm dia NP-4 spigot	metre	5250.00
1738	RCC pipe 1200 mm dia NP-4 spigot	metre	6100.00
1739	RCC pipe 1800 mm dia NP-4 spigot	metre	12850.00
1854	100 mm dia Stoneware pipes grade A (60 cm long)	each	83.00
1855	150 mm dia Stoneware pipes grade A (60 cm long)	each	167.00
1856	200 mm dia Stoneware pipes grade A (60 cm long)	each	219.00
1857	230 mm dia Stoneware pipes grade A (60 cm long)	each	263.00
1858	250 mm dia Stoneware pipes grade A (60 cm long)	each	307.00
1859	300 mm dia Stoneware pipes grade A (60 cm long)	each	329.00
1863	600x450x250 mm Kitchen Sink (Fire clay)	each	2193.00
1864	750x450x250 mm Kitchen Sink (Fire clay)	each	2500.00
1865	600x450x150 mm Mable Chips kitchen sink	each	NA
1866	600x450x250 mm Mable Chips kitchen sink	each	NA
1867	750x450x250 mm Mable Chips kitchen sink	each	NA
1868	600x450x250 mm White vitreous china kitchen sink	each	2775.00
1869	450x300x150 mm White vitreous china kitchen sink	each	1550.00
1871	450x300x150 mm White vitreous china laboratory sink	each	1780.00
1872	600x450x200 mm White vitreous china laboratory sink	each	2740.00
1875	White plastic seat (solid) with lid C.P. brass hinges and rubber buffers	each	470.00
1876	Black plastic seat (solid) with lid C.P. brass hinges and rubber buffers	each	400.00
1878	100 mm dia Shower rose (C.P. brass) for 15 to 20 mm inlet	each	390.00
1879	150 mm dia Shower rose (C.P. brass) for 15 to 20 mm inlet	each	520.00
1880	Dismanteled P or S trap scrap (approx wt 2kg)	kg	30.00
1881	Spun yarn	kilogram	75.00
1882	Strainer brass 40 mm dia 1.5 metre long	each	660.00
1885	15 mm C.P. brass tap	each	410.00
1887	Towel rail C.P. brass 750 x20 mm together with a pair of C.P. brass brackets to fit the size of towel rail	each	950.00
1888	Towel rail C.P. brass 600 x20 mm together with a pair of C.P. brass brackets to fit the size of towel rail	each	650.00
1889	C.P. brass Toilet paper holder of standard size	each	540.00
1890	Centrifugally SCI(spun) S & S P or S trap	each	330.00
1891	C.I. trap for standard urinal with vent arm with operating and other couplings in C.P. brass: 50 mm dia	each	210.00
1892	65 mm dia	each	NA

BASIC RATES

1893	C.I. trap for standard urinal with vent arm with operating and other couplings in C.P. brass: 80 mm dia	each	345.00
1894	C.P. brass 32 mm dia Trap	each	335.00
1895	C.P. brass 40 mm dia Trap	each	390.00
	Trap (Sand Cast Iron)		
1896	100 mm S.C.I. trap with vent heel	each	335.00
1897	100 mm S.C.I. trap with 100 mm inlet and 100 mm outlet	each	305.00
1898	100 mm S.C.I. trap with 100 mm inlet and 75 mm outlet	each	225.00
1899	100 mm S.C.I. trap with 100 mm inlet and 50 mm outlet	each	NA
1900	100 x 100 mm S.W. Gully Traps P Type	each	115.00
1901	125 x 100 mm S.W. Gully Traps P Type	each	145.00
1902	150 x 100 mm S.W. Gully Traps P Type	each	230.00
1903	180 x 100 mm S.W. Gully Traps P Type	each	NA
1904	180 x 150 mm S.W. Gully Traps P Type	each	240.00
1905	125 x 100 mm S.W. Gully Traps Q Type	each	NA
1906	125 x 100 mm S.W. Gully Traps S Type	each	NA
1913	Vitreous china lipped front urinal	each	530.00
1915	Vitreous china squatting plate urinal	each	1460.00
1922	H.P. or L.P. ball valve with polythene floats: 15 mm dia	each	285.00
1923	H.P. or LP ball valve with polythene floats 20mm dia	each	325.00
1924	H.P. or LP ball valve with polythene floats 25mm dia	each	345.00
1926	20 mm dia Gunmetal gate valve with wheel	each	360.00
1927	25 mm dia Brass full way valve with C.I. wheel (screwed end)	each	490.00
1928	32 mm dia Brass full way valve with C.I. wheel (screwed end)	each	530.00
1929	40 mm dia Brass full way valve with C.I. wheel (screwed end)	each	590.00
1930	50 mm dia Brass full way valve with C.I. wheel (screwed end)	each	700.00
1931	65 mm dia Brass full way valve with C.I. wheel (screwed end)	each	1190.00
1932	80 mm dia Brass full way valve with C.I. wheel (screwed end)	each	1900.00
1933	25 mm dia Gun metal non-return valve-horizontal (screwed end)	each	410.00
1934	32 mm dia Gun metal non-return valve-horizontal (screwed end)	each	535.00
1935	40 mm dia Gun metal non-return valve-horizontal (screwed end)	each	680.00
1936	50 mm dia Gun metal non-return valve-horizontal (screwed end)	each	1080.00
1937	65 mm dia Gun metal non-return valve-horizontal (screwed end)	each	1700.00
1938	80 mm dia Gun metal non-return valve-horizontal (screwed end)	each	2550.00
1939	80 mm dia Sluice valve (with Caps) C.I. of Class I	each	NA
1940	100 mm dia Sluice valve (with Caps) C.I. of Class I	each	2450.00
1941	125 mm dia Sluice valve (with Caps) C.I. of Class I	each	2610.00
1942	150 mm dia Sluice valve (with Caps) C.I. of Class I	each	3650.00
1943	200 mm dia Sluice valve (with Caps) C.I. of Class I	each	7600.00
1944	250 mm dia Sluice valve (with Caps) C.I. of Class I	each	10980.00
1945	300 mm dia Sluice valve (with Caps) C.I. of Class I	each	15500.00
1947	630 x 450 mm Flat back wash basin - Vitreous China	each	1020.00
1949	600 x 480 mm Angle back wash basin - Vitreous China	each	795.00
1950	400 x 400 mm Angle back wash basin - Vitreous China	each	635.00
1951	C.P. brass waste 32 mm	each	165.00
1952	C.P. brass waste 40 mm	each	185.00
1953	Vitreous China Indian type w.c. pan size 580 mm	each	760.00

BASIC RATES

1954	Vitreous China orissa type w.c. pan size 580 mm	each	1040.00
1955	Vitreous China pedestal type water closet	each	1009.00
1956	Bolts and Nuts of size 16 mm dia. 60 mm long	each	11.00
1957	Bolts and Nuts of size 16 mm dia. 65 mm long	each	12.00
1958	Bolts and Nuts of size 20 mm dia. 65 mm long	each	15.00
1959	Bolts and Nuts of size 20 mm dia. 70 mm long	each	18.00
1960	Bolts and Nuts of size 20 mm dia. 75 mm long	each	19.00
1961	Bolts and Nuts of size 20 mm dia. 80 mm long	each	19.00
1962	Bolts and Nuts of size 24 mm dia. 85 mm long	each	29.00
1963	Bolts and Nuts of size 24 mm dia. 90 mm long	each	33.00
1964	Bolts and Nuts of size 27 mm dia. 100 mm long	each	39.00
1965	White vitreous China dual purpose closet (Anglo India W.C.) suitable for use as squatting pan or European type water closet as per maunfacturer's specification	each	2800.00
1966	Floor mounted white vitrous china double trap syphonic WC with 10 litre cistern and all fittings & fixtures,seat cover etc	each	13945.00
1969	Rubber plug	each	10.00
1970	Foot rests for Vitreous china 250x125x25 mm	pair	155.00
1980	Fly Ash	cum	NA
1984	Common burnt clay F.P.S. bricks tile class designation 10	thousand	9000.00
1986	Common burnt clay modular bricks class designation 12.5	thousand	NA
1989	F.P.S. brick tiles class designation 7.5	thousand	NA
1992	F.P.S. over burnt bricks	thousand	2950.00
2391	Strips-Aluminium fluted 3.15 mm thick and 150 mm wide	metre	290.00
2392	Strips-Aluminium fluted 3.15 mm thick and 200 mm wide	metre	398.00
2393	1 mm thick stainless steel cover plate grade 304	kg	290.00
2394	Coupler 16 mm dia	each	33.00
2395	Coupler 20 mm dia	each	43.00
2396	Coupler 25 mm dia	each	74.00
2397	Coupler 28 mm dia	each	85.00
2398	Coupler 32 mm dia	each	116.00
2399	Complete Roof Joint of 100 mm	metre	2900.00
2400	Complete Roof Joint of 150 mm	metre	3200.00
2401	Complete Roof Joint of 200 mm	metre	4000.00
2402	Epoxy adhesive	kg	410.00
2403	Floor Joint of 100 mm	metre	3100.00
2404	Floor Joint of 150 mm	metre	4000.00
2405	Floor Joint of 200 mm	metre	5400.00
2406	Float glass panes of nominal thickness 4 mm (weight not less than 10 kg/sqm)	sqm	355.00
2407	Float glass panes of nominal thickness 5 mm (weight not less than 12.50 kg/sqm)	sqm	450.00
2408	Float glass panes of nominal thickness 8 mm (weight not less than 20.00 kg/sqm)	sqm	710.00
2409	Wall Joint of 100 mm	metre	2485.00
2410	Wall Joint of 150 mm	metre	2890.00
2411	Wall Joint of 200 mm	metre	3470.00

BASIC RATES

2412	Ply wood 5 ply with commercial ply on both faces 6 mm thick	sqm	345.00
2413	12mm commercial ply	sqm	515.00
2413.1	9 mm commercial ply	sqm	362.00
2414	18mm thick block board with commercial ply veneering on both side	sqm	855.00
2415	21mm thick clear toughened Laminated glass for fins with holes	sqm	7747.00
2428	25 mm thick veneered partical board conforming to IS:3087 with teak board lipping of 25mm wide X 12 mm thick	sqm	NA
2447	Hollock ballies 125 mm diameter	metre	35.00
2449	Oxidised mild steel pull bolt lock (locking bolt) of size 85 mm x 42 mm with screws, bolts, nuts and washers complete	each	64.50
2451	Brass 40 mm size Cupboard lock 6 levers (of approved quality)	each	170.00
2452	Brass 50 mm size Cupboard lock 6 levers (of approved quality)	each	180.00
2453	Brass 65 mm size Cupboard lock 6 levers (of approved quality)	each	220.00
2454	Brass 75 mm size Cupboard lock 6 levers (of approved quality)	each	235.00
2455	Brass hanging type door stopper 150 mm	each	103.00
2456	Hydraulic door closer bottle type M.S body. with necessary accessories and screws compete	each	1135.00
2459	Anodised aluminium hanging type door stopper	each	35.00
2464	Anodised Aluminium pull bolt lock (locking bolt) of size 85 mm x 42 mm with screws, bolts, nuts and washers complete	each	52.00
2465	Anodised aluminium casement stay 250mm	each	35.00
2466	hollock wood in scantling	cum	35700.00
2467	Chromium plated Brass pull bolt lock (locking bolt) of size 85 mm x 42 mm with screws, bolts, nuts and washers complete	each	190.00
2468	Nickled Chromium Brass cupboard lock 40 mm size	each	155.00
2469	Nickled Chromium Brass cupboard lock 50 mm size	each	176.00
2470	Nickled Chromium Brass cupboard lock 65 mm size	each	207.00
2471	Nickled Chromium Brass cupboard lock 75 mm size	each	227.00
2480	Ply wood 5 ply with teak ply on both faces 9mm thick	sqm	930.00
2481	Ply wood 5 ply with teak ply on one face and comercial ply on another face 9 mm thick	sqm	910.00
2483	Ply wood 7 ply with teak ply on one face and comercial ply on another face 9 mm thick	sqm	1000.00
2484	Pre-laminated with decorative lamination on both side exterior Grade - I MDF Board 12 mm thick confirming to IS:14587	sqm	710.00
2485	Pre-laminated with decorative lamination on both side exterior Grade - I MDF Board 18 mm thick confirming to IS:14587	sqm	980.00
2486	Pre-laminated with decorative lamination one side and other side balancing lamination exterior Grade - I MDF Board 25 mm thick confirming to IS:14587	sqm	1280.00
2487	Pre-laminated with decorative lamination one side and other side balancing lamination exterior Grade - I MDF Board 12 mm thick confirming to IS:14587	sqm	600.00
2488	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	700.00
2489	PVC edge bending tape 2.00 mm thick	metre	37.00

BASIC RATES

2491	Pre laminated both side solid foam uPVC profile (45x20mm)	metre	165.00
2492	Solid foam uPVC sheet 20mm thick pre laminated on both side	sqm	2266.00
2493	PVC edge beading metre	metre	36.00
2494	Expandable fastner with plastic sleeve	each	6.00
2500	Extra for selected planks of second class deodar wood	cum	12000.00
2504	Kiln seasoning of timber	cum	750.00
2505	Hollock wood in planks	cum	39000.00
2506	Carben Steel galvanised (min 5 micron) dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade counter sunk head screw comprising of 10 mm dia polyamide PA 6 grade sleeve. Size 10mm x 60 mm	10 nos	320.00
2507	Carben Steel galvanised (min 5 micron) dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade counter sunk head screw comprising of 10 mm dia polyamide PA 6 grade sleeve. Size 10mm x 80 mm	10 nos	340.00
2508	Carben Steel galvanised (min 5 micron) dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade counter sunk head screw comprising of 10 mm dia polyamide PA 6 grade sleeve. Size 10mm x 120 mm	10 nos	435.00
2509	Carben Steel galvanised (min 5 micron) dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade counter sunk head screw comprising of 10 mm dia polyamide PA 6 grade sleeve. Size 10mm x 140 mm	10 nos	550.00
2510	Carben Steel galvanised (min 5 micron) dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade counter sunk head screw comprising of 10 mm dia polyamide PA 6 grade sleeve. Size 10mm x 160 mm	10 nos.	690.00
2602	Common burnt clay F.P.S. (non modular) brick class designation 7.5	1000 nos.	6943.00
2603	Bricks (F.P.S.) Class designation 5.0 (common burnt clay non modular)	1000 nos.	NA
2604	Weather/structural non sag elastomeric PU sealant (600ml Sausage) for joints in RCC/ Brick/ Stone/ wood/ Ceramic/ Gypsum/ Alluminium work complying to ASTM C920, DIN 18540-F & ISO 11600 incl all taxes	each	532.00
2605	Structural sealant - 6 mm x 12 mm	metre	36.00
2606	Spacer tape 6.4 mm thick x 6 mm wide	metre	22.00
2607	Weather Sealant - Non Staining (600 ml)	each	390.00
2608	Weather Sealant - Normal (300 ml)	each	115.00
2609	MS Brackets/Aluminium Alloy Brackets	kg	108.00
2610	Silicon Gasket in Kg (Above 50 g / m)	kg	490.00
2611	EPDM Gasket in Kg (Above 60 g / m)	kg	170.00
2612	Anchor Fastner - M10	each	11.00
2613	SS Bolt with washer of different sizes for structural glazing / ACP Cladding	each	41.00
2614	SS Screws of sizes for structural glazing / ACP Cladding	each	4.00
2615	Protective Tape	metre	27.00
2616	GI flashing - 1.2 mm Thick	kg	65.00
2617	6 mm thick High performance glass	sqm	1030.00
2618	6 mm thick clear heat strengthened glass	sqm	670.00
2619	6 mm thick clear heat strengthened glass	each	132.00
2620	ARMS GS HD -TOP HUNG -20"-TYPE P-COUPLE	pair	1390.00
2621	Connection Block for vision glass panel	each	36.00
2622	Curtain wall striker for vision glass panel	each	87.00
2623	Adjustable Fastening Pawl for vision glass panel	each	36.00
2624	Corner drive for vision glass panel	each	260.00

BASIC RATES

2625	Top wedge Block for vision glass panel	each	130.00
2626	Glass wool of density @ 48 Kg / cum with black glass tissue (BGT)	sqm	278.00
2627	SS Screws - # 8 x 19	each	8.00
2628	Weather Sealant - DC 789	cartridge	165.00
2629	Cement Board	sqm	346.00
2630	Baker rod	metre	7.00
2631	4 mm thick ACP	sqm	1290.00
2632	Fire Stop	metre	480.00
2634	GI/Aluminium Sheet (0.8 mm thick)	kg	65.00
2635	GI Screws of gauge 10, length 25 mm for fixing cement fibre board to C section	each	4.00
2636	GI Screws of gauge 10, length 45 mm for fixing cement fibre board to C section	each	4.00
2637	Vapour barrier	sqm	175.00
2640	Glass panes of required thickness having 120 minutes of fire resistance both integrity and radiation control (EI 120) and minimum 20 minutes of insulation (EI 20)	sqm	25000.00
2641	G.I U beading of 1.6 mm thick G.I sheet with ceramic tape.	metre	268.00
2642	Ceramic tape 5 x20 mm size	metre	435.00
2701	Chequered terrazo tiles 30 mm thick (light shade)	sqm	NA
2702	Chequered terrazo tiles 30 mm thick (medium shade)	sqm	NA
2703	Chequered terrazo tiles 30 mm thick (dark shade)	sqm	NA
2704	Aluminium strip 40 mm wide and 2 mm thick	kilogram	274.00
2705	Glass strips 25 mm wide and 4 mm thick	metre	14.00
2706	Glass strips 50 mm wide and 4 mm thick	metre	30.00
2707	Glass strips 78 mm wide and 4 mm thick	metre	43.00
2708	Truf Paver (500x500 x40 mm)	Sqm	500.00
2709	Ceramic tiles pieces for crazy flooring	quintal	150.00
2710	White marble makrana second quality plain veined stone pieces for crazy flooring	quintal	614.00
2711	Polyvinyl chloride sheet 1.5 mm thick	sqm	NA
2711 A	FS800H Grade Flooring Panel (Size 600 mm x600 mm x32 mm)	each	740.00
2712	Zinc Electroplated Pedestals - 300 mm	each	152.00
2713	Zinc Electroplated Pedestals - 450 mm	each	220.00
2714	Zinc Electroplated Tube Stinger	each	70.00
2715	Machine Screw for Fixing	each	2.50
2717	Polyvinyl chloride tiles 1.5 mm thick	sqm	500.00
2718	Polyvinyl chloride tiles 2.0 mm thick	sqm	500.00
2723	Adhesive (rubber case)	Kg.	237.00
2744	Aluminium strip 38 mm wide & 1.6 mm thick	kilogram	225.00
2750	8 mm thick granite stone tiles (mirror polished of all shades)	sqm	800.00
2751	8 mm thick marble tiles (polished) Raj Nagar	sqm	400.00
2752	18 to 20mm (average) thick Doongri-Adanga marble tiles (polished)	sqm	500.00
2901	Stone aggregate (Single Size) 100 mm nominal size (A) Crushed	cum	900.00
	(B) Nallah.	cum	900.00
2902	Stone aggregate (Single Size) 80 mm nominal size (A) Crushed	cum	900.00

BASIC RATES

	(B) Nallah.	cum	900.00
2903	Stone Chippings / Screenings 4.75 mm nominal size	cum	900.00
2904	Stone Chippings / Screenings 150 micron nominal size	cum	900.00
2908	Over burnt (Jhama) Brick aggregate 120 mm to 40 mm size	cum	600.00
2909	Over burnt (Jhama) Brick aggregate 90 mm to 40 mm size	cum	600.00
2910	Stone Chippings / Screenings 12.5 / 13.2 mm nominal size	cum	900.00
2911	Stone Chippings / Screenings 10 / 11.2 mm nominal size	cum	900.00
2914	Solvent	kilogram	30.00
2916	paving Asphalt VG-10 of approved quality.	tonne	56302.00
3002	Polyvinyl chloride sheet 400 micron thick	sqm	45.00
3003	Asbestos Cement sheets plain 4 mm thick	sqm	NA
3004	Stoneware spouts 100 mm dia 60 cm long	each	45.00
3050	Galvanised steel corrugated sheets	quintal	6095.00
3080	25 mm dia Gun metal non return valve-vertical (Screwed end)	each	445.00
3084	32 mm dia Gun metal non return valve-vertical (Screwed end)	each	815.00
3088	40 mm dia Gun metal non return valve-vertical (Screwed end)	each	930.00
3092	50 mm dia Gun metal non return valve-vertical (Screwed end)	each	1300.00
3096	65 mm dia Gun metal non return valve-vertical (Screwed end)	each	2070.00
3213	Vitreous china Surgeon type wash basin of size 660x460 mm	each	1100.00
3224	750x20 mm anodised aluminium towel rail alongwith a pair of anodised aluminium brackets	each	345.00
3225	600x20 mm anodised aluminium towel rail alongwith a pair of anodised aluminium brackets	each	280.00
3228	600x120 mm glass shelf with anodised aluminium angle frame, C.P. brass brackets and guard rail of standard size	each	290.00
3229	550x400 mm flat back wash basin vitreous china	each	795.00
3300	80 mm dia Gun metal non return valve-vertical (Screwed end)	each	2600.00
3308	80 mm dia Sluice valve (with caps) C.I. of Class II	each	NA
3311	100 mm dia Sluice valve (with caps) C.I. of Class II	each	2700.00
3314	125 mm dia Sluice valve (with caps) C.I. of Class II	each	3300.00
3317	150 mm dia Sluice valve (with caps) C.I. of Class II	each	4100.00
3320	200 mm dia Sluice valve (with caps) C.I. of Class II	each	8900.00
3321	250 mm dia Sluice valve (with caps) C.I. of Class II	each	15000.00
3326	300 mm dia Sluice valve (with caps) C.I. of Class II	each	18500.00
3327	15mm Battery based Sensor pillar cock	each	6000.00
3617	C.P. brass union 40 mm dia	each	220.00
3620	C.C.I. (spun) socketed soil, waste and vent pipe 1.80 metres long: 100 mm dia	each	1170.00
3621	C.C.I. (spun) socketed soil, waste and vent pipe 1.80 metres long: 75 mm dia	each	1150.00
3624	S.C.I. S&S bends with access door 100 mm dia	each	400.00
3625	S.C.I. S&S bends with access door 75 mm dia	each	300.00
3628	S.C.I. S & S 100 mm dia bend	each	300.00
3629	S.C.I. S & S 75 mm dia bend.	each	200.00
3634	S.C.I. S & S 100 mm dia heal rest sanitary bends	each	300.00
3635	S.C.I. S & S 75 mm dia heal rest sanitary bends	each	280.00
3640	S.C.I. S & S 100x100x100 mm single equal Junctions	each	500.00
3641	S.C.I. S & S 75x75x75 mm single equal Junctions	each	350.00
3644	S.C.I. S & S 100x100x100 mm Single equal Junctions with access door	each	500.00

BASIC RATES

3645	S.C.I. S & S 75x75x75 mm Single equal Junctions with access door	each	390.00
3650	S.C.I. S & S 100x100x100x100 mm double equal junctions	each	630.00
3651	S.C.I. S & S 75x75x75x75 mm double equal junctions	each	470.00
3654	S.C.I. S&S 100x100x100x100mm double equal junctions with access door	each	630.00
3655	S.C.I. S & S 75x75x75x75 mm double equal junctions with access door	each	500.00
3660	S.C.I. S&S single unequal junctions 100x100x75 mm	each	600.00
3661	S.C.I. S & S 100x100x50 mm single unequal junctions	each	NA
3664	S.C.I S & S 100x100x75 mm single unequal junctions with access door	each	650.00
3670	S. C. I. S & S 100x100x75x75 mm double unequal junction	each	800.00
3674	S.C.I S & S 100x100x75x75 mm double unequal junction with access door	each	900.00
3681	S.C.I. S&S single equal invert branch of required degree 100x100x100 mm dia	each	430.00
3682	S.C.I. S&S single equal invert branch of required degree 75x75x75 mm dia	each	330.00
3685	S.C.I. S&S double equal invert branch of required degree 100x100x100x100 mm dia	each	540.00
3686	S.C.I. S&S double equal invert branch of required degree 75x75x75x75 mm dia	each	450.00
3690	S.C.I. S&S single unequal invert branch of required degree 100x100x75 mm dia	each	550.00
3695	S.C.I. S&S double unequal invert branch of required degree 100x100x75x75 mm dia	each	730.00
3699	75 mm Offset for 75 mm dia. Pipe S.C.I S & S	each	230.00
3700	75 mm Offset for 100 mm dia. pipe	each	NA
3707	150 mm Offset for 75 mm dia. Pipe S.C. I S & S	each	300.00
3708	150 mm Offset for 100 mm dia. Pipe S.C.I. S & S	each	400.00
3712	Sand Cast Iron (S&S) 114 mm Offset for 75 mm dia pipe	each	310.00
3713	Sand Cast Iron (S&S) 114 mm Offset for 100 mm dia pipe	each	390.00
3716	Sand Cast Iron (S&S) 152 mm Offset for 75 mm dia pipe	each	360.00
3717	Sand Cast Iron (S&S) 152 mm Offset for 100 mm dia pipe	each	460.00
3728	100 mm door pieces S.C.I. S & S	each	410.00
3729	75 mm door pieces S.C.I. S & S	each	300.00
3733	100 mm Slotted Cowl (Terminal Guard)S C.I. S & S	each	300.00
3734	75 mm Slotted Cowl (Terminal Guard) S.C.I S & S	each	210.00
3738	100 mm Collars S.C.I S & S	each	300.00
3739	75 mm collars S.C.I. S & S	each	180.00
3746	Sand Cast Iron (S&S) 75mm Offset for 75 mm dia pipe	each	220.00
3747	Sand Cast Iron (S&S) 75 mm Offset for 100 mm dia pipe	each	360.00
3749	Vitreous china Toilet paper holder of standard size	each	280.00
3860	560 mm dia cover with frame (Heavy duty)	each	9100.00
3861	560 mm dia cover without frame (Heavy duty)	each	5100.00
3991	Galvanized iron (1.6 ± 0.2 mm) thick reinforcement for small series casement window/door frame, sash, mullion & small series sliding window frame	metre	70.00

BASIC RATES

3992	Galvanized iron (1.6 ± 0.2 mm) thick reinforcement for big series casement window/door frame, sash, mullion, big & small series sliding window frame	metre	75.00
3993	Galvanized iron (1.6 ± 0.2 mm) thick reinforcement for big series casement door sash	metre	100.00
3994	Galvanized iron (1.6 ± 0.2 mm) thick reinforcement for big series sliding window / door sash	metre	90.00
3995	G.I fasteners 100 x 8 mm each	each	15.00
4001	Stainless steel (Grade -304) hollow section round/square tubes	kg	275.00
4002	Stainless steel bolts / square bar and plates	kg	234.00
4006	Pressed steel door frames (mild steel sheet 1.60 mm) profile 'B'	metre	200.00
4007	Pressed steel door frames (mild steel sheet 1.60 mm) profile 'c'	metre	220.00
4008	Pressed steel door frames (mild steel sheet 1.60 mm) profile 'E'	metre	250.00
4009	Mild steel tubes, hot finished welded type	kilogram	60.00
4010	Mild steel tubes, hot finished seamless type	kilogram	70.00
4011	Mild steel tubes, electric resistant or induction butt welded.	kilogram	50.00
4012	Circular C.I. Box for ceiling fan internal dia 140 mm, 73 mm height, toplid of 1.5mm thick MS sheet	each	55.00
4013	40 mm dia pulleys	each	35.00
4014	Ready made steel door with necessary hinges, lugs and glazing clips excluding other fittings and their fixing	sqm	NA
4015	Ready made steel window (fixed) with lugs and glazing clips excluding other fittings and their fixing	sqm	NA
4016	Ready made steel window (side hung) with lugs hinges & glazing clips excluding other fittings and their fixing	sqm	NA
4017	Ready made steel ventilator (top hung) with lugs hinges glazing clips excluding other fittings and their fixing	sqm	NA
4018	Ready made steel ventilator (central hung) with lugs pivots, lugs, glazing clips excluding other fittings and their fixing	sqm	NA
4201	Aluminium Primer	litre	120.00
4202	Red Oxide Zinc Chromate primer	litre	120.00
4203	Copper acetate	kilogram	300.00
4204	Hydrochloric Acid	kilogram	35.00
4205	Copper chloride	kilogram	300.00
4206	Copper Nitrate	kilogram	210.00
4207	Ammonium chloride	kilogram	22.00
5001	Mobil oil	litre	268.00
5050	SS pipe 304 grades with press fit technology as per JIS 3448 Standard 48.60 mm outer dia	metre	775.00
5571	Stoneware pipes Grade A (60 cm long) 100 mm dia	each	NA
5743	Coloured inter locking C.C. paver Block	sqm	500.00
6001	16 mm thick White Marble slab Makrana second quality plain veined	sqm	1460.00
6001A	18 mm thick White Marble slab Makrana second quality plain veined	sqm	1450.00
6004	16 mm thick White Marble slab Makrana Doongri adanga veined	sqm	2900.00
6004A	18 mm thick White Marble slab Makrana Doongri adanga veined	sqm	3050.00
6007	Pink marble slab plain 16 mm thick	sqm	660.00
6007A	Pink marble slab plain 18 mm thick	sqm	685.00

BASIC RATES

6010	Udaypur Green marble 16 mm thick slab	sqm	600.00
6010A	Udaypur Green marble 18 mm thick slab	sqm	620.00
6019	Black Zebra marble slab plain 16 mm thick	sqm	880.00
6019A	Black Zebra marble slab plain 18 mm thick	sqm	1000.00
7001	Brass 100mm mortice latch and lock with 6 levers without pair of handles	each	195.00
7003	Pair of Anodised Aluminium lever handles for 100 mm mortice latch and lock	each	215.00
7004	450 x 300 mm Flat back wash basin (vitreous chian)	each	658.00
7005	10 litres without fittings low level cistern (vitreous china)	each	1140.00
7006	10 litres with fittings low level cistern (vitreous china)	each	1789.00
7008	F.P.S. (non modular) clay fly ash bricks class designation 7.5	1000 nos.	6000.00
7009	12.5 mm thick tapered edge plain Gypsum plaster borad Confirming to IS 2095 (Part- I) : 2011	sqm	215.00
7010	Ceiling sectionsGalvanished steel (size 80 x 26x 0.50 mm)	metre	67.00
7011	Perimetre channel Galvanished steel (size 20 x 27 x 30x0.5 mm)	metre	44.00
7012	Intermediate channel Galvaniwhed steel(size 15x45x15x0.90 mm)	metre	66.00
7013	Angle hanger/Ceiling angle Galvanished steel (size 25x10x0.50 mm)	metre	28.00
7014	Connecting clips Galvanished steel (2.64 mm dia and 230 mm long G.I. wire.)	each	5.00
7015	Soffit cleat Galvanished steel (size 27 x 37x25x0.60 mm)	each	4.00
7016	Joint filler	kilogram	36.00
7017	Joint finisher	kilogram	28.00
7018	Joint tape roll	roll	205.00
7019	Dash fastner/ Chemical fastener,	each	15.00
7020	All drive screws for Gypsum board.	100 Nos.	62.00
7021	Primer for Gypsum board	litre	100.00
7022	Chlorpyriphos 20% E.C. / Lindane 20% E.C.	litre	150.00
7023	Chromium plated brackets (Curtain rod)	each	12.00
7024	Acid proof cement	tonne	7800.00
7025	Self tapping pan head nickel coated mild steel screws of size 13 x 3.2 mm	1000 nos.	580.00
7026	Fibre joint tape 50 mm wide (90 metre) roll	each roll	205.00
7027	M.S. Butt hinges 125x90x4 mm	10 nos.	175.00
7028	12.5 mm thick fully perforated gypsum board	sqm	540.00
7029	Galavanised wire mesh of average width of aperture 1.4 mm and nominal dia. of wire 0.63 mm	sqm	250.00
7030	12.5 mm thick tapered edge gypsum fire resistant board	sqm	NA
7031	12.5 mm thick tapered edge moisture resistant plain Gypsum plaster board confirming to IS 2095 (Part- I) : 2011	sqm	284.00
7032	Frosted glass sheet of nominal thickness 4 mm (weighing not less than 10 kg / sqm)	sqm	539.00
7033	Nickle plated M.S. pipe 25 mm dia.	metre	80.00
7034	Nickle plated M.S. pipe 20 mm dia.	metre	72.00
7035	Nickle plated M.S. Brackets for curtain rod 20 mm	each	20.00
7036	Nickle plated M.S. Brackets for curtain rod 25 mm	each	25.00
7037	Brass screws 35 mm	100 nos.	157.00
7038	Chromium plated brass screws 35 mm	100 nos.	NA
7040	Oxidised mild steel screws 35 mm	100 nos.	48.00
7042	Mild steel conduit pipe (heavy type) ISI marked-20 mm dia.	metre	58.00

BASIC RATES

7043	Mild steel conduit pipe (heavy type) ISI marked-25 mm dia.	metre	67.00
7044	Rolling shutters of 80x0.90 mm laths	sqm	1415.00
7045	Rolling shutters of 80x1.20 mm laths	sqm	1750.00
7046	Top cover of Rolling shutters 0.90 mm thick	metre	528.00
7047	Top cover of Rolling shutters 1.20 mm thick	metre	612.00
7048	Rawl plug 50 mm (designation 10 no.)	each	25.00
7049	Teak wood lipping of size 25X3 mm in pelmets	metre	20.00
7050	PU primer	sqm	62.00
7051	40 mm (average) PU spray having 40-45 kg / m3 density	sqm	413.00
7052	GI wire netting 3 /4" x24G	sqm	31.00
7053	400 G polythene sheet	sqm	18.00
7055	Flat pressed 3 layers and graded particle board (medium density) Grade 1 conforming to IS : 3087 - 18 mm thick	sqm	516.00
7056	Aluminium Tee channel (heavy duty) with rollers and stop end	metre	122.00
7059	Aluminium hanging floor door stopper with twin rubber & stopper	each	41.00
7060	Haudraulic door closer tubler type Aluminium section body	each	620.00
7063	300 mm not less than 0.33 kg.Oxidised M.S. Casement stay(straight peg type)	each	45.00
7064	250 mm not less than 0.28 kg.Oxidised M.S casement stay (Straight peg type)	each	40.00
7065	200 mm not less than 0.24 kg.Oxidised M.S casement stay (straight peg type)	each	30.00
7068	Extra for providing grilled rolling shutters with 8 mm dia M.S.rod.	sqm	500.00
7070	Chequerred precast cement concrete tiles 22 mm thick using marble chips of size 6 mm. - Light shade using white cement	sqm	410.00
7071	White marble Raj Nagar plain - 18 mm thick (upto 0.50 sqm area)	sqm	775.00
7071.1	White marble Raj Nagar plain - 16 mm thick (upto 0.50 sqm area)	sqm	730.00
7072	Wall mounted water closet of size 780 x 370x690 mm	each	6000.00
7073	Adjustable Vitreous China Cistern with fittings of flushing capacity 3 litre/ 6 litre 9 adjustibla to 4 litre/8 litre)	each	2193.00
7074	White Vetrious China Waterless Urinal of size 600x330x315 mm	each	9650.00
7075	Cistern with fittings for waterless urinal	each	2500.00
7076	Battery based infrared sensor operated white Vitreous Urinal of aprox. size 610x390x370 mm	each	4500.00
7077	Acid and alkali resistant tiles size 300x300 mm size 10 mm thick	ten	570.00
7078	Araldite GY 257	kilogram	330.00
7080	Hardner HY 850	kilogram	NA
7081	Hardner HY 825	kilogram	NA
7082	Hardner HY 830	kilogram	NA
7083	Flow control agent	litre	NA
7084	Acrosil D.T. 0.75	litre	NA
7085	Quartz sand No. 10	kilogram	NA
7087	150 mm Tee (S.C.I)	each	570.00
7090	Expanded polystyrene type N- Normal 50 mm thick	sqm	140.00
7091	Expanded polystyrene type - SE 50 mm thick	sqm	170.00
7095	Stainless steel kitchen sink - with drain board 510 x 1040 mm bowl depth 250 mm	each	3220.00
7096	Stainless steel kitchen sink - with drain board 510 x 1040 mm	each	3050.00

BASIC RATES

	bowl depth 225 mm		
7097	Stainless steel kitchen sink - with drain board 510 x 1040 mm	each	2850.00
	bowl depth 200 mm		
7098	Stainless steel kitchen sink - with drain board 510x1040 mm bowl	each	2740.00
	depth 178 mm		
7099	Stainless steel kitchen sink - with drain board 460X915 MM mm bowl	each	2650.00
	depth 178 mm		
7101	Stainless steel kitchen sink - without drain board 610x510 mm	each	2350.00
	bowl depth 200 mm		
7102	Stainless steel kitchen sink - without drain board 610x460 mm	each	1859.00
	bowl depth 200 mm		
7103	Stainless steel kitchen sink - without drain board 470x420 mm	each	1549.00
	bowl depth 178 mm		
7104	Coloured Orissa pattern W.C. pan 580 x 440 mm	each	1675.00
7105	Coloured Pedestal type W.C. pan (European type) 580x440mm	each	1000.00
7106	Coloured low level flushing cistern 10 litres (vitreous china)	each	1343.00
7107	Coloured (other than black) solid P.V.C. plastic seat in European W.C. Pan.	each	450.00
7108	Stainless steel grating 75 mm dia	each	35.00
7109	Stainless steel grating 100 mm dia	each	45.00
7112	Mirror with white plastic moulded frame circular shape 450 mm dia	each	516.00
7113	Mirror with plastic moulded frame rectangular shape 453x357 mm	each	300.00
7114	Mirror with plastic moulded frame oval shape 450x350 mm (Outer dimensions)	each	361.00
7115	Mirror with plastic moulded frame rectangular shape 1500x450 mm	each	826.00
7116	Hard board 6 mm thick	sqm	155.00
7117	Semi Rigid PVC waste pipe for sink and wash basin 32 mm dia with length not less than 700 mm i/c PVC waste fittings	each	52.00
7118	Semi Rigid PVC waste pipe for sink and wash basin 40 mm dia with length not less than 700 mm i/c PVC waste fittings	each	62.00
7119	Flexible (coil shaped) PVC waste pipe for sink and washbasin 32 mm dia with length not less than 700 mm i/c PVC waste fittings	each	45.00
7120	Flexible (coil shaped) PVC waste pipe for sink and wash basin 40 mm dia with length not less than 700 mm i/c PVC waste fittings	each	62.00
7121	Bottle Trap	each	600.00
7122	CP Brass Single lever telephonic wall mixer of approved make	each	5000.00
7123	Coloured High density polyethylene / poly propylene 10 lit. (full flush) capacity controlled low level flushing cistern with fittings	each	680.00
7126	White Vitreous china 10 litre (full flush) capacity controlled low level flushing cistern with all fittings	each	1033.00
7127	Coloured Vitreous china 10 litre (full flush) capacity controlled low level flushing cistern with all fittings	each	1150.00
7128	100 mm dia. metre S.W. intercepting trap	each	225.00
7129	150 mm dia. S.W. intercepting trap	each	280.00

BASIC RATES

7130	Rectangular shape 600x450 mm precast R.C.C. manhole cover with frame - L.D. - 25	each	750.00
7131	Square shape 450x450 mm precast R.C.C. manhole cover with frame - L.D. - 25	each	690.00
7132	Circular shape 450 mm dia precast R.C.C. manhole cover with frame - L.D. - 25	each	690.00
7133	Rectangular shape 500x500 mm precast R.C.C. manhole cover with frame - M.D. - 10	each	800.00
7134	Circular shape 500 mm dia precast R.C.C. manhole cover with frame -M.D.-10	each	690.00
7135	Circular shape 560 mm dia precast R.C.C. manhole cover with frame - H.D. - 20	each	1055.00
7136	Circular shape 560 mm dia precast R.C.C. manhole cover with frame - E.H.D. - 35	each	1400.00
7137	Factory made 35 mm thick shutters with Laminated veneer lumber syles rails as per TADS 15 : 1995 and panels of 12mm thick plain Type 1, medium density flat pressed three layer, graded particle board (FTP-I) as per IS : 3087bonded with BWP type synthetic resin adhesive as per IS : 848	sqm	1700.00
7139	Factory made 35 mm thick shutters with laminated veneer lumbor styles and raids as per TADS 15:1995 and panels of 12 mm thick both sides prelaminated Type-I, medium density flat pressed three, layer, graded particle boad (FPTI) as per IS : 3087 marked bonded with BWP type synthetic resin adhesive as per IS : 848	sqm	1743.00
7143	Factory made 35 mm thick shutters with laminated veneer lumbor styles and raids as per TADS 15:1995 and panels of 12 mm thick one side prelaminated Type-I, other side balancing lamination medium density flat pressed three, layer, graded particle boad (FPTI) as per IS : 3087 marked bonded with BWP type synthetic resin adhesive as per IS : 848	sqm	1930.00
7151	Factory made 30 mm thick shutters with laminated veneer lumber styles & rails as per TADS 15:1995 and panels of sheet glass using 10 kg/ sqm glass panes	sqm	1396.00
7154	Factory made 35 mm thick shutters with laminated veneer lumber styles & rails as per TADS 15:1995 and panels of galvanised wire gauge with average width of aperture 1.4 mm in both directions with wire of dia 0.63 mm	sqm	1700.00
7155	Factory made 30 mm thick shutters with laminated veneer lumber styles &rails as per TADS 15:1995 and panels of galvanised wire gauge with average width of aperture 1.4 mm in both directions with wire of dia 0.63 mm	sqm	1430.00
7157	Laminated veneer lumber conforming to TADS IS : 1995 manufactured in factory in frames of door, windows	cum	70000.00
7178	Chemical ASTM C - type 1	kg	111.00
7181	C.I. pile shoe	kilogram	53.00

BASIC RATES

7182	M.S. clamps for pile shoe of 35 kg per pile	kilogram	55.00
7183	Bentonite of 35 kg per pile	tonne	3250.00
7184	Oxidised M.S. safety chain (weighing not less than 450 gms) for door	each	63.00
7187	C.I. grating 150mm dia. (weighing not less than 440 gms)	each	41.00
7188	uPVC pipes (working pressure 4 kg / cm ²) Single socketed pipe 75 mm dia	metre	89.00
7189	uPVC pipes (working pressure 4 kg / cm ²) Single socketed pipe 110 mm dia	metre	177.00
7190	uPVC pipes (working pressure 4 kg / cm ²) Rubber (Seal) Ring 75 mm dia	each	9.00
7191	uPVC pipes (working pressure 4 kg / cm ²) Rubber (Seal) Ring 110 mm dia	each	11.00
7192	UPVC coupler for UPVC drainage pipes 75 mm	each	52.00
7193	UPVC coupler for UPVC drainage pipes 110 mm	each	78.00
7194	UPVC pusufit coupler (single) 75 mm thick	each	18.00
7195	UPVC pusufit coupler (single) 110 mm thick	each	33.00
7196	uPVC single equal Tee (without door) 75x75x75 mm	each	62.00
7197	uPVC single equal Tee (without door) 110x110x110 mm	each	124.00
7198	uPVC single equal Tee (with door) 75x75x75 mm	each	78.00
7199	uPVC single equal Tee (with door) 110x110x110 mm	each	150.00
7200	75x75x75x75 mm UPVC double equal door Tee	each	68.00
7201	110x110x110x110 mm UPVC double equal door Tee	each	88.00
7202	75x75x75 mm UPVC single equal Y with door	each	104.00
7203	110x110x110 mm UPVC single equal Y with door	each	200.00
7204	75x75x75 mm UPVC single equal Y with door	each	104.00
7205	110x110x110 mm UPVC single equal Y with door	each	200.00
7208	UPVC bend 87.5° 75 mm bend	each	46.00
7209	UPVC bend 87.5° 110 mm bend	each	92.00
7210	75 mm UPVC bend 450	each	46.00
7211	110 mm UPVC bend 450	each	77.00
7212	75 mm bend UPVC plain shoe	each	50.00
7213	110 mm bend UPVC plain shoe	each	52.00
7214	75 mm bend UPVC pipe clip	each	20.00
7215	110 mm bend UPVC pipe clip	each	24.00
7231	Resin bonded glass wool @ 16 kg / cum., 50 mm thick	sqm	100.00
7232	Resin bonded glass wool @ 24 kg / cum., 50 mm thick	sqm	143.00
7233	Fibre glass tissue reinforcement Type II Grade I	sqm	82.00
7236	Precast chequered cement tiles 22 mm thick dark shade using ordinary cement.	sqm	232.00
7237	Precast chequered cement tiles 22 mm thick medium shade using 50% white cement 50% ordinary cement	sqm	337.00
7238	High Albedo paint	kg	191.00
7239	Epoxy Paint	litre	230.00
7240	Fire retardant paint	litre	254.00
7241	Melamine polish	litre	237.00
7242	Silicon water repellent	litre	520.00

BASIC RATES

7244	(i) Agaria Marble stone Table rubbed polished stone 18 mm thick (75x50 cm)	sqm	1824.00
	(ii) Agaria Marble stone Table rubbed polished stone 16 mm thick (75x50 cm)	sqm	1780.00
7245	Granite stone Table rubbed polished stone 18 mm thick (75x50 cm)	sqm	1824.00
	16 mm thick (75x50 cm)	sqm	1824.00
	Tests		
	Verticle load testing (Intial) 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 .		
7246	Upto 50 M.T.capacity pile (Single)	per test	119238.00
7247	Above 50 M.T. & upto 100 tonne capacity piles (Single)	per test	180380.00
	Group of two or more piles		
7248	Upto 50 tonne capacity each	per test	199968.00
	Cyclic vertical Load testing of piles in accordance with IS : 2911 part-IV including preparation of pile head etc for Single pile		
7249	Upto 50 tonne capacity pile	per test	131162.00
7250	Above 50 tonne capacity pile and upto 100 tonne capacity pile	per test	198418.00
7251	group of two piles upto 50 tonne capacity each	per test	219965.00
	Lateral Load testing of singel pile in accordance with IS : 2911 part-IV for determining safe allowable lateral load on pile.		
7252	Upto 50 tonne capacity pile	per test	55205.00
7253	Above 50 tonne capacity pile	per test	62322.00
7254	Hardening compound.	litre	44.00
7255	Road marking paint (spirit based)	litre	145.00
7256	Superior quality road marking paint (water based.)	litre	161.00
7257	C.P. Brass bibcock 15 mm	each	407.00
7258	C.P. Brass long nose bibcock 15 mm	each	492.00
7259	C.P. Brass long body bibcock 15 mm	each	492.00
7260	C.P. Brass stop cock (conceaied) 15 mm	each	487.00
7261	C.P. Brass angle valve 15 mm	each	407.00
7262	Piller Cock C.P. Brass basin Mixer Pillar tap 15 mm	each	1525.00
7266	Pressed clay tiles 20 mm thick 250 x 250 mm size.	1000 nos.	9500.00
7267	Plain ceiling tiles (BWP type phenol formal dehyde synthetic resin bonded) (600x600x12 mm)	each	115.00
7268	Semi perforated ceiling tiles (600x600x12 mm)	each	127.00
7269	25 mm thick particle board	sqm	528.00
7270	30 mm thick prelaminated flush door shutter	sqm	860.00
7271	II nd class teak wood lipping 25 mm wide x12 mm thick	metre	36.00
7272	25 mm thick melamine faced prelaminated three layerparticle board	sqm	912.00

BASIC RATES

7273	Resin Bonded Rockwool 48 kg/m3	sqm	135.00
7274	Glass wool 50 mm thick	sqm	238.00
7280	Waste plastic additive	tonne	40000.00
7281	Chemical ASTM C- type II	kg	182.00
7283	18 mm thick marble slab, areawise above 0.2 sqm upto 0.5 sqm	sqm	365.00
7284	18 mm thick marble slab, areawise above 0.5 sqm upto 1.0 sqm	sqm	456.00
	Udaipur green marble		
7286	18 mm thick marble slab, areawise above 0.10 sqm upto 0.2 sqm	sqm	365.00
7287	18 mm thick marble slab, areawise above 0.2 sqm upto 0.5 sqm	sqm	365.00
7288	18 mm thick marble slab, areawise above 0.5 sqm upto 1.0 sqm	sqm	425.00
	Kishan garh Zebra Black marble		
7291	18 mm thick marble slab, areawise above 0.2 sqm upto 0.5 sqm	sqm	392.00
7292	18 mm thick marble slab, areawise above 0.5 sqm upto 1.0 sqm	sqm	501.00
7295	Granite of any colour, 18 mm thick (slab area upto 0.50 sqm)	sqm	1800.00
7295.1	Granite of any colour, 16 mm thick (slab area upto 0.50 sqm)	sqm	1725.00
7296	Granite of any colour, 30 mm thick (slab area upto 0.50 sqm)	sqm	1900.00
7297	Granite of any colour, 18 mm thick (slab area above 0.50 sqm.)	sqm	1000.00
7297.1	Granite of any colour, 16 mm thick (slab area above 0.50 sqm.)	sqm	1000.00
7306	Aluminium T or L sections	kilogram	229.00
7307	For flush door shutters Extra for providing teak veneering on one side instead of commercial veneering	sqm	380.00
7309	Paving Asphalt of grade VG-30 of approved quality	tonne	57702.00
7312	Expandable fastener with plastic sleeve and M.S. screws : 25 mm long	each	15.00
7313	Expandable fastener with plastic sleeve and M.S. screws : 32 mm long	each	16.00
7314	Expandable fastener with plastic sleeve and M.S. screws : 40 mm long	each	18.00
7315	Expandable fastener with plastic sleeve and M.S. screws : 50 mm long	each	20.00
7318	Plasticizer/super plasticizer	kilogram	70.00
7319	Wall form panel 1250x500 mm	each	950.00
7320	Tie bolt 12 mm dia 100 mm length	each	40.00
7321	Tie bolt 12 mm dia 150 mm length	each	45.00
7322	Tie bolt 20 mm dia 150 mm length	each	65.00
7323	Tie bolt 20 mm dia 225 mm length	each	75.00
7324	Spring coil 12 mm	each	15.00
7325	Plastic cone 12 mm dia	each	17.00
7326	Corner angle 45x45x5 mm 1.50 m long	each	260.00
7327	100 mm channel shoulder 2.5 m long	each	1100.00
7328	Double clip (bridge clip)	each	85.00
7329	Single clip	each	65.00
7330	M.S. tube 40 mm dia	metre	240.00
7331	Wall form panel 1250x450 mm	each	925.00
7332	Corner angle 45x45x5 mm 2.50 m long	each	345.00
7333	Column clamp 450x1070 mm	each	1030.00
7334	Prop 2 m (2-3.5 m)	each	680.00

BASIC RATES

7335	Binding wire	kilogram	85.00
7336	Lock Bar (E 250) - 10 thick MS Plate	kilogram	85.00
7338	Gun metal cramp	kilogram	325.00
7339	Stainless steel cramp	kilogram	310.00
7340	Stainless steel pin	kilogram	197.00
7342	Adjustable span ESO+SI (2.35-3.40)	each	1550.00
7343	Adjustable telescopic prop 3 m (2.02-3.75 m)	each	1100.00
7344	Beam clamp 300-380 mm (450-1070 mm)	each set	390.00
7345	Prop 4 m	each	1050.00
7346	Double Coupler	each	55.00
7347	Cadmium plated full threaded steel screws (30x4 mm dia.)	100 nos.	44.00
7348	Aluminium Washer 2mm thick 15 mm dia	100 nos.	10.00
7349	12 mm M.S. 'U' beading	metre	20.00
7350	M.S. tower bolt-bright finished/black stove enamelled 250x10 mm	each	51.00
7353	M.S. tower bolt-bright finished/black stove enamelled 100x10 mm	each	30.00
7354	Plastic encapsuled M.S. foot rest 30x20x15 cm	each	120.00
7358	Flushing Cistern P.V.C. 10 litre capacity (low level) (White) (with fittings, accessories and flush pipe)	each	700.00
7359	P.V.C. automatic flushing cistern 5 litres capacity	each	550.00
7361	P.V.C. automatic flushing cistern 10 litres capacity	each	510.00
7363	15 mm C.P. brass tap with elbow operation lever	each	490.00
7364	White glazed fire clay draining board 600x450x25 mm	each	600.00
7366	Glass reinforced Gypsum (GRG) board 12.5 mm thick	sqm	265.00
7367	50 x 32 mm Galvanised M.S.sheets 0.5 mm thick pressed channel sector.	metre	65.00
7368	GFRG Panel of 124 mm thick	metre	910.00
7369	48x34x36 mm Galvanised M.S. sheet 0.50 mm thick pressed stud	metre	80.00
7370	70x34x36 mm Galvanised M.S. sheet 0.50 mm thick pressed stud	metre	85.00
7375	GI flush pipe and C.P. brass spreader including C.P. connecting single lipped urinals	each	466.00
7376	GI flush pipe and C.P. brass spreader including C.P. connecting pipe range of two lipped urinals	each	1059.00
7377	GI flush pipe and C.P. brass spreader including C.P. connecting pipe range of three lipped urinals	each	1312.00
7378	GI flush pipe and C.P. brass spreader including C.P. connecting pipe range of four lipped urinals	each	1900.00
7379	white vitreous china clay half stall urinal flat back 580x380x350 mm or angle back 450x375x350 mm with waste fittings as per IS:2556	each	1053.00
7380	Precast R.C.C. grating with frame 500x450 mm horizontal grating	each	697.00
7381	Precast R.C.C. grating with frame 450x100 mm vertical grating	each	285.00
7382	Bitumen emulsion rapid setting (RS) conforming to IS : 8887	tonne	92605.00
7383	12 mm dia 50 mm long wedge type expanded zinc alloy dash fastener	each	7.00
7385	3 mm thick translucent white acrylic plastic sheet	sqm	550.00
7386	12 mm thick particle board ceiling tile	sqm	110.00
7387	Spigot for standard jointing	kg	40.00
7388	Dash hold fastener 12.5 mm dia, 50 mm long with 6 mm dia bolt	each	10.00
7389	Anodising 15 microns on aluminium sections	kilogram	38.00

BASIC RATES

7390	EPDM Gasket for uPVC window/door	meter	15.00
7391	Anodising 25 microns on aluminium sections	kilogram	48.00
7392	Powder coating 50 microns on aluminium sections	kilogram	61.00
7393	Polyester Powder coating 50 microns on aluminium sections	kilogram	67.00
7394	Double action hydraulic floor spring with Stainless Steel cover plate	each	1500.00
7395	6 mm dia. M.S.adjustable hangers including clips (upto 1.2 m length)	each	20.00
7396	Double action hydraulic floor spring with Brass cover plate	each	1620.00
7397	Base jack	each	145.00
7398	Challies (M.S.Tube)	each	765.00
7399	Cup Lock	each	48.00
7400	15 mm PTMT bib cock	each	127.00
7401	15 mm PTMT bib cock with flange (fancy)	each	176.00
7402	15 mm PTMT bib cock long body with flange	each	212.00
7403	15 mm dia PTMT stop cock (male thread)	each	132.00
7404	15 mm dia (F/T) stop cock (female thread)	each	132.00
7405	20 mm dia. PTMT stop cock	each	155.00
7406	PTMT Pillar Cock	each	197.00
7407	PTMT Push Cock 15 mm dia	each	102.00
7408	PTMT Push Cock 12 mm dia 20 mm BSP	each	132.00
7409	PTMT Grating 100 mm dia	each	28.00
7410	PTMT Pillar Cock (fency) 15mm foam flow	each	224.00
7410.1	PTMT Pillar Cock (fency) 15mm bore 125x131x43 mm	each	161.00
7411	125 mm with waste hole	each	25.00
7412	Rectangular type with openable circular lid 150 mm size 18 mm high with 100 mm dia (110 gm)	each	130.00
7415	Double acting air valve 50 mm	each	3715.00
7416	Double acting air valve 80 mm	each	4525.00
7417	Double acting air valve 100 mm	each	5910.00
7418	Water meter (including testing charges) 80 mm	each	2030.00
7419	Water meter (including testing charges) 100 mm	each	3143.00
7420	Water meter (including testing charges) 150 mm	each	4765.00
7421	Water meter (including testing charges) 200 mm	each	5145.00
7422	80 mm dia dirt box strainer	each	2680.00
7423	100 mm dia dirt box strainer	each	4370.00
7424	150 mm dia dirt box strainer	each	5540.00
7425	200 mm dia dirt box strainer	each	7860.00
7426	Cat's eye	each	80.00
7427	Water stops Serrated with central bulb (225 mm wide, 8 -11mm thick)	metre	200.00
7428	Water stop - Dumb bell with central bulb	metre	160.00
7429	Kickers	metre	160.00
7430	1/4" or 6 mm Wedge expansion hold fastner	each	10.00
7431	3/8" or 10 mm Wedge expansion hold fastner	each	10.00
7432	1/2" or 12 mm Wedge expansion hold fastner	each	25.00
7433	Gun metal non return valve horizontal type 100 mm dia.	each	NA
7434	Gun metal non return valve verticle type 100 mm dia.	each	NA
7438	Granite brown 8 mm thick	sqm	NA

BASIC RATES

	(mirror polished tiles machine cut edge)		
7439	Raj Nagar White 8 mm thick	sqm	NA
	(mirror polished tiles machine cut edge)		
7442	Wheel 75 mm dia 40 mm wide	each	62.00
7443	Aluminium single cleat of size 30x32x3 mm	each	14.00
7444	Aluminium grip strip of size 50x12x2 mm	each	13.00
7445	25 mm thick pre-laminated flush door shutter both side decorative	sqm	890
7449	Aluminium U beading	kilogram	250.00
7451	Glass sheet (Pin headed) 4 mm thick	sqm	370.00
	Raj Nagar Plain-White Marble		
	(table rubbed and polished 18 mm thick)		
7452	upto 0.50 sqm	sqm	NA
7453	Above 0.50 sqm	sqm	NA
	Raj Nagar Plain-White Marble		
	(table rubbed and polished 16 mm thick)		
7452.1	upto 0.50 sqm	sqm	822.00
7453.1	Above 0.50 sqm	sqm	1235.00
7466	Second class deodar teak wood lipping with 30x12 mm	metre	40.00
	Veneered particle board with commercial		
	veneering on both sides		
7468	12 mm thick (EG)	sqm	600.00
7469	18 mm thick (EG)	sqm	NA
7470	25 mm thick (EG)	sqm	NA
	Veneered particle board with one side teak		
	veneering and other side commercial veneering		
7471	12 mm thick	sqm	NA
7472	18 mm thick	sqm	NA
7473	25 mm thick	sqm	NA
	Veneered particle board with teak veneering		
	on both sides		
7474	12 mm thick	sqm	NA
7475	18 mm thick	sqm	NA
7476	25 mm thick	sqm	NA
	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)		
7477	12 mm thick	sqm	500.00
7478	18 mm thick	sqm	560.00
7479	25 mm thick	sqm	850.00
	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)		
7480	12 mm thick	sqm	490.00
7481	18 mm thick	sqm	
7482	25 mm thick	sqm	

BASIC RATES

7485	50 mm (Over all width) Oxidised M.S. hinges finished with nickle plating	metre	55.00
7486	65 mm (Over all width) Oxidised M.S. hinges finished with nickle plating	metre	69.00
7491	PTMT Waste Coupling 31/32 mm	each	69.00
7492	PTMT Waste Coupling 38/40 mm	each	90.00
7493	PTMT Bottle Trap 31/32 mm	each	395.00
7494	PTMT Bottle Trap 38/40 mm	each	415.00
7495	PTMT Ball Cock 15 mm complete with Epoxy Coated Aluminium Rod & H.D. Ball	each	203.00
7496	PTMT Ball Cock 20 mm complete with Epoxy Coated Aluminium Rod & H.D. Ball	each	304.00
7497	PTMT Ball Cock 25 mm complete with Epoxy Coated Aluminium Rod & H.D. Ball	each	571.00
7498	PTMT Ball Cock 40 mm complete with Epoxy Coated Aluminium Rod & H.D. Ball	each	955.00
7499	PTMT Ball Cock 50 mm complete with Epoxy Coated Aluminium Rod & H.D. Ball	each	1412.00
7500	PTMT Angle Stop cock with Flange 15 mm	each	154.00
7501	PTMT Swiveling shower 15 mm	each	140.00
7502	PTMT Shower Arm with flange 225 mm	each	98.00
7503	PTMT Liquid soap container of 400 ml. capacity	each	198.00
7504	PTMT - Towel Ring 215x200x37 mm	each	135.00
7505	PTMT - Towel Rail (450 mm long)	each	258.00
7506	PTMT - Towel Rail (600 mm long)	each	312.00
7507	PTMT Shelf 450x124x36 mm	each	336.00
7508	PTMT Urinal spreader 15 mm	each	130.00
7509	PTMT Soap dish / holder 138x102x75 mm	each	155.00
7510	PTMT Flange 15 mm (Waste Coupling)	each	16.00
7511	PTMT extension Nipple 15 mm	each	33.00
7512	PTMT Handle 125x34x24 mm	each	33.00
7513	PTMT Handle 150x34x24 mm	each	39.00
7514	PTMT But Hinges 75x60x10 mm	each	55.00
7515	PTMT But Hinges 100x75x10 mm	each	70.00
7516	PTMT Tower Bolt 152x42x18 mm	each	70.00
7517	PTMT Tower Bolt 202x42x18 mm	each	92.00
7518	PTMT Door Catcher 72x42 mm	each	29.00
	Coir Veneered Board		
7552	4 mm thick	sqm	260.00
7553	6 mm thick	sqm	350.00
7555	12 mm thick	sqm	625.00
7556	18 mm thick	sqm	930.00
7565	PTMT extension nipple 20 mm	each	56.00
7566	PTMT extension nipple 25 mm	each	73.00
7621	Hubless centrifugally cast (spun) iron pipes as per IS 15905 - 100 mm dia (3000 mm length pipe)	metre	700.00
7622	Hubless centrifugally cast (spun) iron pipes as per IS 15905 - 75 mm dia		

BASIC RATES

	(3000 mm length pipe)	metre	570.00
7623	Hubless centrifugally cast (spun) iron plain bend as per IS 15905 - 100mm dia	each	230.00
7624	Hubless centrifugally cast (spun) iron plain bend as per IS 15905 - 75 mm dia	each	160.00
7625	Hubless centrifugally cast (spun) iron double equal plain junction as per IS 15905 - 100x100x100x100 mm dia	each	510.00
7626	Hubless centrifugally cast (spun) iron double equal plain junction as per IS 15905 - 75x75x75x75 mm dia	each	275.00
7627	Hubless centrifugally cast (spun) iron single equal plain junction as per IS 15905 - 100x100x100 mm dia	each	400.00
7628	Hubless centrifugally cast (spun) iron single equal plain junction as per IS 15905 - 75x75x75 mm dia	each	215.00
7629	Hubless centrifugally cast (spun) iron double unequal plain junction as per IS 15905 - 100x100x75x75 mm dia	each	400.00
7630	Hubless centrifugally cast (spun) iron single unequal plain junction as per IS 15905 - 100x100x75 mm dia	each	375.00
7631	Hubless centrifugally cast (spun) iron double equal plain invert branch as per IS 15905 - 100x100x100x100 mm dia	each	625.00
7632	Hubless centrifugally cast (spun) iron single equal plain invert branch as per IS 15905 - 100x100x100 mm dia	each	390.00
7633	Hubless centrifugally cast (spun) iron single equal plain invert branch as per IS 15905 - 75x75x75 mm dia	each	260.00
7634	Hubless centrifugally cast (spun) iron single unequal plain invert branch 45 degree as per IS 15905 - 100x100x75 mm dia	each	430.00
7635	Hubless centrifugally cast (spun) iron 65 mm offset with 100 mm dia pipe as per IS 15905	each	360.00
7636	Hubless centrifugally cast (spun) iron 65 mm offset with 75 mm dia pipe as per IS 15905	each	295.00
7637	Hubless centrifugally cast (spun) iron 130 mm offset with 100 mm dia pipe as per IS 15905	each	440.00
7638	Hubless centrifugally cast (spun) iron 130 mm offset with 75 mm dia pipe as per IS 15905	each	310.00
7639	Hubless centrifugally cast (spun) iron bend with access door - 100mm dia as per IS 15905	each	365.00
7640	Hubless centrifugally cast (spun) iron bend with access door - 75mm dia as per IS 15905	each	290.00
7641	Hubless centrifugally cast (spun) iron terminal guard (slotted cowl) - 100 mm dia as per IS 15905	each	270.00
7642	Hubless centrifugally cast (spun) iron trap with 100 mm inlet and 100 mm outlet as per IS 15905	each	540.00
7643	Hubless centrifugally cast (spun) iron trap with 100 mm inlet and 75 mm outlet as per IS 15905	each	385.00
7644	SS 304 grade shielded coupling with EPDM rubber gasket for 100mm dia Hubless centrifugally cast (spun) iron	each	275.00
7645	SS 304 grade shielded coupling with EPDM rubber gasket for 75 mm dia Hubless centrifugally cast (spun) iron	each	250.00

BASIC RATES

7651	Ductile Iron Pipes Class K-9 Conforming to I.S. 8329- 100 mm dia	metre	765.00
7652	Ductile Iron Pipes Class K-9 Conforming to I.S. 8329 -150 mm dia	metre	1150.00
7653	Ductile Iron Pipes Class K-9 Conforming to I.S. 8329- 200 mm dia	metre	2155.00
7654	Ductile Iron Pipes Class K-9 Conforming to I.S. 8329 -250 mm dia	metre	2952.00
7655	Ductile Iron Pipes Class K-9 Conforming to I.S. 8329-300 mm dia	metre	3350.00
7656	Ductile Iron Pipes Class K-9 Conforming to I.S. 8329- 350 mm dia	metre	3800.00
7657	Ductile Iron Pipes Class K-9 Conforming to I.S. 8329- 400 mm dia	metre	4300.00
7658	Ductile Iron Pipes Class K-9 Conforming to I.S. 8329- 450 mm dia	metre	5000.00
7659	Ductile Iron Pipes Class K-9 Conforming to I.S. 8329- 500 mm dia	metre	6270.00
7660	Ductile Iron Pipes Class K-9 Conforming to I.S. 8329 -600 mm dia	metre	7560.00
7661	Ductile Iron Pipes Class K-9 Conforming to I.S. 8329 -700 mm dia	metre	10500.00
7662	Ductile Iron Pipes Class K-9 Conforming to I.S. 8329- 750 mm dia	metre	11350.00
7663	Ductile Iron Pipes Class K-9 Conforming to I.S. 8329- 800 mm dia	metre	11450.00
7664	Ductile Iron Pipes Class K-9 Conforming to I.S. 8329- 900 mm dia	metre	13900.00
7665	Ductile Iron Pipes Class K-9 Conforming to I.S. 8329 -1000 mm dia	metre	15550.00
7666	Rubber Gasket conforming to I.S. 5382 of S.B.R Quality 100 mm dia	each	29.00
7668	Rubber Gasket conforming to I.S. 5382 of S.B.R Quality 150 mm dia	each	33.00
7669	Rubber Gasket conforming to I.S. 5382 of S.B.R Quality 200 mm dia	each	60.00
7670	Rubber Gasket conforming to I.S. 5382 of S.B.R Quality 250 mm dia	each	70.00
7671	Rubber Gasket conforming to I.S. 5382 of S.B.R Quality 300 mm dia	each	100.00
7672	Rubber Gasket conforming to I.S. 5382 of S.B.R Quality 350 mm dia	each	116.00
7673	Rubber Gasket conforming to I.S. 5382 of S.B.R Quality 400 mm dia	each	210.00
7674	Rubber Gasket conforming to I.S. 5382 of S.B.R Quality 450 mm dia	each	250.00
7675	Rubber Gasket conforming to I.S. 5382	each	270.00

BASIC RATES

7676	of S.B.R Quality 500 mm dia Rubber Gasket conforming to I.S. 5382	each	356.00
7677	of S.B.R Quality 600 mm dia Rubber Gasket conforming to I.S. 5382	each	510.00
7678	of S.B.R Quality 700 mm dia Rubber Gasket conforming to I.S. 5382	each	600.00
7679	of S.B.R Quality 750 mm dia Rubber Gasket conforming to I.S. 5382	each	705.00
7680	of S.B.R Quality 800 mm dia Rubber Gasket conforming to I.S. 5382	each	910.00
7681	of S.B.R Quality 900 mm dia Rubber Gasket conforming to I.S. 5382	each	1080.00
7682	of S.B.R Quality 1000 mm dia Ductile iron K-12 specials suitable for push on jointing upto 600 mm dia.	quintal	12400.00
7683	Ductile iron K-12 specials suitable for push on jointing over 600 mm dia.	quintal	17200.00
7684	Ductile iron specials suitable for mechanical jointing as per I.S. 9523 upto 600 mm dia	quintal	13050.00
7685	Ductile iron specials suitable for mechanical jointing as per I.S. 9523 over 600 mm dia	quintal	18750.00
7686	Ductile Iron Pipe Class K-9 flanges and welding 100 mm dia	metre	1100.00
7687	Ductile Iron Pipe Class K-9 flanges and welding 150 mm dia	metre	1650.00
7688	Ductile Iron Pipe Class K-9 flanges and welding 200 mm dia K-9 flanges and welding.	metre	2075.00
7689	Ductile Iron Pipe Class K-9 flanges and welding 250 mm dia	metre	2950.00
7690	Ductile Iron Pipe Class K-9 flanges and welding 300 mm dia	metre	3790.00
7691	Ductile Iron Pipe Class K-9 flanges and welding 350 mm dia	metre	4780.00
7692	Ductile Iron Pipe Class K-9 flanges and welding 400 mm dia	metre	6150.00
7693	Ductile Iron Pipe Class K-9 flanges and welding 450 mm dia	metre	6453.00
7694	Ductile Iron Pipe Class K-9 flanges and welding 500 mm dia	metre	9180.00
7695	Ductile Iron Pipe Class K-9 flanges and welding 600 mm dia	metre	12150.00
7696	Ductile Iron Pipe Class K-9 flanges and welding 700 mm dia	metre	14370.00
7697	S&S Centrifugally (Spun) C.I. Pipe class LA 100 mm dia	metre	857.00
7698	S&S Centrifugally (Spun) C.I. Pipe class LA 125 mm dia	metre	1067.00
7699	S&S Centrifugally (Spun) C.I. Pipe class LA 150 mm dia	metre	1286.00
7700	S&S Centrifugally (Spun) C.I. Pipe class LA 200 mm dia	metre	2190.00
7701	S&S Centrifugally (Spun) C.I. Pipe class LA 250 mm dia	metre	2857.00
7702	S&S Centrifugally (Spun) C.I. Pipe class LA 300 mm dia	metre	3857.00
7703	S&S Centrifugally (Spun) C.I. Pipe class LA 350 mm dia	metre	4619.00
7704	S&S Centrifugally (Spun) C.I. Pipe class LA 400 mm dia	metre	6095.00
7705	S&S Centrifugally (Spun) C.I. Pipe class LA 450 mm dia	metre	7381.00
7706	S&S Centrifugally (Spun) C.I. Pipe class LA 500 mm dia	metre	8571.00
7707	S&S Centrifugally (Spun) C.I. Pipe class LA 600 mm dia	metre	11995.00
	S&S Centrifugally (Spun) C.I. Pipe specials as per IS 1538 suitable for lead jointing		
7708	Upto 300 mm dia.	quintal	5190.00

BASIC RATES

7709	Over 300 mm dia. S&S Centrifugally (Spun) C.I. Pipe specials suitable for mechanical joint as per IS 13382	quintal	6200.00
7710	Upto 300 mm dia.	quintal	8571.00
7711	Over 300 mm dia.	quintal	9048.00
7712	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 100 mm dia	metre	1310.00
7713	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 150 mm dia	metre	2048.00
7714	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 200 mm dia	metre	3238.00
7715	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 250 mm dia	metre	3905.00
7716	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 300 mm dia	metre	4990.00
7717	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 350 mm dia	metre	6286.00
7718	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 400 mm dia	metre	8143.00
7719	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 450 mm dia	metre	10381.00
7720	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 500 mm dia	metre	12914.00
7721	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 600 mm dia	metre	17905.00
7722	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 100 mm dia	metre	1000.00
7723	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 150 mm dia	metre	1400.00
7724	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 200 mm dia	metre	1600.00
7725	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 250 mm dia	metre	1800.00
7726	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 300 mm dia	metre	2250.00
7727	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 350 mm dia	metre	2650.00
7728	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 400 mm dia	metre	3175.00
7729	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 450 mm dia	metre	3852.00
7730	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 500 mm dia	metre	4350.00
7731	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 600 mm dia	metre	5600.00
7732	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 700 mm dia	metre	7300.00
7733	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 800 mm dia	metre	9100.00
7734	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 900 mm dia	metre	11800.00
7735	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 1000 mm dia	metre	12300.00
7736	Extruded burnt flyash clay sewer bricks conforming to I.S 4885	1000 nos.	5000.00
7737	Fly ash bricks conforming to I.S. 12894	1000 nos.	3950.00
7738	Calcium Silicate Bricks machine moulded confirming to I.S. 4139	1000 nos.	5050.00
7739	Modified Bitumen Refinery produced CRMB-55	tonne	54762.00
7741	Modified Bitumen Refinery produced CRMB-60	tonne	54572.00
7742	Bitumen Emulsion M.S. (medium setting) conforming to IS : 8887	tonne	55882.00
7743	M.S.pipe 150 mm dia casing pipe	metre	1126.00
7744	M.S pipe 200mm dia casing pipe	metre	1400.00

BASIC RATES

7745	PVC blind pipe 150 mm dia as per IS : 12818	metre	527.00
7746	PVC blind pipe 200mm dia as per IS: 12818	metre	800.00
7747	MS cap 150 mm dia	each	150.00
7748	MS cap 200 mm dia	each	200.00
7749	MS bail plug 150 mm dia	each	200.00
7750	MS bail plug 200 mm dia	each	220.00
7751	PVC slotted pipe 150 mm dia as per IS : 12818	metre	550.00
7752	PVC slotted pipe 200 mm dia as per IS: 12818	metre	840.00
7753	Stone Boulder 50 mm to 200 mm	cum	500.00
7754	Gravel 5 mm to 10 mm	Cum	630.00
7755	Gravel 1.5 mm to 2 mm	Cum	630.00
7756	Gravel 3 mm to 6 mm	Cum	630.00
7757	M.S. pipe 100 mm dia casing pipe	metre	780.00
7758	UPVC blind pipe 100 mm dia as per IS : 12818	metre	405.00
7759	UPVC slotted pipe 100 mm dia as per IS:12818	metre	425.00
7760	M.S. cap 100 mm dia	each	135.00
7761	M.S.bail plug 100 mm dia	each	160.00
7762	Precast R.C.C. perforated slab	each	875.00
7763	Water supply tanker of 5000 ltr. Capacity	each	877.00
7764	M.S socket 100 mm dia	each	125.00
7765	M.S. socket 150 mm dia	each	205.00
7766	M.S.socket 200 mm dia	each	265.00
7767	Stone cleaning chemical approved by ASI	litre	270.00
7768	Water repellent chemical approved by ASI	litre	1100.00
7769	Stone surface strengthening chemical approved by ASI	litre	835.00
7770	Turpentine oil	litre	85.00
7771	Liquid Amonia 5 %	litre	160.00
7772	Pea Gravel	Cum	630.00
7773	Coloured inter locking C.C. paver Block (60 mm thick, M-35)	sqm	450.00
7774	Stone size 10x10x7.50cm	each	9.00
7775	Sodium Pentachlorophenate	kg	500.00
7776	Concrete paver block of grade M-30 made of C&D waste (60mm thickness)	sqm	295.00
7800	Ceramic Glazed Tiles 1st quality minimum thickness 5mm in all colours shades and designs except burgundy, bottle green, black	sqm	310.00
7801	Ceramic Glazed Tiles Ist quality 300 x 300 mm in all shades, designs of white, Ivory,Grey Fume Red Brown etc	sqm	310.00
7802	Ceramic Glazed Tiles Ist quality 300 x 300 mm in all shades, designs except white, Ivory, Grey & Fume Red Brown etc	sqm	356.00
7803	Rectified Ceramic Glazed Tiles Ist quality 300 x 300 mm or more in all shades, designs of white, Ivory, Grey & Fume Red Brown etc	sqm	410.00
7804	Rectified Ceramic Glazed Tiles Ist quality 300 x 300 mm or more in all shades, designs except white, Ivory, Grey & Fume Red Brown etc	sqm	410.00
7805	Salem Stainless steel AISI - 304 (18/8) Orrisa pattern W.C. pan 724 mm X 578 mm	each	4500.00
7806	Salem Stainless Steel AISI-304 (18/8) Round basin 405x355 mm	each	1500.00
7807	Salem Stainless Steel AISI-304 (18/8) wash basin 530x345 mm	each	2000.00
7808	Centrifugally cast (spun) iron.. S&S 100 mm inlet & 100 mm outlet	each	450.00

BASIC RATES

7809	Centrifugally cast (spun) iron S.C.I. S&S 100 mm inlet & 75mm outlet	each	500.00
7850	Agaria White marble slab plain 18 mm thick	sqm	1824.00
7857	PTMT Grating square slit 150 mm	each	73.00
7858	PTMT Urinal Cock 15 mm dia.	each	115.00
7859	PTMT Bib Cock with nozzle 15 mm	each	138.00
7860	PTMT Piller Cock fancy 15 mm	each	222.00
7861	PTMT Stop Cock (concealed) 15 mm	each	197.00
7862	PVC connection pipe with PTMT nuts 15 mm nominal bore and 30cm length.	each	38.00
7863	PVC connection pipe with PTMT nuts 15 mm nominal bore and 45cm length.	each	52.00
7864	PTMT extension nipple 15 mm	each	34.00
7865	PTMT extension nipple 20 mm	each	44.00
7866	PTMT extension nipple 25 mm	each	69.00
7893	Tactile tile	sqm	1000.00
7895	Matt finished vitrified tile 100x100 x16 mm	sqm	1000.00
7896	Vitrified tile	sqm	500.00
7900	Modular common burnt clay bricks of class designation 7.5	1000 nos.	NA
7901	Machine moulded perforated common burnt clay FPS (Non modular) bricks of class designation 12.5	1000 nos.	NA
7902	Machine moulded common burnt clay modular perforated bricks of class designation 12.5	1000 nos.	NA
7903	Machine Moulded common burnt clay FPS (non modular) bricks of class designation 12.5	1000 nos.	NA
7904	Machine Moulded common burnt clay tile bricks of class designation 12.5	1000 nos.	NA
7911	Chemical Rust Remover	litre	210.00
7912	Hire charges of Drill machine upto 30 mm dia	day	150.00
7913	Epoxy	kg	550.00
7914	SBR Polymer	kg	190.00
7915	Woven PVC cloth	sqm	25.00
7916	Hire charges of sand blasting equipment	day	500.00
7917	Hire charges of compressure	day	900.00
7918	25mm thick cement concrete shotcrete(guniting) with compressor	sqm	110.00
7919	50mm thick cement concrete shotcrete(guniting) with compressor	sqm	200.00
7920	75mm thick cement concrete shotcrete(guniting) with compressor	sqm	310.00
7921	Adhesive chemical	ml	2.00
7922	Bit of drilling machine for Hole upto 30mm dia	each	550.00
7923	GI injection nipple 12mm dia, 75mm long	each	50.00
7924	Blowing compressed air for cleaning holes upto 30mm dia	each	10.00
7925	L shaped 100mm long, 10mm dia mild steel shear key	kg	70.00
7926	Welding charges of shear key to existing reinforcement	each	2.00
7927	Acrylic Polymer chemical for cracks	kg	31.00
7928	Hire charges of Plant and machinery, it can inject - 350kg/day	day	100.00
7929	Shear loops (6mm dia GI wire rope) (For vertical joints) 6 nos on each side	each	200.00
7930	dowel tubes (Corrugated GI pipes 50 to 80mm dia) (For horizontal joints)	metre	135.00
7931	Hooks for lifting (Alloy steel) having 2.5 tonne capacity	each	275.00
7996	Factory made EPS light weight composite sandwitched wall/roof		

BASIC RATES

7997	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 will be non asbestos fiber cement board confirming to IS 14862:2000 or Calcium silicate board confirming to EN 14306:2009 of 5mm thick each Factory made EPS light weight composite sandwiched 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 will be non asbestos fiber cement board confirming to IS 14862:2000 or Calcium silicate board confirming to EN 14306:2009 of 5mm thick each	sqm	750.00
7998	Factory made EPS light weight composite sandwiched 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 will be non asbestos fiber cement board confirming to IS 14862:2000 or Calcium silicate board confirming to EN 14306:2009 of 5mm thick each	sqm	865.00
7999	Factory made EPS light weight composite sandwiched 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 will be non asbestos fiber cement board confirming to IS 14862:2000 or Calcium silicate board confirming to EN 14306:2009 of 5mm thick each	sqm	1070.00
8000	Factory made EPS light weight composite sandwiched 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 will be non asbestos fiber cement board confirming to IS 14862:2000 or Calcium silicate board confirming to EN 14306:2009 of 5mm thick each	sqm	1300.00
8001	24 mm thick Factory made shutters with style, rails and panels of PVC extruded sections in white, grey or wooden finish	sqm	1545.00
8002	30 mm thick Factory made shutters with style, rails and panels of PVC extruded sections in white, grey or wooden finish	sqm	1892.00
8003	Factory made PVC rigid foam panelled shutter i/c carriage	sqm	1978.00
8004	Factory made PVC rigid foam panelled shutter as per IS : 4020 i/c carriage	sqm	1892.00
8006	Factory made PVC rigid foam sheet 1 mm thick	sqm	2236.00
8007	Factory made PVC rigid foam sheet 5 mm thick	sqm	155.80
8008	Factory made prelaminated PVC rigid foam sheet 5 mm thick	sqm	632.00
8010	48mmX40mmX1.5mm thick Factory made door frame of PVC extruded sections in white, grey or wooden finish	sqm	752.00
8011	Factory made door frame PVC extruded sheet i/c carriage	metre	130.00
8012	Adhesive solvent cement	metre	260.00
8013	Factory made EPS Core wallpanel /roof panel sandwiched between two Engineered welded wire fabric mesh of 3 mm dia G.I. wire mesh, with 50 mm pitch in both the directions, kept at 120-135 mm gap and interconnected by the zig zag G.I. wire of 3 mm dia at alternate	kg	140.00

BASIC RATES

	row by welding.	sqm	1750.00
8014	Factory made door frame of size 50x47 mm with wall thickness 5 mm made of single piece extruded profile	mtr.	430.00
8015	Expanded poly ethylene Foam sheet 4mm thick of Density 40kg/m3	sqm	20.00
8016	High Density expanded poly ethylene (EPE) Foam 1mm thick	sqm	10.00
8017	Fire rated door frame made with 1.6 mm thick G.I sheet (120 minutes fire rating)	metre	1200.00
8018	Fire rated door shutter made with 1.6 mm thick G.I sheet (120 minutes fire rating) including hinges (without glass panels)	sqm	6000.00
8019	GI sheet 0.8 mm thick confirming to IS 277:1992	kg	102.00
8020	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 50 mm pitch in both the directions, connected by G.I. wire of 3mm dia at alternate row by welding	sqm	600.00
8021	Bamboo wood Tile Flooring 14mm thick of minimum size 1800mm x130mm	sqm	3470.00
8022	Bamboo wood Quarter Round 18mm thick of size 1900mm x 18mm	metre	115.00
8023	Bamboo wood door reducer 14mm thick of size 1900mm x 44mm	metre	255.00
8024	Bamboo wood Skirting 14mm thick of Size 1900mm x 85mm	metre	300.00
8025	Bamboo wood Tile Wall Cladding 10mm thick of size 1900mm x 135mm	sqm	3400.00
8026	Bamboo wood T-mold 14mm thick of size 1900mm x 44mm	metre	250.00
8027	Bamboo wood Threshold 14mm thick of size 1900mm x 44mm	metre	255.00
8028	Bamboo wood shutter of doors	10 cudm	1700.00
8029	Bamboo wood panelling (10mm thick)	10 cudm	1680.00
8030	Superior class Bamboo wood door frame 65 mm thick,	10 cudm	1675.00
8031	Aluminium sheets Grade 5052, 4 mm thick for wall panel/deck panel/ WRB panel/Kicker Panels/door closing panels (for form work)	sqm	8500.00
8032	Aluminium sheets Grade 5052, 4 mm thick for Internal Corner/Column Corners/ (for form work)	sqm	11500.00
8033	Aluminium sheets Grade 5052, 4 mm thick for Mid Soldier/End soldier (for form work)	sqm	32000.00
	Accessories for aluminium form work		
8034	External corner 2050 mm	each	1400.00
8035	External corner 825 mm	each	590.00
8036	soldier tie 370mm	each	290.00
8037	Adjustable prop-2.0 x2.0 m	each	1200.00
8038	Pin-50	each	15.00
8039	Pin-127	each	55.00
8040	wedge	each	14.00
8041	wall tie-150 (355 mm)	each	45.00
8042	Polythene Sleeve 90 x 150mm	each	3.00
8043	Polythene Roll - 150mm Long.	each	6.00
8044	Vertical Soldier -1100mm	each	370.00
8045	Wall Attached Bracket 600x1000mm	each	990.00
8046	Allignment Pipe - 3.00 Mtr.	each	1000.00
8047	Allignment Bracket	each	480.00
8048	Tie Rod for Bracket - 500mm	each	120.00
8049	Anchor Wing Nut Ø100 mm	each	65.00

BASIC RATES

8050	Debit Pin - 250mm	each	60.00
8051	PVC Pipe Ø20mm - 150mm long	each	5.00
8052	PVC Cone	each	5.00
8053	Bolt+Nut - 16 x 80 mm	each	30.00
8054	Flat Washer Ø16, 3mm thik	each	5.00
8055	Bolt+Nut - 16 x 30 mm	each	18.00
8056	Door spacer 45x45x5-1135mm Long	each	365.00
8057	Door spacer 45x45x5-985 mm Long	each	320.00
8100	Powder coated M.S. Butt Hinges 100x58x1.9 mm	10 Nos.	130.00
8101	SS ball bearing of size 100 x89x3mm	each	450.00
8116	Zinc alloy (white powder coated) 3D Hinges for uPVC door	each	455.00
8117	Zinc alloy (white powder coated) handles with zinc plated mild steel multi point locking having transmission gear, cylinder with keeps and one side key for uPVC casement door	each set	2635.00
8118	Zinc alloy (white powder coated) handles along with zinc plated mild steel multi point locking having transmission gear with keeps for uPVC sliding window	each set	1535.00
8119	Zinc alloy (white powder coated) handles with key along with zinc plated mild steel multi point locking having transmission gear with keeps for uPVC sliding door	each set	1265.00
8121	uPVC extruded (small series) casement window frame size 47x50mm	metre	280.00
8122	uPVC extruded (small series) casement window sash/window mullion size 47x68 mm	metre	311.00
8125	uPVC extruded glazing bead of appropriate dimension for small series casement window Sash	metre	100.00
8126	uPVC extruded (big series) casement window frame size 67x60 mm	metre	351.00
8127	uPVC extruded (big series) casement door frame size 67x64 mm	metre	396.00
8128	uPVC extruded (big series) casement window sash/window mullion/door mullion size 67x80 mm	metre	469.00
8129	uPVC extruded (big series) casement door sash size 67x110 mm	metre	568.00
8130	uPVC extruded glazing bead of appropriate dimension for big series casement window/door sash	metre	135.00
8131	uPVC extruded glazing bead of appropriate dimension for small series sliding window sash	metre	66.00
8132	uPVC extruded glazing bead of appropriate dimension for big series of sliding window/ door sash	metre	85.00
8133	uPVC extruded (small series) 2 track sliding window frame size 52x 44mm	metre	314.00
8134	uPVC extruded (big series) 2 track sliding window/door frame size 67x50mm	metre	424.00
8135	uPVC extruded (small series) 3 track sliding window frame size 92x44 mm	metre	418.00
8136	uPVC extruded (big series) 3 track sliding window/door frame size 116x45mm	metre	583.00
8137	uPVC extruded (small series) 2 track sliding window sash/3 track sliding window sash size 32x60mm	metre	291.00
8138	uPVC extruded (big series) 2 track sliding window sash size 46x62mm	metre	357.00
8139	uPVC extruded (big series) 3 track sliding window sash size 46x62mm	metre	358.00

BASIC RATES

8140	uPVC extruded interlock of appropriate dimension for small series sliding window sash	metre	88.00
8141	uPVC extruded interlock of appropriate dimension for big series sliding window/ door sash	metre	98.00
8142	uPVC extruded inline adaptor of appropriate dimension for big series sliding window/door sash	metre	98.00
8143	uPVC extruded 2 track sliding door sash/ 3 track sliding door sash (big series) size 46x82mm	metre	385.00
8144	Bamboo Mat corrugated sheets 3.5 to 4mm thick conforming to IS 15476:2004	sqm	2648.00
8145	Bamboo Mat Ridge cap 3.5 to 4mm thick conforming to IS 15476:2004	metre	2570.00
8146	3mm thick Bamboo Mat Board conforming to IS 13958:1994	sqm	1508.00
8147	4mm thick Bamboo Mat Board conforming to IS 13958:1994	sqm	1738.00
8148	6mm thick Bamboo Mat Board conforming to IS 13958:1994	sqm	2098.00
8149	9mm thick Bamboo Mat Board conforming to IS 13958:1994	sqm	2688.00
8150	12mm thick Bamboo Mat Board conforming to IS 13958:1994	sqm	3115.00
8200	A.P.P. modified polymeric felt (two layers) 1.5 mm thick	sqm	80.00
8201	A.P.P. modified polymeric felt (two layers) 2 mm thick	sqm	120.00
8202	Aluminium Powder coated lever type handle	each	NA
8203	APP modified 2 mm thick membrane reinforced with glass fibre matt	sqm	130.00
8204	APP modified 3 mm thick membrane reinforced with glass fibre matt	sqm	190.00
8205	APP modified 3 mm thick membrane reinforced with polyester matt	sqm	210.00
8206	Bitumen primer for bitumen membrane	litre	85.00
8207	Geotextile 120 grams per sqm membrane	sqm	45.00
8210	Stainless steel screws 50 mm	100 No.	300.00
8211	Stainless steel screws 40 mm	100 No.	250.00
8212	Stainless steel screws 30 mm	100 No.	230.00
8213	Stainless steel screws 25 mm	100 No.	0.00
8214	Stainless steel screws 20 mm	100 No.	150.00
8215	Stainless steel Butt Hinge 125x64x1.90 mm IS : 12817	10 Nos.	310.00
8216	Stainless steel Butt Hinge 100x58x1.90 mm IS : 12817	10 Nos.	280.00
8217	Stainless steel Butt Hinge 75x47x1.80 mm IS : 12817	10 Nos.	180.00
8218	Stainless steel Butt Hinge 50x37x1.50 mm IS : 12817	10 Nos.	150.00
8219	Stainless steel Butt Hinge (heavy weight) 125x64x2.50 mm IS : 12817 marked	10 Nos.	375.00
8220	Stainless steel Butt Hinge (heavy weight) 100x60x2.50 mm IS : 12817 marked	10 Nos.	275.00
8221	Stainless steel Butt Hinge (heavy weight) 75x50x2.50 mm IS : 12817 marked	10 Nos.	230.00
8222	M.S. Butt Hinges (heavy weight) 125x90x4.00 mm I.S : 1341 marked	10 Nos.	230.00
8223	M.S. Butt Hinges (heavy weight) 100x75x3.50 mm I.S: 1341 marked	10 Nos.	180.00
8224	M.S. heavy weight butt hinges 75x60x3.1 mm IS: 1341 marked	10 Nos.	110.00
8225	M.S. Butt Hinges (heavy weight) 50x40x2.50 mm I.S : 1341 marked	10 Nos.	90.00
8226	Concealed zinc coated hinges 19-20 mm thick with mounting plate	10 Nos.	460.00
8300	PE-AL-PE Composite Pressure Pipe 1216 mm	metre	80.00
8301	PE-AL-PE Composite Pressure Pipe 1620 mm	metre	90.00
8302	PE-AL-PE Composite Pressure Pipe 2025 mm	metre	140.00

BASIC RATES

8303	PE-AL-PE Composite Pressure Pipe 2532 mm	metre	180.00
8304	PE-AL-PE Composite Pressure Pipe 3240 mm	metre	280.00
8305	PE- AL-PE composite pressure pipe 4050mm	metre	360.00
8306	PPR Union 20 mm	each	60.00
8307	PPR Union 25 mm	each	110.00
8308	PPR Union 32 mm	each	150.00
8309	PPR Union 40 mm	each	220.00
8310	PPR Union 50 mm	each	410.00
8311	PPR Union 63 mm	each	550.00
8312	PPR Union 75 mm	each	1100.00
8350	Pipe holding clamps 1216 mm	each	5.00
8351	Pipe holding clamps 1620 mm	each	7.00
8352	Pipe holding clamps 2025 mm	each	9.00
8353	Pipe holding clamps 2532 mm	each	19.00
8354	Pipe holding clamps 3240 mm	each	21.00
8355	Fitting hoding clamps 1216/1620 mm	each	22.00
8356	Equal Tee 1216 mm	each	125.00
8357	Equal Tee 1620 mm	each	160.00
8358	Equal Tee 2025 mm	each	243.00
8359	Equal Tee 2532 mm	each	247.00
8360	Equal Tee 3240 mm	each	377.00
8361	Reducing Tee 1620 x mm with all branches	each	153.00
8363	Reducing Tee 2025 x mm with all branches	each	224.00
8364	Reducing Tee 2532 x mm with all branches	each	332.00
8365	Reducing Tee 3240 x mm with all branches	each	393.00
8366	Female Branch Tee 1216x1216x15 mm thread	each	127.00
8367	Female Branch Tee 1620x1620x15 mm thread	each	147.00
8368	Female Branch Tee 2025x2025x25 mm thread	each	214.00
8369	Female Branch Tee 2532x2532x32 mm thread	each	243.00
8370	Female Branch Tee 3240x3240x40 mm thread	each	294.00
8371	Equal Elbow 2532 mm	each	192.00
8372	Equal Elbow 3240 mm	each	242.00
8373	Female Elbow 1216x15 mm thread	each	86.00
8374	Female Elbow 1620x15 mm thread	each	97.00
8376	Female Elbow 2025x25 mm thread	each	137.00
8378	Female Elbow 3240x40 mm thread	each	233.00
8379	Male Thread Connector 1216x15 mm thread	each	50.00
8380	Male Thread Connector 1620x15 mm thread	each	60.00
8381	Male Thread Connector 1620x20 mm thread	each	64.00
8382	Male Thread Connector 2025x25 mm thread	each	92.00
8383	Male Thread Connector 2532x32 mm thread	each	85.00
8384	Female Thread Connector 3240x40 mm thread	each	209.00
8385	Female Thread Connector 1216x15 mm thread	each	82.00
8386	Female Thread Connector 1620x15 mm thread	each	93.00
8391	Couplers 1216 mm	each	92.00
8392	Couplers 1620 mm	each	113.00
8393	Couplers 2025 mm	each	172.00

BASIC RATES

8394	Couplers 2532 mm	each	186.00
8395	Couplers 3240 mm	each	257.00
8396	Reducers 1620 x 1216 mm	each	103.00
8397	Reducers 2025 x 1216 mm	each	136.00
8398	Reducers 2025 x 1620 mm	each	146.00
8399	Reducers 2532 x mm with all Reduced end	each	168.00
8400	Reducers 3240 x mm with all Reduced end	each	219.00
8500	Water for jetting / blowback	1000 litres	1500.00
8501	Polymer modified cementation coating-	kilogram	140.00
8502	Fibre glass cloth	sqm	32.00
8504	Multi surface paint	litre	336.00
8505	Acrylic exterior paint	litre	240.00
8506	Premium Acrylic exterior paint	litre	245.00
8507	Textured exterior paint	litre	312.00
8508	Primer for cement paint	litre	95.00
8509	Special Primer (C.W.)	litre	162.00
8510	Metal Primer (U.G.)	litre	0.00
8511	Fibre reinforced elastomeric liquid water proofing membrane litre 198.69	litre	230.00
8512	Cementitious water proofing coating with elastic polymers	kg	225.00
8513	Acrylic modified resin based texture	kg	42.00
8514	40 mm long S.S screws with plastic rawl plugs	100 nos.	42.00
8515	Galavanised MS 8 mm outer diameter M-6 dash fastener 50mm long	each	42.00
8516	ZMB 60/equivalent	kg	120.00
8517	ZMB thinner	litre	262.00
8518	Zycoprime / equivalent	litre	280.00
8519	Zycosil / equivalent	litre	1800.00
8520	Elastobar / equivalent	kg	300.00
8552	Mineral fibre beveled tegular edged ceiling tiles 595 x595mm,16 mm thick	sqm	835.00
8553	Mineral fibre beveled tegular edged ceiling tiles 595 x595mm,16 mm thick with bio-block conforming to ISO 5 (class 100) specifications.	sqm	925.00
8554	Mineral fiber beveled tegular edged ceiling tiles 595 x595mm,20 mm thick.	sqm	1045.00
8555	G.I main runner 15 x32 mm of 3000 mm length, 0.33 mm thick	each	250.00
8556	G.I cross-T 15 x32 mm of 1200 mm length, 0.33 mm thick	each	100.00
8557	G.I cross-T 15 x32 mm of 600 mm length, 0.33 mm thick	each	50.00
8558	G.I hanger rod 6mm dia fully threaded upto 1000 mm length	each	50.00
8559	Stainless steel U Channel of size (50x25x2mm)	metre	160.00
8560	Non staining water resistant clear silicon	metre	70.00
8561	Extruded polystyrene rigid insulation board 50 mm thick	sqm	580.00
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	850.00
8563	15 mm thick, light weight, integral densified micro look edged,false ceiling tiles of size 595x595 mm.	sqm	750.00
8564	15 mm thick, light weight,fully perforated square/butt edge integral densified,false ceiling tiles of size 595x595 mm.	sqm	950.00
8565	Galavanised MS hanger rod 6 mm dia MS fully threaded up to 1000mm length	each	50.00

BASIC RATES

8566	Powder coated steel section main-T ceiling sections 15x42x0.40 mm (3000 mm long)	each	300.00
8567	Galvanized mild steel perimeter wall angle 22x19x0.40 mm (3000mm long)	each	150.00
8568	Powder coated Galvanised Iron intermediate cross-T section 15x42x 0.40 mm (1200 mm long)	each	150.00
8569	Powder coated Galvanized Iron intermediate cross-T section 15x42x 0.40mm (600 mm long)	each	80.00
8570	GI Main T ceiling section 30x25x0.3 mm (3 metre long)	each	250.00
8571	GI Perimeter wall angle 25x25x0.4 mm (3 metre long)	each	250.00
8572	GI Intermediate cross T section 25x25x0.3 mm (1.2 metre long)	each	150.00
8573	GI Intermediate cross T section 25x25x0.3 mm (0.6 metre long)	each	75.00
8576	Powder coated Galvanized Iron intermediate cross-T section wire diameter 3.00 mm).	sqm	215.00
8577	Crates made of Mesh type 10x12 (D=100 mm) Zn+PVC coated. Mesh wire diameter 2.70/3.70 mm (ID/OD).	sqm	250.00
8578	Crates made of Mesh type 10x12 (D=100 mm) Zn+10% Al alloy +PVC coated. Mesh wire diameter 2.70/3.70 mm (ID/OD).	sqm	315.00
8579	Cold form light gauge Steel C-section of thickness 0.75mm i/c zink coating/sliting etc.	kg	165.00
8580	Wastage of cold form light gauge steel	kg	19.00
8581	12 mm thick micro tegular edged semi perforated GRG (Glass Fibre Reinforced Gypsum) false celing tiles of Size 595x595 mm	sqm	550.00
8582	12 mm thick micro tegular edged fully perforated GRG (Glass Fibre Reinforced Gypsum) false celing tiles of Size 595x595 mm	sqm	650.00
8583	10 mm thick square edge fully perforated GRG(Glass Fibre Reinforced Gypsum) false celing tiles of Size 595x595 mm	sqm	790.00
8587	Galvanized iron intermediate cross-T section 15x32x0.33 mm (600mm long)	each	80.00
8588	Galavanised MS hanger rod 6mm dia MS fully threaded up to 1000mm length	each	50.00
8589	Calcium Silicate tegular edged ceiling tiles 595x595 mm and 15 mm thick on edges	sqm.	685.00
8590	Galvanised Steel main Tee ceiling section Size 24x38x0.33 mm (3 metre long)	each	152.00
8591	Galvanised steel perimeter wall angle size 24x24x0.40 mm (3 .00 metre long)	each	127.00
8592	Galvanised steel intermediate cross T section size 24x25x0.33mm (1.2 metre long)	each	61.00
8593	Galvanised steel intermediate cross T section size 24x25x0.33 mm (0.6 metre long)	each	34.00
8594	Galvanised steel soffit cleat size 25x35x1.60 mm	each	4.00
8595	Wooden screws with plastic rawal plugs35 x 8 mm	each	1.50
8596	Galvanised MS 8mm outer diameter M-6 dash fastener 25mm long	each	35.00
8597	G.I. metal Tile Clip in plain Beveled edges global white colour tiles of size 600x600 mm & 0.5 mm thick	sqm.	894.00
8598	G.I. Metal Tile Clip in Perforated Beveled edges global white colour tiles of size 600x600 mm and 0.5 mm thick	sqm.	1165.00
8599	G.I Metal Tile Lay-in plain Tegular edge global white colour tiles of size 595x595 mm and 0.5 mm thick	sqm.	705.00
8600	G.I Metal Tile Lay- in Perforted Tegular edge global	sqm.	894.00

BASIC RATES

8601	white colour tiles of size 595x595 mm and 0.5 mm thick		
8601	PVC Laminated Gypsum tiles (Square edge) of size 595x 595 mm and 12.5 mm thick	sqm.	880.00
8602	Gypsum Tiles fully perforated square edges of size 595 x 595 mm and 12.5 mm thick	sqm.	380.00
8604	Spring T - section 24x 34 x0.45 mm (3.00 meter long)	metre	220.00
8605	C wall angle section 20x30x20x0.50 mm (3.00 meter long)	metre	110.00
8606	Main C Carrier size 10x 38x10x0.70 mm (3.00 meter long)	metre	130.00
8607	Spring T- connector	each	5.00
8608	C Carrier connector	each	12.00
8609	C Suspension clip	each	10.00
8610	Wire Coupling clip	each	10.00
8611	Main T ceiling sections 24x38x0.3 mm (3 meter long)	each	200.00
8612	Perimeter Wall angle 24x24x0.3 mm (3 meter long)	each	120.00
8613	Intermediate Cross T-section 24x25x0.3 mm (1.2 mtrs)long	each	60.00
8614	Intermediate cross T-Section 24x25x0.3 mm (0.6 m long)	each	20.00
8615	Hanger rod 4 mm thick	each	12.00
8616	Adjustment clip 85x30x0.8 mm	each	8.00
8617	Soffit Cleat (size 27x37x25x1.60 mm)	each	5.00
8618	Dash fastener 6mm dia 50 mm long	each	12.00
8619	Galavanised MS L-shape level adjuster of size 85x25x2 mm	each	17.00
8620	Vitrified floor tile 50x50 cm conforming to IS 15622:2006 group (B1a)	sqm	500.00
8621	Vitrified floor tile 60x60 cm conforming to IS 15622:2006 group (B1a)	sqm	560.00
8622	Vitrified floor tile 80x80 cm conforming to IS 15622:2006 group (B1a)	sqm	900.00
8623	Vitrified floor tile 100x100 cm conforming to IS 15622:2006 group (B1a)	sqm	1390.00
8624	Border tiles 200x75mm size	each	16.00
8625	Poly propylene- Random - Co - Polymer (PPR) pipes PN-16 (SDR 7.4) - 16 mm Outer dia	metre	32.00
8626	Poly propylene- Random - Co - Polymer (PPR) pipes PN-16 (SDR 7.4) - 20 mm Outer dia	metre	43.00
8627	Poly propylene- Random - Co - Polymer (PPR) pipes PN-16 (SDR 7.4) - 25 mm Outer dia	metre	67.00
8628	Poly propylene- Random - Co - Polymer (PPR) pipes PN-16 (SDR 7.4) - 32 mm Outer dia	metre	107.00
8629	Poly propylene- Random - Co - Polymer (PPR) pipes PN-16 (SDR 7.4) - 40 mm Outer dia	metre	162.00
8630	Poly propylene- Random - Co - Polymer (PPR) pipes PN-16 (SDR 7.4) - 50 mm Outer dia	metre	252.00
8631	Poly propylene- Random - Co - Polymer (PPR) pipes PN-16 (SDR 7.4) - 65 mm Outer dia	metre	282.00
8632	Poly propylene- Random - Co - Polymer (PPR) pipes PN-16 (SDR 7.4) - 75 mm Outer dia	metre	418.00
8633	Poly propylene- Random - Co - Polymer (PPR) pipes PN-16 (SDR 7.4) - 90 mm Outer dia	metre	600.00
8634	Poly propylene- Random - Co - Polymer (PPR) pipes PN-16 (SDR 7.4) - 110 mm Outer dia	metre	890.00
8635	Poly propylene- Random - Co - Polymer (PPR) pipes PN-16 (SDR 7.4) -	metre	2575.00

BASIC RATES

	160 mm Outer dia		
8636	Chloronated Polyvinyl-Chloride (CPVC) pipe 15 mm outer dia	metre	49.00
8637	Chloronated Polyvinyl-Chloride (CPVC) pipe 20 mm outer dia	metre	80.00
8638	Chloronated Polyvinyl-Chloride (CPVC) pipe 25 mm outer dia	metre	127.00
8639	Chloronated Polyvinyl-Chloride (CPVC) pipe 32 mm outer dia	metre	165.00
8640	Chloronated Polyvinyl-Chloride (CPVC) pipe 40 mm outer dia	metre	230.00
8641	Chloronated Polyvinyl-Chloride (CPVC) pipe 50 mm outer dia	metre	375.00
8642	Chloronated Polyvinyl-Chloride (CPVC) pipe 62.5 mm outer dia	metre	793.00
8643	Chloronated Polyvinyl-Chloride (CPVC) pipe 75 mm outer dia	metre	1031.00
8644	Chloronated Polyvinyl-Chloride (CPVC) pipe 100 mm outer dia	metre	1466.00
8645	Chloronated Polyvinyl-Chloride (CPVC) pipe 150 mm outer dia	metre	3145.00
8646	Weather Silicon sealant	cartridge	112.00
8647	Stainless steel screws 30mm x 4mm	100 nos.	60.00
8648	Hermetically sealed double glazed unit made with 6 mm thick clear float glass both side having 12 mm air gap	sqm	2200.00
8649	Stainless steel (SS 304 grade) adjustable friction window stay. 205x19 mm	each	197.00
8650	Stainless steel (SS 304 grade) adjustable friction window stay. 255x19 mm	each	235.00
8651	Stainless steel (SS 304 grade) adjustable friction window stay. 355x19 mm	each	205.00
8652	Stainless steel (SS 304 grade) adjustable friction window stay. 510x19 mm	each	570.00
8653	Stainless steel (SS 304 grade) adjustable friction window stay. 710x19 mm	each	1000.00
8654	Masking tape	metre	2.18
8655	Autoclaved aerated cement (AAC) blocks	cum	2650.00
8656	Gypsum panel 666 X 500 X 100 mm size	sqm	480.00
8657	Bonding plaster for Gypsum panel	Kilogram	25.50
8658	Precast C&D waste concrete block	1000 nos.	25150.00
8659	Water proof ply 12 mm thick	sqm	540.00
8660	Aluminium casement window fastner (anodised AC 15)	each	50.00
8661	Aluminium casement window fastner (powder coated)	each	50.00
8662	Aluminium casement window fastner (polyester powder coated)	each	55.00
8663	Aluminium round shape handle (anodised AC 15) outer dia 100 mm	each	60.00
8664	Aluminium round shape handle (powder coated) outer dia 100 mm	each	65.00
8665	Aluminium round shape handle (polyester powder coated) outer dia 100 mm	each	65.00
8666	Stainless steel screws 25 mm x 4 mm	100 nos.	45.00
8667	UV stablised 2 mm thick plain FRP sheet	sqm	500.00
8668	UV stablised 2 mm thick corugated FRP sheet	sqm	550.00
8669	Mengalore ridge tiles 20 mm thick	each	10.00
8670	Mengalore tiles 20 mm thick	each	9.00
8671	Precoated galvanised iron profile sheet 0.50 mm TCT	sqm	400.00
8672	Precoated galvanised steel plain ridges 0.50 mm TCT and 500-600mm wide	metre	270.00
8673	Precoated galvanised steel flashings/aprons 0.50 mm TCT and upto 600 mm wide	metre	275.00
8674	Precoated galvanised steel gutter 600mm overall girth	metre	470.00
8675	Precoated galvanised steel north light curves	metre	280.00

BASIC RATES

8676	Precoated galvanised steel barge board (upto 300mm)	metre	230.00
8677	Precoated galvanised steel crimp curve	metre	235.00
8678	1 mm thick 35 mm wide bright finished stainless steel piano hinges	metre	47.00
8682	Epoxy Grout	Kg	380.00
8683	Red sand stone gang saw cut 30 mm thick	sqm	476.00
8684	White sand stone gang saw cut 30 mm thick	sqm	560.00
8685	Delineator	each	375.00
8686	Precast C.C. kerb stone M-25	cum	5600.00
8687	Thermo plastic paint	kilogram	66.00
8688	Glass beads	kilogram	72.00
8689	Interlocking C.C. paver block (60 mm thick, M-30)	sqm	400.00
8690	High intensity retro - reflective sheet as per IRC 67-2001	sqm	1443.00
8691	Punched tape concertina coil 600 mm dia 10 m openable length (Total length 90 m)	bundle	600.00
8692	RBT reinforced barbed wire	metre	7.00
8693	Turn buckle & strengthening bolt	each set	52.00
8694	Precast pavement slab 450x450x50 mm (M-30)	each	135.00
8695	Chain link fabric fencing mesh of size 50x50 mm made of G.I. wire of dia 4 mm	sqm	300.00
8696	Chain link fabric fencing mesh of size 50x50 mm made of G.I. wire of dia 4mm, PVC coated to outer dia 5 mm	sqm	330.00
8697	Chain link fabric fencing mesh of size 25x25 mm made of G.I. wire of dia 3mm	sqm	385.00
8698	Stainless steel cramps (weight 260 gms) with nuts, bolt and washers for dry stone cladding,	each	115.00
8699	8 mm thick tapered edge calcium silicate board	sqm	270.00
8700	10 mm thick calcium silicate board	sqm	420.00
8701	SS pipe 304 grades with press fit technology as per JIS 3448 standard 48.60 mm outer dia	metre	620.00
8702	Coupling/Socket fittings for 15.88 mm outer dia SS pipe	each	60.00
8703	Telescopic drawer channels 300 mm long	set	270.00
8704	Stainless steel roller for sliding arrangement in racks/ cupboards / cabinet shutters	each	13.00
8705	50 mm x 42 mm x 2 mm thick factory made door frame of PVC extruded section in white, grey or wooden finish	metre	180.00
8706	25 mm thick factory made PVC flush door shutter I/c carriage	sqm	2115.00
8707	Factory made glass reinforced plastic door frame 90x45mm I/c carriage	metre	516.00
8708	30 mm factory made glass fibre reinforced plastic panel door shutter I/c carriage	sqm	2510.00
8709	30mm thick factory made solid PVC profile panelled door single piece extruded profile decorative finish (wood grain printed on both side)	sqm.	2540.00
8710	Factory made solid PVC door frame 60x30 mm I/c carriage	metre	340.00
8711	20 mm factory made solid PVC panel door shutter i/c carriage	sqm	2190.00
8712	30 mm thick factory made solid PVC profile panelled door single piece extruded profile non decorative finish.	sqm.	2200.00
8713	Fibre glass reinforced plastic chajja	sqm	3400.00

BASIC RATES

8714	Magnetic catcher triple strip vertical type	each	30.00
8715	Magnetic catcher double strip horizontal type	each	25.00
8716	100 mm mortice lock with 6 levers for aluminium door	each	432.00
8717	12.5 mm thick glass fibre reinforced Gypsum board	sqm	0.00
8719	2nd class teak wood moulded beading or Taj beading/ornamental bleading of size 18X5 mm	metre	35.00
8720	Ceiling sections 0.55 mm thick having a knurled web of 51.55 mm & two flanges of 26 mm each with lips of 10.5mm	metre	44.00
8721	Perimeter channel having one flange of 20 mm & another flange of 30 mm with thickness of 0.55 mm & web of length 27 mm	metre	27.00
8722	Nylon sleeves & wooden screws (40 mm)	each	2.60
8723	Counter sunk ribbed head screw 25 mm	cent	95.00
8724	12 mm thick marin plywood conforming to IS:710	sqm	820.00
8725	12 mm thick fire retardant plywood conforming to IS:5509	sqm	912.00
8726	1.5 mm thick decorative laminated sheet	sqm	380.00
8727	1.0 mm thick decorative laminated sheet	sqm	294.00
8730	30 mm thick factory made glass fibre reinforced plastic flush door shutter I/c carriage	sqm	2675.00
8731	High polymer modified quick set tile adhesive	kg	9.00
8732	Synthetic Polyster Triangular fibre of length 12mm effective diameter 10-40 microns and specific gravity 1:34 to 1:40	Kg	370.00
8733	Synthetic Polyster Triangular fibre of length 6 mm effective diameter 10-40 microns and specific gravity 1:34 to 1 :40	Kg	410.00
8734	P.V.C Single piece extruded door frame of profile size 50 mm x 47 mm with wall thickness of 5 mm	metre	265.00
8735	35 mm thick factory made solid panel PVC door shutter of single piece extruded profile non decorative finished (Matt finished).	sqm.	2295.00
8736	35 mm thick factory made solid panel PVC door shutter of single piece extruded profile decorative finished (wood grain finished.)	sqm	2707.00
8737	Stainless steel wire guage (Grade- 304) aperture 1.4 mm and 0.50 mm dia wire.	sqm	413.00
8738	Factory made door frame fire rated (60 minutes) made with 16 SWG G.I.sheet of section 143 mmx57mm duly filled with vermiculite based concrete mix.	metre	1062.00
8739	Fire rated door shutter made with 16 SWG G.I.sheet (60 minutes) without panel	sqm	4702.00
8740	Fire seal putty	kg	304.00
8741	Clear fire resistant glass panes 6 mm thick (60 minutes)	sqm	21500.00
8742	G.I. U beading of 16 SWG G.I .sheet (zinc. Coated > 120 gm/m2) with ceramic tape of suitable thickness and fire resistant primer coating .	metre	303.00
8743	Matrix Mineral board	metre	70.00
8744	Panic bar / latch (Double point)	each	5200.00

BASIC RATES

8745	65 mm x 55 mm x 2mm thick factory made door frame of PVC extruded section in white. Grey or wooden finish.	metre	364.00
8746	37 mm thick factory made shutter with style, rails and panels of PVC extruded section in white.or grey finish I /c carriage.	sqm,	2479.00
8747	75 mm x 53 mm x 2.0 mm thick factory made door frame of PVC extruded section in white ,grey or wooden finish.	metre	413.00
8748	37 mm thick factor made fusion welded shutter with style, rails and panels of PVC extruded section in wooden finish	sqm.	2703.00
8749	Zinc alloy (white powder coated) touch lock with hook for wire mesh shutter	each	133.00
8750	Zinc alloy (white powder coated) casement handle for uPVC window/door	each	130.00
8751	Zinc alloy (white powder coated) touch lock withhook for uPVC window/door	each	114.00
8752	Zinc alloy body with single nylon roller (weight bearing capacity to be 40 Kg) for uPVC sliding window	each	60.00
8753	Stainless Steel (SS - 304) with adjustable double nylon roller (weight bearing capacity to be 120 Kg) for uPVC sliding door/window	each	105.00
8754	Zinc alloy (white powder coated) crescent lock for uPVC sliding door/window	each	110.00
8755	Stainless steel friction hinge of size 200 mm x 19x 1.9 mm for u PVC windows	each	212.00
8756	Stainless steel friction hinge of size 250 mm x 19 x1.9 mm for u PVC windows	each	237.00
8757	Stainless steel friction hinges (SS-304 grade) size 300 x 19 x 1.9 mm for uPVC window	each	260.00
8758	Stainless steel friction hinges (SS-304 grade) size 350 x 19 x 1.9 mm for uPVC window	each	361.00
8759	Stainless steel friction hinges (SS-304 grade) size 400 x 19 x 1.9 mm for uPVC window	each	365.00
8760	Glass panes of required thickness having 60 minutes of fire resistance both integrity and radiation control (EW 60) and minimum 20 minutes of insulation (EI 20)	sq metre	22500.00
8761	Scaffolding net made of high density polyethylene UV stabilized having density 100gm/ sqm.	metre	21.50
8762	u PVC extruded profile casement window mullion (intermediate section) (66 mmx 50 mm)	metre	168.00
8763	u PVC extruded profile casement window, T profile (one vertical length in between two shutters) (24mm x 34.5mm)	metre	46.00
8764	u PVC extruded profile casement window, glazing bead (12mm x18 mm)	metre	46.00
8765	u PVC extruded profile casement window, Frame (67 mm x 62 mm)	metre	211.00
8766	u PVC extruded profile casement window sash / Mullion (67 mmx 75 mm) (style , rail and inter mediate section)	metre	236.00
8767	u PVC extruded profile casement window glazing bead (35 mmx18 mm)	metre	77.00
8768	u PVC extruded profile Two Track Sliding frame (67 mm x 52 mm)	metre	222.00
8769	u PVC extruded profile Sliding window Sash (60 mm x 44 mm)	metre	206.00
8770	u PVC extruded profile Sliding interlock for window (one vertical length in each shutter) (45.5 mm x 28 mm)	metre	46.00
8771	u PVC extruded profile Sliding Door Sash (80 mm x 44 mm)	metre	258.00
8772	Aluminium Track on bottom rail for u PVC window	metre	30.00
8773	Wool pile/ weather pile strip for uPVC sliding window	metre	20.00

BASIC RATES

8774	Aluminium Grill as per IS 1868	kg	279.00
8775	Steel Galvanised tubular reinforcement for u PVC door/window.	metre	62.00
8776	Stainless steel dash fastener of 8 mm dia and 75 mm long bolt	each	17.00
8777	GI Fastener 100x8 mm	each	15.00
8778	Toughened glass 12 mm thickness	sqm.	1750.00
8779	SS pipe 304 grades with press fit technology as per JIS 3448 standard 15.88 mm outer dia	metre	140.00
8780	SS pipe 304 grades with press fit technology as per JIS 3448 standard 22.22 mm outer dia	metre	250.00
8781	SS pipe 304 grades with press fit technology as per JIS 3448 standard 28.58 mm outer dia	metre	310.00
8782	SS pipe 304 grades with press fit technology as per JIS 3448 standard 34.00 mm outer dia	metre	439.50
8783	SS pipe 304 grades with press fit technology as per JIS 3448 standard 42.70 mm outer dia	metre	450.00
8784	8 mm thick Calcium silicate perforated tiles of size 595 x595 mm	sqm	850.00
8785	Interlocking C.C. paver block (80 mm thick, M-30)	sqm	485.00
8786	Coupling/Socket fittings for 22.22 mm outer dia SS pipe	each	70.00
8787	Coupling/Socket fittings for 28.58 mm outer dia SS pipe	each	96.25
8788	Coupling/Socket fittings for 34.00 mm outer dia SS pipe	each	135.00
8789	Coupling/Socket fittings for 42.70 mm outer dia SS pipe	each	160.00
8790	Coupling/Socket fittings for 48.60 mm outer dia SS pipe	each	180.00
8791	Reducer for 22.22 mm X 15.88 mm outer Dia SS pipe	each	108.50
8792	Reducer for 28.58 mm X 15.88 mm outer Dia SS pipe	each	152.50
8793	Reducer for 28.58 mm X 22.22 mm outer Dia SS pipe	each	161.50
8794	Reducer for 34.00 mm X 15.88 mm outer Dia SS pipe	each	200.00
8795	Reducer for 34.00 mm X 22.22 mm outer Dia SS pipe	each	210.00
8796	Reducer for 34.00 mm X 28.58 mm outer Dia SS pipe	each	210.00
8797	Reducer for 42.70 mm X 15.88 mm outer Dia SS pipe	each	375.00
8798	Reducer for 42.70 mm X 22.22 mm outer Dia SS pipe	each	375.00
8799	Reducer for 42.70 mm X 28.58 mm outer Dia SS pipe	each	390.00
8800	Reducer for 42.70 mm X 34.00 mm outer Dia SS pipe	each	390.00
8801	Reducer for 48.60 mm X 15.88 mm outer Dia SS pipe	each	425.00
8802	Reducer for 48.60 mm X 22.22 mm outer Dia SS pipe	each	425.00
8803	Reducer for 48.60 mm X 28.58 mm outer Dia SS pipe	each	425.00
8804	Reducer for 48.60 mm X 34.00 mm outer Dia SS pipe	each	425.00
8805	Reducer for 48.60 mm X 42.70 mm outer Dia SS pipe	each	425.00
8806	Slip Coupling / Socket 15.88 mm outer dia SS pipe	each	55.00
8807	Slip Coupling / Socket 22.22 mm outer dia SS pipe	each	70.00
8808	Slip Coupling / Socket 28.58 mm outer dia SS pipe	each	95.00
8809	Slip Coupling / Socket 34.00 mm outer dia SS pipe	each	135.00
8810	Slip Coupling / Socket 42.70 mm outer dia SS pipe	each	160.00
8811	Slip Coupling / Socket 48.60 mm outer dia SS pipe	each	175.00
8812	Elbow 90° for 15.88 mm outer dia SS pipe	each	65.00
8813	Elbow 90° for 22.22 mm outer dia SS pipe	each	70.00
8814	Elbow 90° for 28.58 mm outer dia SS pipe	each	105.00
8815	Elbow 90° for 34.00 mm outer dia SS pipe	each	120.00

BASIC RATES

8816	Elbow 90° for 42.70 mm outer dia SS pipe	each	130.00
8817	Elbow 90° for 48.60 mm outer dia SS pipe	each	160.00
8818	Reducing Elbow 90° for 22.22 mm X 15.88 mm outer dia SS pipe	each	150.00
8819	Reducing Elbow 90° for 28.58 mm X 15.88 mm outer dia SS pipe	each	210.00
8820	Reducing Elbow 90° for 28.58 mm X 22.22 mm outer dia SS pipe	each	250.00
8821	Reducing Elbow 90° for 34.00 mm X 22.22 mm outer dia SS pipe	each	295.00
8822	Reducing Elbow 90° for 34.00 mm X 28.58 mm outer dia SS pipe	each	350.00
8823	Reducing Elbow 90° for 42.70 mm X 34.00 mm outer dia SS pipe	each	390.00
8824	Equal Tee for 15.88 mm outer dia SS pipe	each	175.00
8825	Equal Tee for 22.22 mm outer dia SS pipe	each	250.00
8826	Equal Tee for 28.58 mm outer dia SS pipe	each	295.00
8827	Equal Tee for 34.00 mm outer dia SS pipe	each	440.00
8828	Equal Tee for 42.70 mm outer dia SS pipe	each	695.00
8829	Equal Tee for 48.60 mm outer dia SS pipe	each	915.00
8830	Reducing Tee for 22.22 mm X 15.88 mm outer dia SS pipe	each	185.00
8831	Reducing Tee for 28.58 mm X 15.88 mm outer dia SS pipe	each	290.00
8832	Reducing Tee for 28.58 mm X 22.22 mm outer dia SS pipe	each	290.00
8833	Reducing Tee for 34.00 mm X 15.88 mm outer dia SS pipe	each	440.00
8834	Reducing Tee for 34.00 mm X 22.22 mm outer dia SS pipe	each	440.00
8835	Reducing Tee for 34.00 mm X 28.58 mm outer dia SS pipe	each	440.00
8836	Reducing Tee for 42.70 mm X 15.88 mm outer dia SS pipe	each	690.00
8837	Reducing Tee for 42.70 mm X 22.22 mm outer dia SS pipe	each	690.00
8838	Reducing Tee for 42.70 mm X 28.58 mm outer dia SS pipe	each	690.00
8839	Reducing Tee for 42.70 mm X 34.00 mm outer dia SS pipe	each	690.00
8840	Reducing Tee for 48.60 mm X 15.88 mm outer dia SS pipe	each	895.00
8841	Reducing Tee for 48.60 mm X 22.22 mm outer dia SS pipe	each	895.00
8842	Reducing Tee for 48.60 mm X 28.58 mm outer dia SS pipe	each	895.00
8843	Reducing Tee for 48.60 mm X 34.00 mm outer dia SS pipe	each	895.00
8844	Reducing Tee for 48.60 mm X 42.70 mm outer dia SS pipe	each	895.00
Item 8845 to 8944 of STAINLESS STEEL			
8845	Male thread Tee for 15.88 mm outer dia X 15 mm nominal dia threaded	each	185.00
8846	Male thread Tee for 22.22 mm outer dia X 15 mm nominal dia threaded	each	215.00
8847	Male thread Tee for 22.22 mm outer dia X 20 mm nominal dia threaded	each	215.00
8848	Male thread Tee for 28.58 mm outer dia X 15 mm nominal dia threaded	each	295.00
8849	Male thread Tee for 28.58 mm outer dia X 20 mm nominal dia threaded	each	295.00
8850	Male thread Tee for 28.58 mm outer dia X 20 mm nominal dia threaded	each	295.00
8851	Male thread Tee for 34.00 mm outer dia X 15 mm nominal dia threaded	each	465.00
8852	Male thread Tee for 34.00 mm outer dia X 20 mm nominal dia threaded	each	465.00
8853	Male thread Tee for 34.00 mm outer dia X 25 mm nominal dia threaded	each	465.00
8854	Male thread Tee for 34.00 mm outer dia X 32 mm nominal dia threaded	each	465.00
8855	Male thread Tee for 42.70 mm outer dia X 15 mm nominal dia threaded	each	710.00
8856	Male thread Tee for 42.70 mm outer dia X 20 mm nominal dia threaded	each	710.00
8857	Male thread Tee for 42.70 mm outer dia X 25 mm nominal dia threaded	each	710.00
8858	Male thread Tee for 42.70 mm outer dia X 32 mm nominal dia threaded	each	710.00
8859	Male thread Tee for 42.70 mm outer dia X 40 mm nominal dia threaded	each	710.00
8860	Male thread Tee for 48.60 mm outer dia X 15 mm nominal dia threaded	each	895.00
8861	Male thread Tee for 48.60 mm outer dia X 20 mm nominal dia threaded	each	895.00

BASIC RATES

8862	Male thread Tee for 48.60 mm outer dia X 25 mm nominal dia threaded	each	895.00
8863	Male thread Tee for 48.60 mm outer dia X 32 mm nominal dia threaded	each	895.00
8864	Male thread Tee for 48.60 mm outer dia X 40 mm nominal dia threaded	each	895.00
8865	Male thread Tee for 48.60 mm outer dia X 50 mm nominal dia threaded	each	895.00
8866	Female thread Tee for 15.88 mm outer dia X 15 mm nominal dia threaded	each	185.00
8867	Female thread Tee for 22.22 mm outer dia X 15 mm nominal dia threaded	each	205.00
8868	Female thread Tee for 22.22 mm outer dia X 20 mm nominal dia threaded	each	205.00
8869	Female thread Tee for 28.58 mm outer dia X 15 mm nominal dia threaded	each	275.00
8870	Female thread Tee for 28.58 mm outer dia X 20 mm nominal dia threaded	each	275.00
8871	Female thread Tee for 28.58 mm outer dia X 20 mm nominal dia threaded	each	275.00
8872	Female thread Tee for 34.00 mm outer dia X 15 mm nominal dia threaded	each	445.00
8873	Female thread Tee for 34.00 mm outer dia X 20 mm nominal dia threaded	each	445.00
8874	Female thread Tee for 34.00 mm outer dia X 25 mm nominal dia threaded	each	445.00
8875	Female thread Tee for 34.00 mm outer dia X 32 mm nominal dia threaded	each	445.00
8876	Female thread Tee for 42.70 mm outer dia X 15 mm nominal dia threaded	each	700.00
8877	Female thread Tee for 42.70 mm outer dia X 20 mm nominal dia threaded	each	700.00
8878	Female thread Tee for 42.70 mm outer dia X 25 mm nominal dia threaded	each	700.00
8879	Female thread Tee for 42.70 mm outer dia X 32 mm nominal dia threaded	each	700.00
8880	Female thread Tee for 42.70 mm outer dia X 40 mm nominal dia threaded	each	700.00
8881	Female thread Tee for 48.60 mm outer dia X 15 mm nominal dia threaded	each	905.00
8882	Female thread Tee for 48.60 mm outer dia X 20 mm nominal dia threaded	each	905.00
8883	Female thread Tee for 48.60 mm outer dia X 25 mm nominal dia threaded	each	905.00
8884	Female thread Tee for 48.60 mm outer dia X 32 mm nominal dia threaded	each	905.00
8885	Female thread Tee for 48.60 mm outer dia X 40 mm nominal dia threaded	each	905.00
8886	Female thread Tee for 48.60 mm outer dia X 50 mm nominal dia threaded	each	905.00
8887	Female threaded Connector/Adapter for 15.88 mm outer dia X 15 mm nominal threaded	each	195.00
8888	Female threaded Connector/Adapter for 22.22 mm outer dia X 15 mm nominal threaded	each	230.00
8889	Female threaded Connector/Adapter for 22.22 mm outer dia X 20 mm nominal threaded	each	240.00
8890	Female threaded Connector/Adapter for 28.58 mm outer dia X 15 mm nominal threaded	each	277.00
8891	Female threaded Connector/Adapter for 28.58 mm outer dia X 20 mm nominal threaded	each	290.00
8892	Female threaded Connector/Adapter for 28.58 mm outer dia X 25 mm nominal threaded	each	355.00
8893	Female threaded Connector/Adapter for 34.00 mm outer dia X 25 mm nominal threaded	each	410.00
8894	Female threaded Connector/Adapter for 34.00 mm outer dia X 32 mm nominal threaded	each	540.00
8895	Female threaded Connector/Adapter for 42.70 mm outer dia X 32 mm nominal threaded	each	595.00
8896	Female threaded Connector/Adapter for 42.70 mm outer dia X 40 mm nominal threaded	each	695.00
8897	Female threaded Connector/Adapter for 48.60 mm outer dia X 40 mm nominal threaded	each	845.00

BASIC RATES

8898	Female threaded Connector/Adapter for 48.60 mm outer dia X 50 mm nominal threaded	each	975.00
8899	Male threaded Connector/Adapter for 15.88 mm outer dia X 15 mm nominal threaded	each	195.00
8900	Male threaded Connector/Adapter for 22.22 mm outer dia X 15 mm nominal threaded	each	230.00
8901	Male threaded Connector/Adapter for 22.22 mm outer dia X 20 mm nominal threaded	each	255.00
8902	Male threaded Connector/Adapter for 28.58 mm outer dia X 20 mm nominal threaded	each	325.00
8903	Male threaded Connector/Adapter for 28.58 mm outer dia X 25 mm nominal threaded	each	325.00
8904	Male threaded Connector/Adapter for 34.00 mm outer dia X 25 mm nominal threaded	each	475.00
8905	Male threaded Connector/Adapter for 34.00 mm outer dia X 32 mm nominal threaded	each	565.00
8906	Male threaded Connector/Adapter for 42.70 mm outer dia X 32 mm nominal threaded	each	649.00
8907	Male threaded Connector/Adapter for 42.70 mm outer dia X 40 mm nominal threaded	each	730.00
8908	Male threaded Connector/Adapter for 48.60 mm outer dia X 40 mm nominal threaded	each	850.00
8909	Male threaded Connector/Adapter for 48.60 mm outer dia X 50 mm nominal threaded	each	1140.00
8910	Valve Connector for 15.88 mm outer dia X 15 mm nominal dia threaded	each	235.00
8911	Valve Connector for 22.22 mm outer dia X 15 mm nominal dia threaded	each	280.00
8912	Valve Connector for 22.22 mm outer dia X 20 mm nominal dia threaded	each	310.00
8913	Valve Connector for 28.58 mm outer dia X 25 mm nominal dia threaded	each	425.00
8914	Valve Connector for 34.00 mm outer dia X 32 mm nominal dia threaded	each	645.00
8915	Valve Connector for 42.70 mm outer dia X 40 mm nominal dia threaded	each	880.00
8916	Valve Connector for 48.60 mm outer dia X 50 mm nominal dia threaded	each	1210.00
8917	Female Threaded Elbow 90° for 15.88 mm outer dia X 15 mm nominal dia threaded	each	160.00
8918	Female Threaded Elbow 90° for 22.22 mm outer dia X 15 mm nominal dia threaded	each	215.00
8919	Female Threaded Elbow 90° for 22.22 mm outer dia X 20 mm nominal dia threaded	each	215.00
8920	Female Threaded Elbow 90° for 28.58 mm outer dia X 25 mm nominal dia threaded	each	215.00
8921	Female Threaded Elbow 90° for 34.00 mm outer dia X 32 mm nominal dia threaded	each	295.00
8922	Female Threaded Elbow 90° for 42.70 mm outer dia X 32 mm nominal dia threaded	each	480.00
8923	Female Threaded Elbow 90° for 42.70 mm outer dia X 40 mm nominal dia threaded	each	480.00
8924	Female Threaded Elbow 90° for 48.60 mm outer dia X 40 mm nominal dia threaded	each	710.00

BASIC RATES

8925	Female Threaded Elbow 90° for 48.60 mm outer dia X 50 mm nominal dia threaded	each	710.00
8926	Male Threaded Elbow 90° for 15.88 mm outer dia X 15 mm nominal dia threaded	each	195.00
8927	Male Threaded Elbow 90° for 22.22 mm outer dia X 15 mm nominal dia threaded	each	225.00
8928	Male Threaded Elbow 90° for 22.22 mm outer dia X 20 mm nominal dia threaded	each	225.00
8929	Male Threaded Elbow 90° for 28.58 mm outer dia X 25 mm nominal dia threaded	each	225.00
8930	Male Threaded Elbow 90° for 34.00 mm outer dia X 25 mm nominal dia threaded	each	290.00
8931	Male Threaded Elbow 90° for 34.00 mm outer dia X 32 mm nominal dia threaded	each	290.00
8932	Male Threaded Elbow 90° for 42.70 mm outer dia X 32 mm nominal dia threaded	each	480.00
8933	Male Threaded Elbow 90° for 42.70 mm outer dia X 40 mm nominal dia threaded	each	480.00
8934	Male Threaded Elbow 90° for 48.60 mm outer dia X 40 mm nominal dia threaded	each	695.00
8935	Male Threaded Elbow 90° for 48.60 mm outer dia X 50 mm nominal dia threaded	each	695.00
8936	Cap for 15.88 mm outer dia pipe	each	48.00
8937	Cap for 22.22 mm outer dia pipe	each	70.00
8938	Cap for 28.58 mm outer dia pipe	each	90.00
8939	Cap for 34.00 mm outer dia pipe	each	175.00
8940	Cap for 42.70 mm outer dia pipe	each	250.00
8941	Cap for 48.60 mm outer dia pipe	each	325.00
8942	Pipe Bridge for 15.88 mm outer dia pipe	each	220.00
8943	Pipe Bridge for 22.22 mm outer dia pipe	each	290.00
8944	Pipe Bridge for 28.58 mm outer dia pipe	each	415.00
8945	4 Point facade glass bracket without flat head bolts	Nos.	3318.00
8946	2 Point facade glass bracket (wall mounted with out flat head bolt)	Nos.	1659.00
8947	1 Point facade glass bracket (wall mounted with out flat head bolt)	Nos.	1300.00
8948	Flate head bolt for brackets of spider glazing	Nos.	651.00
8949	400 mm long fin plate without fastners	pair	5931.00
8953	Micro Silica	kg	28.00
8954	Stop end tubes for diaphragmwall 600 mm dia.	sqm	4.50
8955	Driving end tubes for diaphragm wall 600 mm dia.	sqm	72.00
8956	Bi-Axial Extruded GeoGrids of Minimum Tensile Strength 15 kN/m in the longitudinal and transverse direction	sqm	120.00
8957	Bi-Axial Extruded GeoGrids of Minimum Tensile Strength 20kN/m in the longitudinal and transverse direction	sqm	135.00
8958	Bi-Axial Extruded GeoGrids of Minimum Tensile Strength 30kN/m in the longitudinal and transverse direction	sqm	205.00
8959	Bi-Axial Extruded GeoGrids of Minimum Tensile Strength 40kN/m in the longitudinal and transverse direction	sqm	290.00

BASIC RATES

8960	Geosynthetic Drainage with two filtering nonwoven geotextiles having 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 having pores of 150 micron and tensile strength of 8.0 kN/m and having plane flow capacity of 2.1 L / (m.s) at hydraulic gradient of 1.0 & 20 kPa pressure, tensile strength of 18 kN/m , with mass per unit area of 740 gsm.	sqm	530.00
8961	Geosynthetic Drainage Composite having thermobonding a draining core - HDPE geonet comprises of two sets of parallel overlaid ribs integrally connected to have a rhomboidal shape with a polyethylene film and a nonwoven geotextile having mass per unit area 130 g/m2 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 13.5 kN/m , with mass per unit area of 830 gsm,	sqm	630.00
8962	Synthetic Geogrid having Ultimate tensile strength- 100 kN/m	sqm	200.00
8963	Synthetic Geogrid having Ultimate tensile strength- 150 kN/m	sqm	210.00
8964	Synthetic Geogrid having Ultimate tensile strength- 200 kN/m	sqm	340.00
8965	Synthetic Geogrid having Ultimate tensile strength- 250 kN/m	sqm	350.00
8966	Synthetic Geogrid having Ultimate tensile strength- 300 kN/m	sqm	360.00
8967	Synthetic Geogrid having Ultimate tensile strength- 350 kN/m	sqm	370.00
8968	Synthetic Geogrid having Ultimate tensile strength- 400 kN/m	sqm	450.00
8969	Synthetic Geogrid having Ultimate tensile strength- 500 kN/m	sqm	500.00
8970	Synthetic Geogrid having Ultimate tensile strength- 600 kN/m	sqm	550.00
8971	Synthetic Geogrid having Ultimate tensile strength- 700 kN/m	sqm	650.00
8972	Synthetic Geogrid having Ultimate tensile strength- 800 kN/m	sqm	725.00
8973	Synthetic Geogrid having Ultimate tensile strength- 900 kN/m	sqm	850.00
8974	Synthetic Geogrid having Ultimate tensile strength- 1000 kN/m	sqm	950.00
8975	Synthetic Geogrid having Ultimate tensile strength- 1100 kN/m	sqm	1000.00
8976	Synthetic Geogrid having Ultimate tensile strength- 1200 kN/m	sqm	1050.00
8977	Aluminium profile industrial troughed sheet of Alloy 31500/31000/40800, conforming to IS 1254, IS 737, IS 2676, 0.71 mm thick, the profile detail width 1044/920 mm, cover width 1000/875 mm.	sqm	600.00
8978	Aluminium profile industrial troughed sheet of Alloy 31500/31000/40800, conforming to IS 1254, IS 737, IS 2676, 0.91 mm thick, the profile detail width 1044/920 mm, cover width 1000/875 mm.	sqm	785.00
9001	C.P. Brass Centre Hole Basin Mixer With Cast Spout	each	1567.00
9999	Sundries	1 time	2.50
8779 A	Supply of Zinc+PVC Coated Gabions mechanically woven double twisted hexagonal in shape having wire mesh size of 100x120 mm & having mesh wire dia. 2.7/3.7 mm, Selvedge Wire dia: 3.4/4.4mm & lacing wire dia. 2.2/3.2mm & PVC coating thickness 1 mm of size:		
	1x1x1 m	per kg	NA
	2x1x1 m	per kg	NA
	3x1x1 m	per kg	NA
	4x1x1 m	per kg	NA
	6x1x1 m	per kg	NA
	6x1.2x1.2 m	per kg	NA

BASIC RATES

	6x1.5x1.5 m	per kg	NA
	3x1x0.5 m	per kg	NA
	4x1.5x1.5 m	per kg	NA
	3x1.5x1.5 m	per kg	NA
	2x1.5x1.5 m	per kg	NA
	1.5x1x1 m	per kg	NA
8780 A	Supply of Zinc Coated Gabions mechanically woven double twisted hexagonal in shape having wire mesh size of 100x120 mm & having mesh wire dia. 2.7 mm, Selvedge Wire dia: 3.4 mm & lacing wire dia. 2.2 mm & PVC coating thickness		
	1x1x1 m	per kg	112.00
	2x1x1 m	per kg	112.00
	3x1x1 m	per kg	112.00
	4x1x1 m	per kg	112.00
	6x1x1 m	per kg	112.00
	6x1.2x1.2 m	per kg	112.00
	6x1.5x1.5 m	per kg	112.00
	3x1x0.5 m	per kg	112.00
	4x1.5x1.5 m	per kg	112.00
	3x1.5x1.5 m	per kg	112.00
	2x1.5x1.5 m	per kg	112.00
	1.5x1x1 m	per kg	112.00
10001	DELETED		
10002	DELETED		
10003	Foreign wood in planks of:		
	a. Burma Teak Wood	cum	145481.00
	b. Teak Wood	cum	86681.00
	c. Sal Wood	cum	80720.00
	d. Kaper Sal wood	cum	68760.00
	e. Sylvaite	cum	37464.00
10004	Foreign wood in scantling of:		
	a. Burma Teak Wood	cum	145481.00
	b. Teak Wood	cum	86681.00
	c. Sal Wood	cum	77720.00
	d. Kaper Sal wood	cum	66760.00
	e. Sylvaite	cum	35467.00
10005	Cement Concrete Bricks (1:4:8) of size 9"x4 1/4"x2 3/4"	1000 nos	7000.00
10006	Cement Concrete Bricks (1:3:6) of size 9"x4 1/4"x2 3/4"	1000 nos	8000.00
10007*	<u>*KHATUMBANDI CEILING</u>		
(a)	Changez Khani	sqm	3389.00
(b)	Chaar Gul	sqm	3785.00
(c)	Chaar Phool	sqm	3107.00
(d)	Pahel Gardan	sqm	2825.00
(e)	Dawaz-dal-i-Girde	sqm	2881.00
(f)	Panch Murabah	sqm	2654.00
	* These rates includes fixing charges also.		

SUB HEAD: 1.0
CARRIAGE

1.0 CARRIAGE OF MATERIALS

1.1 By Mechanical Transport including loading, unloading and stacking

S.No.	Materials	Unit	Rate ₹								Remarks
			1 km	2km	3km	4km	5km	Beyond 5 km upto 10 km per km	Beyond 10 km upto 20 km per km	Beyond 20 km per additional km	
1	2	3	4	5	6	7	8	9	10	11	12
1.1.1	Lime, moorum, building rubbish	cum	128.75	147.44	165.84	183.58	200.74	15.66	13.09	11.04	The rates will be applicable to net quantities after deduction of prescribed percentage for voids mentioned in the specification under subhead "Carriage of materials"
1.1.2	Earth	cum	160.93	184.30	207.30	229.48	250.92	19.58	16.36	13.80	
1.1.3	Manure or sludge	cum	139.94	160.26	180.26	199.55	218.19	17.03	14.23	12.00	
1.1.4	Excavated rock	cum	257.49	294.88	331.67	367.17	401.48	31.33	26.17	22.07	
1.1.5	Sand, stone aggregate below 40 mm nominal size	cum	128.75	147.44	165.84	183.58	200.74	15.66	13.09	11.04	
1.1.6	Stone aggregate 40 mm nominal size and above	cum	139.94	160.26	180.26	199.55	218.19	17.03	14.23	12.00	
1.1.7	Soling stone	cum	151.47	173.46	195.10	215.98	236.16	18.43	15.40	12.98	
1.1.8	Bricks	1000 nos.	343.32	393.17	442.23	489.56	535.30	41.77	34.90	29.43	
1.1.9	Brick Tiles	1000 nos.	205.99	235.90	265.34	293.74	321.18	25.06	20.94	17.66	
1.1.10	Cement, stone blocks, G.I. C.I., A.C., Stainless Steel & C.C. pipes below 100 mm dia and other heavy materials	tonne	114.44	131.06	147.41	163.19	178.43	13.92	11.63	9.81	
1.1.10A	Crates	tonne	343.32	393.17	442.23	489.56	535.30	41.77	34.90	29.43	
1.1.11	Steel/ C.G.I. sheets	tonne	114.44	131.06	147.41	163.19	178.43	13.92	11.63	9.81	
1.1.12	Timber	cum	147.14	168.50	189.53	209.81	229.41	17.90	14.96	12.61	
1.1.13	Tar Bitumen	tonne	128.75	147.44	165.84	183.58	200.74	15.66	13.09	11.04	
1.1.14	Solvent	qtls	12.87	14.74	16.58	18.36	20.07	1.57	1.31	1.10	
1.1.15	Steam Coal	tonne	147.14	168.50	189.53	209.81	229.41	17.90	14.96	12.61	
1.1.16	S.W. Pipe										
1.1.16.1	100 mm dia	100m	171.66	196.59	221.11	244.78	267.65	20.89	17.45	14.72	

1	2	3	4	5	6	7	8	9	10	11	12	
1.1.16.2	150 mm dia	100m	343.32	393.17	442.23	489.56	535.30	41.77	34.90	29.43		
1.1.16.3	200mm dia	100m	572.20	655.29	737.05	815.93	892.17	69.62	58.17	49.05		
1.1.16.4	230mm dia	100m	817.44	936.12	1052.93	1165.62	1274.53	99.46	83.09	70.08		
1.1.16.5	250 mm dia	100m	980.92	1123.35	1263.51	1398.74	1529.43	119.35	99.71	84.09		
1.1.16.6	300 mm dia	100m	1226.15	1404.18	1579.39	1748.43	1911.79	149.18	124.64	105.11		
1.1.16.7	350 mm dia	100m	1716.61	1965.86	2211.15	2447.80	2676.51	208.86	174.50	147.16		
1.1.16.8	400 mm dia	100m	2452.31	2808.36	3158.78	3496.85	3823.58	298.37	249.28	210.23		
1.1.16.9	450 mm dia	100m	3121.12	3574.28	4020.27	4450.54	4866.38	379.74	317.27	267.56		
1.1.16.10	500 mm dia	100m	3433.23	3931.71	4422.29	4895.60	5353.02	417.72	349.00	294.32		
1.1.16.11	600 mm dia	100m	4291.53	4914.64	5527.87	6119.49	6691.27	522.14	436.25	367.90		
1.16A.1	Empty Cement Bags	1000 nos.	51.50	58.98	66.33	73.43	80.30	6.27	5.23	4.41		
1.1.17	R.C.C. pipe, A.C. pipes, steel cylinder, R.C. pipes, G.I. pipes, D.I. pipes, M.S. pipes, C.I. pipes and unreinforced cement pipe											
1.1.17.1	100 mm dia	100m	281.41	322.27	362.48	401.28	438.77	34.24	28.61	24.12		
1.1.17.2	125mm dia	100m	375.90	430.48	484.19	536.01	586.10	45.74	38.21	32.22		
1.1.17.3	150 mm dia	100m	469.02	537.12	604.14	668.80	731.29	57.06	47.68	40.21		
1.1.17.4	200mm dia	100m	762.94	873.71	982.73	1087.91	1189.56	92.83	77.55	65.40		
1.1.17.5	250 mm dia	100m	1084.18	1241.59	1396.51	1545.98	1690.43	131.91	110.21	92.94		
1.1.17.6	300 mm dia	100m	1340.06	1534.63	1726.11	1910.85	2089.39	163.04	136.22	114.88		
1.1.17.7	350 mm dia	100m	1876.08	2148.48	2416.55	2675.19	2925.15	228.26	190.71	160.83		
1.1.17.8	400 mm dia	100m	2558.29	2929.74	3295.30	3647.99	3988.83	311.26	260.06	219.31		
1.1.17.9	450 mm & 500 mm dia	100m	3126.80	3580.79	4027.59	4458.65	4875.24	380.43	317.85	268.05		
1.1.17.10	600, 700, 750 & 800mm dia	100m	4690.20	5371.19	6041.39	6687.97	7312.86	570.65	476.77	402.07		
1.1.17.11	900 mm dia	100m	7035.30	8056.78	9062.08	10031.96	10969.29	855.97	715.16	603.11		
1.1.17.12	1000, 1100 & 1200 mm dia.	100m	9380.40	10742.38	12082.77	13375.95	14625.73	1141.30	953.54	804.14		

1.0 CARRIAGE OF MATERIALS

1.2 By Manual Labour including loading, unloading and stacking for lead less than 0.50 km

S.No.	Materials	Unit	Cost of carriage including loading, unloading and stacking for 1 st 50 metres (₹)	Every additional lead of 50 metres or part there of beyond 1 st 50 metre upto 09 such additional leads (₹)	Remarks
1	2	3	4	5	6
1.2.1	Lime, moorum, building rubbish	cum	160.53	34.95	The rates will be applicable to net quantities after deduction of prescribed percentage for voids mentioned in the specification under subhead "Carriage of materials".
1.2.2	Earth	cum	200.67	43.69	
1.2.3	Manure or sludge	cum	174.49	37.99	
1.2.4	Excavated rock	cum	321.07	69.91	
1.2.5	Sand, stone aggregate below 40 mm nominal size	cum	200.67	43.69	
1.2.6	Stone aggregate 40 mm nominal size and above	cum	216.94	47.23	
1.2.7	Soling stone	cum	236.08	51.40	
1.2.8	Bricks	1000 nos.	374.58	81.56	
1.2.9	Brick Tiles, Allahabad roofing tiles (flat or round)	1000 nos.	234.11	50.97	
1.2.10	Steam coal	tonne	187.29	40.78	
1.2.10A	Empty cement bags	1000 nos.	37.46	8.16	
1.2.11	Cement, stone blocks, G.I. C.I., A.C., Stainless Steel & C.C. pipes below 100 mm dia and other heavy materials/ knitted crates	tonne	146.51	21.50	
1.2.12	Cement	tonne	116.22	17.05	
1.2.13	Steel/ C.G.I. Sheets	tonne	249.61	36.63	
1.2.14	Timber	cum	160.46	23.55	
1.2.15	Tar Bitumenetc	tonne	146.51	21.50	
1.2.16	S.W. Pipe				The length of S.W. pipes will be measured exclusive of the internal depth of sockets
1.2.16.1	100 mm dia	100 m	293.28	43.04	
1.2.16.2	150 mm dia	100 m	482.08	70.74	
1.2.16.3	200mm dia	100 m	674.62	98.99	
1.2.16.4	230mm dia	100 m	864.04	126.79	
1.2.16.5	250 mm dia	100 m	1123.25	164.82	

1	2	3	4	5	6
1.2.16.6	300 mm dia	100 m	1604.64	235.46	
1.2.16.7	350 mm dia	100 m	2246.50	329.65	
1.2.16.8	400 mm dia	100 m	2808.12	412.06	
1.2.16.9	450 mm dia	100 m	3403.79	499.47	
1.2.16.10	500 mm dia	100 m	4160.18	610.46	
1.2.16.11	600 mm dia	100 m	5105.68	749.20	
1.2.17	R.C.C. pipe, A.C. pipes, steel cylinder, R.C. pipes, G.I. pipes, D.I. pipes, M.S. pipes, C.I. pipes and unreinforced cement pipe				
1.2.17.1	100 mm dia	100 m	395.98	58.11	The length of the flanged or plain ended concrete R.C.C. pipes, Steel cylinders, R.C. pipes and C.I. pipes shall be measured overall. The length of socketed pipes shall be measured exclusive of internal depth of sockets
1.2.17.2	125mm dia	100 m	484.51	71.10	
1.2.17.3	150 mm dia	100 m	557.91	81.87	
1.2.17.4	200mm dia	100 m	837.20	122.85	
1.2.17.5	250 mm dia	100 m	1471.51	215.93	
1.2.17.6	300 mm dia	100 m	1841.39	270.20	
1.2.17.7	350 mm dia	100 m	2632.62	386.31	
1.2.17.8	400 mm dia	100 m	3063.41	449.52	
1.2.17.9	450 mm & 500 mm dia	100 m	4084.54	599.36	
1.2.17.10	600, 700, 750 & 800mm dia	100 m	4493.00	659.30	
1.2.18	Asbestos cement pipes				
1.2.18.1	50 mm dia	100 m	66.97	9.83	The length of asbestos cement pipes shall be measured exclusive of internal depth of sockets.
1.2.18.2	80 mm dia	100 m	184.14	27.02	
1.2.18.3	100 mm dia	100 m	263.06	38.60	
1.2.18.4	150 mm dia	100 m	368.28	54.04	

SUB HEAD: 2.0
EARTH WORK

2.0 (EARTH WORK)

2.0 (EARTH WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹		
2.1	Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including disposal of excavated earth, lead upto 50 meter and lift upto 1.5m, as directed by Engineer-in-Charge. All kinds of soil :	sqm	91.75		
2.2	Earth work 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 50 m and lift upto 1.5 m in all kinds of soil:	cum	741.05		
2.3	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 rolling every 3 rd 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 50 m and lift upto 1.5 m in All kinds of soil:	cum	467.30		
2.4	Deduct for not rolling with power roller of minimum 8 tonnes for banking excavated Earth in layers not exceeding 20 cm in depth.	cum	4.40		
2.5	Deduct for not watering the excavated earth for banking.	cum	33.45		
2.6	Earth work in bulk excavation by manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 m ² on plan) including disposal of excavated earth lead upto 50 meters and lift upto 1.5 m, as directed by Engineer-in-Charge. 2.6.1 All kinds of soil : 2.6.2 Ordinary Rock 2.6.3 Hard Rock (Requiring Blasting) 2.6.4 Hard Rock (Blasting Prohibited)	cum cum cum cum	592.90 940.30 1312.40 2218.10		
2.7	Earth work in bulk excavation by mechanical means (hydraulic excavator) over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 m ² on plan) including disposal of excavated earth lead upto 50 meters and lift upto 1.5 m, as directed by Engineer-in-Charge. 2.7.1 All kinds of soil : 2.7.2 Ordinary Rock 2.7.3 Hard Rock (Requiring Blasting) 2.7.4 Hard Rock (Blasting Prohibited)	cum cum cum cum	187.30 392.80 687.10 1128.75		
2.8	Earth work in excavation by manual means in trenches for foundations, drains, pipes, cables etc. (not exceeding 1.5 m in width) and for shafts, wells, cesspits and the like not exceeding 10 sqm on plan, including dressing of sides and ramming of bottoms lift upto 1.5 m, including getting out excavated earth and disposal of surplus excavated earth as directed:				
	Description	Unit	Rate for a lead upto		
			1 meter from cutting edge	25 meter beyond 1 m from cutting edge	50 meter beyond 1 m from cutting edge
	2.8.1 All kinds of soil :	cum	479.30	576.45	673.30
	2.8.2 Ordinary Rock	cum	924.80	1013.55	1102.35
	2.8.3 Hard Rock (Requiring Blasting)	cum	1316.20	1405.00	1493.80
2.8.4 Hard Rock (Blasting prohibited)	cum	2173.00	2261.80	2350.55	
2.9	Earth work in excavation by mechanical means (hydraulic excavator) in trenches for foundations, drains, pipes, cables etc. (not exceeding 1.5 m in width) and for shafts, wells, cesspits and the like not exceeding 10 sqm on plan, including dressing of sides and ramming of bottoms lift upto 1.5 m, including getting out excavated earth and disposal of surplus excavated earth as directed, within a lead of 50 metres:				
	2.9.1 All kinds of soil :	cum		256.85	
	2.9.2 Ordinary Rock	cum		493.50	
	2.9.3 Hard Rock (Requiring Blasting)	cum		810.85	
	2.9.4 Hard Rock (Blasting prohibited)	cum		1196.05	

2.0 (EARTH WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
2.10	Extra for every additional lift of 1.5 m or part thereof in excavation/banking excavated or stacked material : 2.10.1 All kinds of soil : 2.10.2 Ordinary or hard rock	cum cum	89.75 161.00
2.11	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead upto 50 m and lift upto 1.5 m.	cum	218.40
2.11(a)	Excavating, supplying and filling of local earth (including royalty)by mechanical transport upto a lead of 5 km also including ramming and watering of the earth in layers not exceeding 20 cm in trenches, plinth, sides of foundation etc. complete.	cum	276.60
2.12	Surface dressing of the ground including removing vegetation and in-equalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5 m in -All kinds of soil.	100 sqm	2412.00
2.13	Excavating holes more than 0.10 cum and upto 0.5 cum including getting out the excavated soil, then returning the soil as required in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering etc, disposing of surplus excavated soil; as directed within a lead of 50 m and lift upto 1.5 m in: 2.13.1 All kinds of soil. 2.13.2 Ordinary Rock 2.13.3 Hard Rock (Requiring Blasting) 2.13.4 Hard Rock (Blasting Prohibited)	Rate per hole <u>By manual</u> <u>By mechanical</u> 206.60 81.60 335.25 152.55 452.65 247.80 709.70 363.35	
NOTE (I) Carriage of excavated material beyond the first 50 m shall be paid as per the sub-head "carriage of materials". (II) Carriage by animal and mechanical transport will be reckoned in terms of nearest km. distance of 0.5 km or more will be taken as 1 km and distance of less than 0.5 km ignored, However, when the total lead is less than 0.5 km it will not be ignored but paid for separately in successive stages of 50m subject to the conditions that the total rate worked out on these bases does not exceed the rate for initial lead of 1 km.			
2.14	Close timbering in trenches including strutting, shoring and packing cavities (wherever required) complete. (Measurements to be taken of the face area timbered). 2.14.1 Depth not exceeding 1.5 m. 2.14.2 Depth exceeding 1.5 m but not exceeding 3 m 2.14.3 Depth exceeding 3 m but not exceeding 4.50 m	sqm sqm sqm	243.75 255.20 281.30
2.15	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). 2.15.1 Depth not exceeding 1.5 m. 2.15.2 Depth exceeding 1.5 m but not exceeding 3 m 2.15.3 Depth exceeding 3 m but not exceeding 4.50 m	sqm sqm sqm	250.50 275.40 301.65
2.16	Close timbering over areas including strutting, shoring and packing cavities (wherever required) etc. complete. (Measurements to be taken of the face area timbered). 2.16.1 Depth not exceeding 1.5 m. 2.16.2 Depth exceeding 1.5 m but not exceeding 3 m 2.16.3 Depth exceeding 3 m but not exceeding 4.50 m	sqm sqm sqm	213..85 227.75 242.40
2.17	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	3206.70
2.18	Open timbering in trenches including strutting and shoring complete (measurements to be taken of the face area timbered): 2.18.1 Depth not exceeding 1.5 m. 2.18.2 Depth exceeding 1.5 m but not exceeding 3 m 2.18.3 Depth exceeding 3 m but not exceeding 4.50 m	sqm sqm sqm	127.10 134.45 146.55

2.0 (EARTH WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
2.19	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):		
2.19.1	Depth not exceeding 1.5 m.	sqm	106.60
2.19.2	Depth exceeding 1.5 m but not exceeding 3 m	sqm	118.25
2.19.3	Depth exceeding 3 m but not exceeding 4.50 m	sqm	133.60
2.20	Open timbering over areas including strutting, shoring etc. complete (Measurements to be taken of the face area timbered):		
2.20.1	Depth not exceeding 1.5 m.	sqm	68.50
2.20.2	Depth exceeding 1.5 m but not exceeding 3 m	sqm	76.45
2.20.3	Depth exceeding 3 m but not exceeding 4.50 m	sqm	89.20
2.21	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	1673.40
2.22	Extra rates for quantities of works executed : 2.22.1 In or under water and/ or liquid mud, including pumping out water as required. 2.22.2 In or under foul position including pumping out water as required. Note for item no. 2.22:- The extra percentage rate is applicable in respect of each item but limited to quantities of work executed in these difficult conditions. The unit, namely, metre depth, to be considered for payment, shall be the depth measured from the subsoil water level upto the centre of gravity of the quantity executed in difficult conditions. The depth shall be reckoned correct to 0.1 metre, 0.05 metre or more shall be taken as 0.1 metre and less than 0.05metre ignored.	m depth m depth	20% of the rate of the item 25% of the rate of the item
2.23	Supplying and filling in plinth with fine sand under floors including, watering, ramming, consolidating and dressing complete.	cum	1204.50
2.24	Ploughing the existing ground to a depth of 15 cm to 25 cm and watering the same in- All kinds of soil.	100 sqm	2452.75
2.25	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth upto 30 cm measured at a height of 1 m above ground level and removal of rubbish upto a distance of 50 m outside the periphery of the area cleared.	100 sqm	1249.10
2.26	Clearing grass and removal of the rubbish upto a distance of 50 m outside the periphery of the area cleared.	100 sqm	635.00
2.27	Felling trees of the girth (measured at a height of 1 m above ground level) including cutting of trunk and branches, removing the roots and stacking of serviceable material and disposal of unserviceable material. 2.27.1 Beyond 30 cm girth upto and including 60 cm girth. 2.27.2 Beyond 60 cm girth upto and including 120 cm girth. 2.27.3 Beyond 120 cm girth upto and including 240 cm girth. 2.27.4 Above 240 cm girth	each each each each	379.05 1683.00 7795.70 15627.50
2.28	Supplying chemical emulsion in sealed containers including delivery as specified. Chlorophriphos/Lindane emulsifiable concentrate of 20%	1 litre	200.70
2.29	Diluting and injecting chemical emulsion for POST-CONSTRUCTIONAL anti-termite treatment. (excluding the cost of chemical emulsion): 2.29.1 Along external wall where the apron is not provided using chemical emulsion (Chlorophriphos/ Lindane E.C. 20% with 1% concentration) @ 7.5 litres/sqm of the vertical surface of the sub-structure to a depth of 300 mm including excavation of channel along the wall & rodding etc. complete: 2.29.2 Along the external wall below concrete or masonry apron using chemical emulsion (Chloropyriphos / Lindane E.C. 20% with 1% concentration) @ 2.25 litres/ linear meter including drilling & plugging holes etc.	meter meter	28.95 41.60

2.0 (EARTH WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	2.29.3 Treatment of soil under existing floors using chemical emulsion (Chlorophriphos/Lindane E.C. 20% with 1% concentration) @ one litre per hole, 300mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1:2 (1 cement :2 coarse sand) to match the existing floor:	sqm	232.30
	2.29.4 Treatment of existing masonry using chemical emulsion (Chlorophriphos /Lindane E.C. 20% with 1% concentration)@ one litre per hole at 300 mm interval including drilling holes at 45 degree and plugging them with cement mortar 1:2 (1 cement :2 coarse sand) to the full depth of hole:	meter	33.10
	2.29.5 Treatment of points of contact of wood work with chemical emulsion Chlorophriphos /Lindane E.C. 20% with 1% concentration (in oil or kerosene based solution) @ 0.5 litres per hole by drilling 6 mm dia holes at downward angle of 45 degree at 150 mm centre to centre and sealing the same	meter	256.50
2.30	Extra for levelling & neatly dressing of disposed soil completely as directed by Engineer-in-charge.	cum	65.90
2.31	Pumping out water caused by springs, tidal or river seepage, broken water mains or drains and the like.	1 kl	167.80
2.32	Removal of unhygienic materials (so classified by the site engineer) from designated sites and its disposal as per directions, all inclusive.	cum	189.20
2.33	Supply and stacking of Fly ash conforming to IRC- 58 at site, (measured stacks will be reduced by 20% for payment).	cum	NA
2.34	Filling with available fly ash and earth (excluding rock) in trenches or embankment in layers (each layer should not exceed 15 cm), with intermediate layer of compacted earth (Soil density of 98%) after every four layers of compacted depth of fly ash, sides & top layer of filling shall be done with earth having total minimum compacted thickness 30 cm or as decided by Engineer -in-charge, including compacting each layer by rolling/ ramming and watering, all complete as per drawing and direction of Engineer -in - charge.	cum	218.40

SUB HEAD: 3.0
MORTARS

3.0 (MORTARS)

CODE NO.	DESCRIPTION	UNIT	Rate ₹
	<u>LIME MORTAR</u>		
3.1	Lime Mortar 1 : 1 : 1 (1 lime putty: 1 surkhi: 1 fine sand)	cum	3083.30
3.2	Lime Mortar 1 : 1 : 2 (1 lime putty: 1 surkhi: 2 coarse sand)	cum	2802.45
3.3	Lime Mortar 1 : 2 (1 lime putty: 2 surkhi)	cum	3050.05
3.4	Lime Mortar 1 : 3 (1 lime putty: 3 surkhi)	cum	2752.65
3.5	Lime Mortar 1 : 3 (1 lime putty: 3 coarse sand)	cum	2827.40
	<u>CEMENT MORTAR</u>		
3.6	Cement Mortar 1 : 1 (1 cement: 1 fine sand)	cum	8282.05
3.7	Cement Mortar 1 : 2 (1 cement: 2 fine sand)	cum	6073.65
3.8	Cement Mortar 1 : 3 (1 cement: 3 fine sand)	cum	4970.40
3.9	Cement Mortar 1 : 4 (1 cement: 4 fine sand)	cum	4056.10
3.10	Cement Mortar 1 : 5 (1 cement: 5 fine sand)	cum	3563.75
3.11	Cement Mortar 1 : 6 (1 cement: 6 fine sand)	cum	3141.80
3.12	DELETED		
3.13	Cement Mortar 1 : 2 (1 cement: 2 coarse sand)	cum	6073.65
3.14	Cement Mortar 1 : 3 (1 cement: 3 coarse sand)	cum	4970.40
3.15	Cement Mortar 1 : 4 (1 cement: 4 coarse sand)	cum	4056.10
3.16	Cement Mortar 1 : 5 (1 cement: 5 coarse sand)	cum	3563.75
3.17	Cement Mortar 1 : 6 (1 cement: 6 coarse sand)	cum	3141.80
3.18	DELETED		
3.19	Cement Mortar 1 : 2 (1 cement: 2 stone dust)	cum	6073.65
3.20	Cement Mortar 1 : 2 (1 cement: 2 Marble dust)	cum	6415.65
3.21	Cement Mortar 1 : 5 (1 cement: 5 Marble dust)	cum	3948.95
3.22	White Cement Lime Mortar ¼:1:1:1 (¼ white cement : 1 lime putty : 1 stone dust : 1 marble dust)	cum	5486.05
3.23	White Cement Mortar 1:2 (1 white cement : 2 marble dust)	cum	11727.00
3.24	White Cement Mortar 1:3 (1 white cement : 3 marble dust)	cum	9339.10
3.25	White Cement Mortar 1:5 (1 white cement : 5 marble dust)	cum	6370.30
	<u>CEMENT LIME MORTAR</u>		
3.26	Cement Lime Mortar 1:1:3 (1cement : 1 lime putty: 3 fine sand)	cum	5398.10
3.27	Cement Lime Mortar 1:1:6 (1cement : 1 lime putty: 6 fine sand)	cum	4094.50
3.28	DELETED		
3.29	Cement Lime Mortar 1:1:6 (1cement : 1 lime putty: 6 coarse sand)	cum	4094.50
3.30	Mud Mortar	cum	739.60
3.31	Mortar in Lime, Surkhi (50% red and 50% yellow) and Marble Dust 1: 1.5 :0.5 (1 lime putty: 1.5 Surkhi :0.5 Marble Dust)	cum	3092.75

SUB HEAD: 4.0
CONCRETE WORK

4.0 (CEMENT CONCRETE)

4.0 (CEMENT CONCRETE)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
4.1	<u>LIME CONCRETE</u> Providing and laying in position lime concrete with graded stone/brick aggregate 40 mm nominal size and 40% mortar comprising of 1:1:1 (1 lime putty: 1surkhi: 1fine sand) including curing complete but excluding cost of centering and shuttering. All works upto plinth level with: 4.1.1 Graded Stone Aggregate 4.1.2 With graded brick aggregate	cum cum	4389.30 4012.00
4.2	Providing and laying on terrace upto floor five level lime concrete with graded brick agg. 25mm nominal size and 50% mortar comprising of 1lime putty: 2surkhi and curing complete.	cum	7667.35
4.3	Deduct for using 63 mm nominal size graded stone/brick aggregate instead of 40 mm nominal size graded stone/brick aggregate in lime concrete 4.3.1 Graded Stone Aggregate 4.3.2 Brick Aggregate	cum cum	0.00 0.00
4.4	<u>CEMENT CONCRETE (CAST-IN-SITU)</u> Providing and laying in position cement concrete of specified grade including curing but excluding the cost of centring and shuttering. All work upto plinth level with: 4.4.1 DELETED 4.4.2 1:1½:3 (1 cement :1½ coarse sand: 3 graded stone aggregate 20 mm nominal size) 4.4.3 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) 4.4.4 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 40 mm nominal size) 4.4.5 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) 4.4.6 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) 4.4.7 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size) 4.4.8 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) 4.4.9 DELETED 4.4.10 DELETED	cum cum cum cum cum cum cum cum	7275.25 6591.25 6540.45 5733.60 5673.40 5202.90 4826.50
4.5	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, anchors blocks, plain window sills, fillets etc upto floor V level, including curing but excluding the cost of centring, shuttering and finishing with. 4.5.1 DELETED 4.5.2 1:1½:3 (1 cement :1½ coarse sand: 3 graded stone aggregate 20 mm nominal size) 4.5.3 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) 4.5.4 DELETED 4.5.5 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) 4.5.6 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) 4.5.7 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) 4.5.8 1:5:10 (1 cement : 5 coarse sand : 10 graded brick aggregate 40 mm nominal size)	cum cum cum cum cum cum cum	9106.50 8422.45 7564.80 7504.60 6644.55 4469.25
4.6	Centering and shuttering including strutting, propping etc. and removal of form work for: 4.6.1 Foundations, footings, bases for columns 4.6.2 Retaining walls, return walls, walls (any thickness) including attached pilasters buttresses, plinth and string course fillets, kerbs and steps etc. 4.6.3 Columns, piers, abutments, pillars, posts and struts	sqm sqm sqm	286.35 628.95 723.20
4.7	Providing and laying cement concrete in kerbs, steps and the like at or near ground level including curing, excluding the cost of centring, shuttering, and finishing. 4.7.1 1:1½:3 (1 cement :1½ coarse sand :3 graded stone aggregate 20 mm nominal size) 4.7.2 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) 4.7.3 DELETED	cum cum	7275.25 6591.25
4.8	<u>CEMENT CONCRETE (PRECAST)</u> Providing & 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 coarse		

4.0 (CEMENT CONCRETE)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	sand) cost of required centring, shuttering and curing complete		
4.8.1	1:1½:3(1 cement :1½ coarse sand :3 graded stone aggregate 20 mmnominal size)	cum	8700.55
4.8.2	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	8016.55
4.8.3	DELETED		
4.9	Providing & fixing at or near ground level precast cement concrete in kerbs,, edging etc as per approved patterns and setting in position with cement mortar 1:3(1 cement:3 coarse sand) including the cost of required centring, shuttering and curing complete		
4.9.1	1:1½:3(1 cement :1½ coarse sand :3 graded stone aggregate 20 mmnominal size)	cum	7666.60
4.9.2	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	6982.60
4.10	Providing & fixing upto floor five level precast cement concrete solid blocks including hoisting and setting in position in cement mortar 1:3 (1cement:3 coarse sand), cost of required centring, shuttering and curing complete		
4.10.1	1:1½:3(1 cement :1½ coarse sand :3 graded stone aggregate 20 mmnominal size)	cum	14417.80
4.10.2	1:2:4 (1 cement : 2 coarse sand : 4 graded crushed stone aggregate 20 mm nominal size)	cum	13733.80
4.10.3	1:3:6 (1 cement : 3 coarse sand : 6 graded crushed stone aggregate 20 mm nominal size)	cum	12876.15
4.10.4	DELETED		
4.10.5	DELETED		
4.11	Providing & fixing upto floor five level precast cement concrete hollow blocks, including hoisting and setting in position in cement mortar 1:3 (1cement:3 coarse sand), cost of required centring, shuttering and curing complete.		
4.11.1	1:1½:3(1 cement :1½ coarse sand :3 graded stone aggregate 20 mmnominal size)	cum	11759.15
4.11.2	1:2:4 (1 cement : 2 coarse sand : 4 graded crushed stone aggregate 20 mm nominal size)	cum	11444.50
4.11.3	1:3:6 (1 cement : 3 coarse sand : 6 graded crushed stone aggregate 20 mm nominal size)	cum	11049.95
4.12	Deduct for using cement mortar 1:4 (1 cement: 4 coarse sand) instead of cement mortar 1:3 (1 cement: 3 coarse sand) for fixing precast cement concrete solid block work.	cum	115.50
4.13	DELETED		
4.14	Deduct for using cement mortar 1:4 (1 cement: 4 coarse sand) instead of cement mortar 1:3 (1 cement: 3 coarse sand) for fixing precast cement concrete hollow block work.	cum	54.36
4.15	DELETED		
4.16	Pre-casting & Placing in position 125 mm dia Bollards 600 mm high of required shape including providing M.S. Pipe Sleeve 50 mm dia 300 mm long in the Bollard and M.S. pipe 40mm dia and 450mm long with 150x150x6 mm M.S. plate welded at bottom and embeded 150 mm in cement concrete 1: 3: 6 (1 cement:3 coarse sand:6 graded stone aggregate 20 mm nominal size) including necessary excavation of size 250x250x450mm deep for the same in bitumen/concrete pavement at specified spacing.	1 bollard	859.00
4.17	DAMP PROOF COURSE Providing & laying damp-proof Course 40 mm thick with cement concrete 1:2:4 (1 cement:2 coarse sand: 4 graded stone agg 12.5 mm nominal size) and curing complete	sqm	346.70
4.18	Providing and laying damp-proof Course 50 mm thick with cement concrete 1:2:4 (1 cement:2 coarse sand: 4 graded stone aggregate 20 mm nominal size) and curing complete	sqm	416.50
4.19	Providing and mixing water proofing material in cement concrete work in doses by weight of cement as per manufacturer's specification. (1 kg of water proofing material in 50 kg of cement)	kg	63.00
4.20	Applying a coat of residual petroleum bitumen of grade VG-10 of approved quality using 1.7 kg per square meter on damp proof courses after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	sqm	183.20

4.0 (CEMENT CONCRETE)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
4.21	<u>MISCELLANEOUS</u> Extra for concrete work in superstructure above floor five level for each four floors or part thereof.	cum	1109.80
4.22	Extra for laying concrete in or underwater and/or liquid mud including cost of pumping or bailing out water and removing slush etc. complete Note for item No. 4.22:- The quantity will be calculated by multiplying the depth measured from the sub-soil water level up to centre of gravity of concrete under sub-soil water level with quantity of concrete in cum executed under sub-soil water. The depth of centre of gravity shall be reckoned correct to 0.1m, 0.05m or more shall be taken as 0.1m and less than 0.05m ignored.	cum/m depth	788.25
4.23	Extra for laying concrete in or under foul positions	cum	337.15
4.24	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75mm bed of dry brick ballast 40mm nominal size well rammed and consolidated and grouted with fine sand including finishing the top smooth and curing complete	sqm	572.80
4.25	Extra for addition of synthetic polyester triangular fibre of length 12 mm, effective diameter 10-40 microns and specific gravity of 1.34 to 1.40 in cement concrete/RCC/ Flooring /water retaining structures by using 125 gms of synthetic polyester triangular fibre for 50 kgs cement used as per directions of Engineer-in-Charge	per bag of 50kg of cement	61.90
4.26	Providing and laying in position ready mixed plain cement concrete, using Flyash 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 plain cement concrete work, including pumping of R.M.C. from transit mixer to site of laying, excluding the cost of centering, shuttering and finishing, including cost of curing, admixtures in recommended proportions as per IS : 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Note: 1) Excess/less cement used than specified in this item is payable/recoverable separately. (2) Fly ash conforming to grade I of IS3812 (Part-1) only be used as part replacement of OPC as per IS: 456. Uniform blending with cement is to be ensured in accordance with clauses 5.2 and 5.2.1 of IS: 456 -2000 in the items of BMC and RMC." 4.26.1 All works upto plinth level 4.26.1.1 M-15 grade plain cement concrete (cement content considered @ 240 Kg/cum. 4.26.1.2 M-10 grade plain cement concrete (cement content considered @ 220 Kg/cum. 4.26.2 All works above plinth level and upto floor five level 4.26.2.1 M-15 grade plain cement concrete (cement content considered @ 240 Kg/cum. 4.26.2.2 M-10 grade plain cement concrete (cement content considered @ 220 Kg/cum.	cum cum cum cum	NA NA NA NA
4.27	Providing and laying in position ready mixed plain cement concrete, with 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 plain cement concrete work, including pumping of R.M.C. from transit mixer to site of laying, excluding the cost of centering, shuttering and finishing, including cost of curing, admixtures in recommended proportions as per IS : 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Note: 1) Excess/less cement used than specified in this item is payable/recoverable separately. 4.27.1 All works upto plinth level 4.27.1.1 M-15 grade plain cement concrete (cement content considered @ 240 Kg/cum.)	cum	7725.60

4.0 (CEMENT CONCRETE)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	4.27.1.2 M-10 grade plain cement concrete (cement content considered @ 220 Kg/cum.	cum	7528.05
	4.27.2 All works above plinth level and upto floor five level		
	4.27.2.1 M-15 grade plain cement concrete (cement content considered @ 240 Kg/cum.	cum	8835.60
	4.27.2.2 M-10 grade plain cement concrete (cement content considered @ 220 Kg/cum.	cum	8638.05
4.28	DELETED		

SUB HEAD: 5.0

**REINFORCED CEMENT
CONCRETE**

5.0 (REINFORCED CEMENT CONCRETE)

5.0 (REINFORCED CEMENT CONCRETE)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
5.1	<u>CAST-IN-SITU</u> Providing and laying in position specified grade of reinforced cement concrete including curing but excluding the cost of centering, shuttering, finishing and reinforcement. All works upto plinth level 5.1.1 DELETED 5.1.2 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size) 5.1.3 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	 cum cum	 7788.40 7104.35
5.2	Reinforced cement concrete work in walls (any thickness) including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts upto floor five level including curing but excluding cost of centering shuttering, finishing and reinforcement. 5.2.1 DELETED 5.2.2 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size) 5.2.3 DELETED	 cum	 9395.70
5.3	Reinforced cement concrete work in beams, suspended floors, roofs having slope upto 15°, landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases upto five level including curing but excluding the cost of centring, shuttering, finishing and reinforcement with 5.3.1 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size) 5.3.2 DELETED	 cum	 9821.85
5.4	Providing and laying upto floor v level reinforced cement concrete in kerbs, steps and the like including curing but excluding the cost of centering, shuttering, finishing and reinforcement with 5.4.1 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size) 5.4.2 DELETED	 cum	 9023.35
5.5	Reinforced cement concrete work in arches, archribs, domes, vaults shells, folded plate and roofs having slope more than 15° upto floor five level level including curing but excluding the cost of centering, shuttering finishing and reinforcement with: 5.5.1 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size) 5.5.2 DELETED	 cum	 10377.15
5.6	Reinforced cement concrete work in chimneys, shafts upto floor five level including curing complete but excluding the cost of centering, shuttering, finishing and reinforcement with: 5.6.1 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size) 5.6.2 DELETED	 cum	 9588.05
5.7	Reinforced cement concrete work in well-steining including curing but excluding the cost of centering, shuttering, finishing and reinforcement, with 5.7.1 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size) 5.7.2 DELETED	 cum	 7334.45
5.8	Reinforced cement concrete work in vertical and horizontal fins individually or forming box louvers, facias and eaves boards up to floor five level including curing but excluding the cost of centering, shuttering, finishing and reinforcement, with 1:1½:3 (1 cement:1½ coarse sand :3 graded crushed stone aggregate 20 mm nominal size).	 cum	 8663.80
5.9	<u>FORM WORK</u> Centering and shuttering including strutting, propping etc. and removal of form for: 5.9.1 Foundations, footings, bases of columns etc. for mass concrete. 5.9.2 Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc. 5.9.3 Suspended floors, roofs, landings, balconies and access platforms. 5.9.4 Shelves (cast-in-situ) 5.9.5 Lintel, beams, plinth beams, girders, bressumers and cantilevers. 5.9.6 Columns, pillars, piers, abutments, posts and struts. 5.9.7 Stairs (excluding landings) except spiral staircases. 5.9.8 Spiral staircases (including landings) 5.9.9 Arches, domes, vaults upto 6 m span	 sqm sqm sqm sqm sqm sqm sqm sqm sqm	 286.35 628.95 718.20 718.20 577.55 742.55 851.15 676.25 2281.20

5.0 (REINFORCED CEMENT CONCRETE)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	5.9.10 Extra for arches, domes, vaults exceeding 6 m span	sqm	1118.85
	5.9.11 Chimney and shafts	sqm	628.95
	5.9.12 Well steining	sqm	543.85
	5.9.13 Vertical and Horizontal fins individually or forming box louvers, bands, facias and eaves boards.	sqm	1289.55
	5.9.14 Extra for shuttering in circular work (20% of respective centering and Shuttering items)	sqm	20%
	5.9.15 Small lintels not exceeding 1.5 m clear span, mouldings as in cornices, window sills, string courses, bands, copings, bed plates, anchor blocks and the like.	sqm	286.35
	5.9.16 Edges of slabs and breaks in floors and walls		
	5.16.1.1 Under 20 cm wide	meter	262.20
	5.16.1.2 Above 20 cm wide	sqm	1145.10
	5.9.17 Cornices and mouldings	sqm	1217.05
	5.9.18 Small surfaces such as cantilever ends, brackets and end of steps, caps and bases to pilasters and column and the like.	sqm	1027.40
	5.9.19 Weather shades, chajjas, corbels etc. including edges.	sqm	1037.35
	5.9.20 Suspended floors, roofs, landings, balconies and access platform with waterproofing ply 12 mm thick	sqm	803.75
	5.9.21 Lintel, beams, plinth beams, girders, bressumers and cantilevers with waterproofing ply 12 mm thick	sqm	663.40
5.10	Providing and fixing tie bolt, spring coil and plastic cone in wall shuttering complete as per the direction of Engineer-in-Charge.		
	5.10.1 12 mm dia and 100 mm length	each set	142.75
	5.10.2 12 mm dia and 150 mm length	each set	149.45
	5.10.3 20 mm dia and 150 mm length	each set	176.20
	5.10.4 20 mm dia and 225 mm length	each set	189.60
5.11	Extra for additional height in centering, shuttering where ever required with adequate bracing, propping etc. including cost of de-shuttering and de-centering at all levels, over a height of 3.5 m, for every additional height of 1 meter or part thereof (Plan area to be measured).		
	5.11.1 Suspended floors, roofs, landings, beams and balconies (plan area to be measured)	sqm	293.90
5.12	<u>PRE-CAST R.R.C.</u> Providing, hoisting and fixing up to floor five level precast reinforced cement concrete work in string courses, bands, copings, bed plates, anchor blocks, plain window sills and the like, including setting in position in cement mortar 1:3 (1 cement :3 coarse sand) including the cost of required centering, shuttering and curing but excluding cost of reinforcement with:		
	5.12.1 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size)	cum	9057.65
	5.12.2 DELETED		
5.13	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in small lintels not exceeding 1.5 m clear span up to floor five level, including setting in position in cement mortar 1:3 (1 cement :3 coarse sand) including the cost of required centering, shuttering and curing but excluding the cost of reinforcement with:		
	5.13.1 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size)	cum	12618.80
	5.13.2 DELETED		
5.14	Providing, hoisting and fixing 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 and curing but excluding the cost of reinforcement with:		
	5.14.1 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size)	cum	14746.00
	5.14.2 DELETED		
5.15	Providing, hoisting and fixing 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, shuttering and curing but excluding the cost of		

5.0 (REINFORCED CEMENT CONCRETE)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	reinforcement with: 5.15.1 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size) 5.15.2 DELETED	cum	11669.95
5.16	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in shelves including setting in cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centering, shuttering and finishing with neat cement punning on exposed surfaces and curing but excluding the cost of reinforcement with: 5.16.1 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size) 5.16.2 DELETED	cum	18449.95
5.17	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in vertical & horizontal fins individually or forming box louvers setting in cement mortar 1:2 (1 cement : 2 coarse sand), including the cost of required centering, shuttering and curing but excluding the cost of reinforcement with: 5.17.1 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size) 5.17.2 DELETED	cum	10121.00
5.18	Providing precast cement concrete Jali 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6 mm nominal size) reinforced with 1.6 mm dia mild steel wire including centering and shuttering, roughening cleaning, curing, fixing and finishing complete in cement mortar 1:3 (1 cement : 3 fine sand) etc. complete excluding plastering of the jambs, sills and soffits. 5.18.1 50 mm thick 5.18.2 40 mm thick 5.18.3 25 mm thick	sqm sqm sqm	1493.90 1342.40 1207.10
5.19	<u>ENCASING ROLLED STEEL SECTIONS</u> Encasing rolled steel sections, in beams and columns, with cement concrete of specified grade including curing, centering and shuttering complete but excluding cost of reinforcement with:- 5.19.1 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size) 5.19.2 DELETED	cum	13373.75
5.20	Encasing rolled steel sections, in grillage, with cement concrete of specified grade including curing, centering and shuttering complete but excluding cost of expended metal and hangers with:- 5.20.1 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size) 5.20.2 DELETED	cum	8292.40
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	555.70
5.22	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level 5.22.1 Mild steel and medium tensile steel bars 5.22.2 Hard drawn steel wire 5.22.3 Cold twisted bars 5.22.4 Hot rolled deformed bars 5.22.5 Hard drawn steel wire fabric 5.22.6 Thermo-Mechanically Treated bars of grade Fe-500D or more.	Kg Kg Kg Kg Kg Kg	115.35 92.85 123.20 123.20 94.15 123.20
5.22A	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level 5.22A.1 Mild steel and medium tensile steel bars 5.22A.2 Hard drawn steel wire 5.22A.3 Cold twisted bars 5.22A.4 Hot rolled deformed bars 5.22A.5 Hard drawn steel wire fabric 5.22A.6 Thermo-Mechanically Treated bars of grade Fe-500D or more.	Kg Kg Kg Kg Kg Kg	115.35 92.85 123.20 123.20 94.15 123.20
5.22B	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		

5.0 (REINFORCED CEMENT CONCRETE)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	complete upto plinth level. 5.22B.1 Thermo-Mechanically Treated bars of grade Fe-500D or more.	Kg	116.25
5.22C	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. 5.22C.1 Thermo-Mechanically Treated bars of grade Fe-500D or more.	Kg	116.25
5.23	MISCELLANEOUS Smooth finishing of the exposed surface of RCC work with 6mm thick cement mortar 1:3 (1 cement: 3 fine sand) including curing.	sqm	241.25
5.24	Extra for rendering smooth the top of suspended floors, landings and staircases (treads and risers) with cement mortar 1:2 (1 cement: 2 coarse sand) 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 sand in case of suspended floor and bricks laid in mud mortar in case of landings and steps including subsequent removal and cleaning of the same.	sqm	135.30
5.25	Providing and fixing copper plates as per design for expansion joints	Kg	868.15
5.26	Providing and filling in position, blown bitumen in expansion joints	cum	71992.80
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 meter of coarse sand for expansion joints.	cum	31743.50
5.28	Providing and fixing in position 12 mm thick bitumen impregnated fiber board conforming to IS: 1838, including cost of primer, sealing compound in expansion joints.	Per cm depth per 100 m	657.15
5.29	Providing and fixing sheet covering over expansion joints with iron screws as per design 5.29.1 DELETED 5.29.2 Non-Asbestos Cement sheet plain 6 mm thick 150 mm wide 200 mm wide 5.29.3 Aluminum fluted strip 3.15 mm thick 150 mm wide 200 mm wide 5.29.4 Cement bonded wood particle board 6mm thick IS: 14276 150 mm wide 200 mm wide	meter meter meter meter meter meter	203.75 274.00 512.65 696.80 203.75 274.00
5.30	Add for plaster drip course/grooves in plastered surface or moulding to R.C.C. projections	meter	62.00
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 R.C.C. under subsoil water with the quantity of R.C.C. in cubic meter executed under subsoil water. The depth of centre of gravity shall be reckoned correct to 0.1 m, 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 m depth	788.25
5.32	Extra for laying reinforced cement concrete in or under foul position.	cum	337.15
5.33	DESIGN MIX CONCRETE DELETED		
5.34	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve		

5.0 (REINFORCED CEMENT CONCRETE)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	workability without impairing strength and durability as per direction of Engineer-in-charge. Note: - Cement in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is content considered payable or recoverable separately.		
	5.34.1 All works upto plinth level	cum	8021.10
	5.34.2 All works above plinth level upto floor V level	cum	9412.05
5.35	Extra for providing richer mixes at all floor levels. Note:- Excess/ less cement over the specified cement content used is payable/ recoverable separately.		
	5.35.1 Providing M-30 grade concrete instead of M-25 grade BMC/RMC. (Note:- Cement content considered in M-30 is @ 340 kg/cum)	cum	98.80
	5.35.2 Providing M-35 grade concrete instead of M-25 grade BMC/RMC. (Note : Cement content considered in M-35 is @ 350 kg/cum).	cum	197.55
	5.35.3 Providing M-40 grade concrete instead of M-25 grade BMC/RMC. (Note : Cement content considered in M-40 is @ 360 kg/cum)	cum	269.35
5.36	Add or deduct for using more or less cement in the items of design mix over and above the specified cement content therein.	quintal	941.00
5.37	Providing and placing in position precast reinforced cement concrete waffle units, square or rectangular as per design and shape for floors and roofs in 1:1½:3 (1cement : 1½ coarse sand : 3 graded stone aggregate 10 mm nominal size), 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 service lines etc., providing steel hooks for lifting etc, form work in pre casting, handling, hoisting, centering and erection complete for all floor levels including curing but excluding the cost of reinforcement.	cum	26030.10
5.38	Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work, using cement content as per approved design mix, 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 as per direction of the Engineer- in - charge. Note: - Cement content considered in this item is @ 330 kg/ cum. Excess/ less cement used as per design mix is payable/ recoverable separately.		
	5.38.1 All works upto plinth level	cum	8520.15
	5.38.2 All works above plinth level upto floor V level	cum	9911.10
5.39	Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work, using flyash and cement content as per approved design mix, 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 includingcost of admixtures in recommended proportions as per IS : 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer- in - charge. 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 clauses 5.2 and 5.2.1 of IS: 456 -2000 in the items of BMC and RMC.		
	5.38.1 All works upto plinth level	cum	NA
	5.38.2 All works above plinth level upto floor V level	cum	NA
	Note:- The above item shall be used judiciously where specified qualityof Fly Ash is available for mixing in concrete. Also, the guidelines issued by CDO, CPWD, vide circular no.CDO/SE (RR)/FlyAsh (Main)/102 dated 9th April 2009 shall be followed in such cases.		

5.0 (REINFORCED CEMENT CONCRETE)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
5.40	Extra for R.C.C./B.M.C./R.M.C. work above floor V level for each four floors or part thereof.	cum	280.95
5.41	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. 5.41.1 Non pigmented wet curing compound	sqm	58.05
5.42	Providing and fixing tapered / parallel threaded couplers conforming to IS code on Reinforcement Couplers for Mechanical Splices of Bars for Concrete Reinforcement – Specification, 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 . (The length of the bars in which coupler is to be provided should not be less than 4 meter, no deduction for labour and binding wire saved for not providing lap length shall be made). 5.42.1 Coupler for 16 mm diameter reinforcement bar. 5.42.2 Coupler for 20 mm diameter reinforcement bar. 5.42.3 Coupler for 25 mm diameter reinforcement bar. 5.42.4 Coupler for 28 mm diameter reinforcement bar. 5.42.5 Coupler for 32 mm diameter reinforcement bar.	each each each each each	116.20 161.45 227.10 265.60 315.90
5.43	Providing and fixing in position Stainless steel Grade 304 plate-1.0 mm thick as per design for expansion joints. 5.43.1 200 mm wide 5.43.2 300 mm wide	meter meter	748.80 1059.20
5.44	Providing and fixing of expansion joint system related with floor location as per drawings and direction of Engineer-In-Charge. The joints system will be of extruded aluminum 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 without stress to its components. System shall consist of metal profiles with a universal aluminum base member designed to accommodate 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 aluminum 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 manufactures design and as approved by Engineer-in-Charge. (Material shall confirm to ASTM 6063.) 5.44.1 Floor joint of 100 mm gap 5.44.2 Floor joint of 150 mm gap 5.44.3 Floor joint of 200 mm gap	meter meter meter	6751.70 8093.00 10103.25
5.45	Providing and fixing of expansion joint system related with wall joint (internal/ external) location as per drawings and direction of Engineer-In-Charge. The joints shall be of extruded aluminum 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 aluminum profiles exhibiting minimal exposed aluminum surfaces mechanically snap locking the multi-cellular to facilitate movement. (Material shall confirm to ASTM 6063.) 5.45.1 Wall joint of 100 mm gap 5.45.2 Wall joint of 150 mm gap 5.45.3 Wall joint of 200 mm gap	meter meter meter	5928.85 6607.85 7521.00

5.0 (REINFORCED CEMENT CONCRETE)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
5.46	<p>Providing and fixing of expansion joint system of approved make and manufactures for various roof locations as per approved drawings and direction of Engineer-In- Charge. The joints shall be of extruded aluminum 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 aluminum 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 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 aluminum extrusion cavity to allow freedom of movement and flexure in all directions including vertical displacement. The Joint system shall resists damage 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.</p> <p>5.46.1 Roof joint of 100 mm gap</p> <p>5.46.2 Roof joint of 150 mm gap</p> <p>5.46.3 Roof joint of 200 mm gap</p>	meter meter meter	6484.10 7022.65 8230.10
5.47	<p>Providing and fixing in position factory made precast RCC M-40 fixing with hold fast embedded in 1:3:6 concrete blocks for doors and windows frames having excellent smooth finish as per IS: 6523 with reinforcement of 3 Nos, 6 mm dia main bars tied with 3 mm M.S stirrups placed @ 200 mm C/C and 6 numbers high strength polymer blocks of required size for fixing hinges including providing 6 nos. specially designed M.S. galvanized sleeves for accommodating 6 mm dia fully threaded bolts for fixing hold fast on vertical members, providing suitable arrangement for receiving sliding door bolts and towerbolt etc all complete, as per the direction of Engineer in charge. The frame shall be measured in running meter correct to two places of decimal</p> <p>5.47.1 Door frame 125 mm x 60 mm</p> <p>5.47.2 Door frame 100 mm x 60 mm</p> <p>5.47.3 Door frame 85 mm x 60 mm</p>	meter meter meter	711.45 660.00 632.65
5.48	<p>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 & 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.</p> <p>5.48.1 Reinforced Cement Concrete M-50 grade</p> <p>5.48.2 Reinforced Cement Concrete M-60 grade</p> <p>5.48.3 Extra for using M-50/M-60 grade self –compacting Reinforced Cement Concrete</p>	cum cum cum	8150.15 9291.10 614.15
5.49	<p>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</p>		

5.0 (REINFORCED CEMENT CONCRETE)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	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 directed by the 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 directed by the 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 directed by the 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. “Excess/less cement used for design mix including the extra cement required for under water concreting is payable / recoverable separately.	cum	18288.45

SUB HEAD: 6.0
MASONRY WORK

6.0 (MASONRY WORK)

6.0 (MASONRY WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
6.1	Brick work with common burnt clay (non-modular) bricks of class designation 7.5 in foundation and plinth including curing in : 6.1.1 Cement lime mortar 1:1:6 (1 cement : 1 lime putty : 6fine sand) 6.1.2 DELETED 6.1.3 Cement lime mortar 1:1:6 (1 cement : 1 lime putty : 6 coarse sand) 6.1.4 Cement mortar 1:4 (1 cement : 4 coarse sand) 6.1.5 Cement mortar 1:6 (1 cement : 6 coarse sand) 6.1.6 Mud Mortar	cum cum cum cum cum	7890.20 7890.20 7877.40 7571.55 6768.05
6.2	Brick work with common burnt clay Modular bricks of class designation 7.5. in foundation and plinth including curing complete in : 6.2.1 Cement mortar 1:4 (1 cement : 4 coarse sand) 6.2.2 Cement mortar 1:6 (1 cement : 6 coarse sand)	cum cum	NA NA
6.3	Brick work with common burnt clay machine moulded perforated bricks of class designation 12.5 conforming to I:S: 2222 in Superstructure above plinth level upto floor five level in cement mortar 1:6 (1 cement : 6 coarse sand) and curing complete in: 6.3.1 With (non-modular) bricks 6.3.2 with modular bricks	cum cum	NA NA
6.4	Extra for brick work with common burnt clay bricks/cement concrete bricks in superstructure above plinth level upto floor five level	cum	1455.65
6.5	Extra for brick work/tile brick/AAC block masonry in superstructure above floor V level for each four floors or part thereof by mechanical means:	cum	142.00
6.6	Extra for brick work in: 6.6.1 Square or rectangular pillars	cum	756.10
6.7	Extra for brick work with bricks of class designation 7.5 curved on plan upto a mean radius not exceeding 6 meters.	cum	994.40
6.8	Extra for cutting or chamfering of bricks to required shape in masonry work.	meter	33.20
6.9	Extra for forming cavity 5 cm to 7.5 cm wide in cavity walls with necessary weep and vent holes including use of cores and cost of providing and fixing bitumastic coated M.S. ties 300 mm long of 25mmx3 mm section at not less than 3 ties per sqm as per approved design.	sqm	204.55
6.10	Providing half brick masonry with common burnt clay (non-modular) bricks of class designation 7.5 in cement mortar 1:3 (1 cement : 3 coarse sand) in superstructure for closing cavity 5 to 7.5cm wide in cavity wall and curing complete with 10 cm / 11.4 cm wide bitumen felt type 3 grade 1.	meter	305.40
6.11	Brick work 7 cm thick with common burnt clay (non-modular) bricks of class designation 7.5 in cement mortar 1:3 (1 cement : 3 coarse sand) in superstructure above plinth level and upto floor V level including curing complete.	sqm	877.10
6.12	Brick work in plain arches in superstructure above plinth level and upto floor V level including centering, shuttering and curing complete for span upto 6 meters with common burnt clay (non-modular) bricks of class designation 7.5 in cement mortar 1:3 (1 cement : 3 coarse sand)	cum	15245.95
6.13	Brick work in gauged arches in superstructure above plinth level and upto floor V level in cement mortar 1:3 (1 cement : 3 coarse sand) including centering, shuttering and curing complete, for span upto 6 meters with common burnt clay (non-modular) bricks of class designation 7.5.	cum	18466.90
6.14	Extra for additional cost of centering for arches exceeding 6 m span including all shuttering, bolting, wedging and removal (Area of the soffit to be measured)	sqm	1120.25
6.15	<u>Half brick masonry</u> Half brick masonry with common burnt clay (non-modular) bricks of class designation 7.5 in foundations and plinth including curing in : 6.15.1 Cement mortar 1:3 (1 cement : 3 coarse sand) 6.15.2 Cement mortar 1:4 (1 cement : 4 coarse sand)	sqm sqm	981.50 947.25
6.16	Extra for half Brick masonry in superstructure above plinth level upto floor V level.	sqm	159.65

6.0 (MASONRY WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
6.17	Extra for half Brick masonry in superstructure, above floor V level for every four floors or part thereof by mechanical means.	sqm	12.60
6.18	Extra for providing and placing in position 2 Nos. 6mm dia. M.S. bars at every third course of half brick masonry.	sqm	126.55
6.19	Providing bricks band 10cm / 7.0 cm thick 5 cm / 5.7 cm projected from wall face, in bricks of class designation 7.5 laid in cement mortar 1:4 (1 cement : 4 coarse sand) and curing complete. Note: For items where modular bricks are used, the thickness of drip course / string course / band shall be 10 cm and where 22.9 cm x 11.4 cm x 7 cm bricks are used, the thickness shall be 7.0 cm	meter	42.05
6.20	Brick Tile Work Tile brick masonry with common burnt clay tile bricks of class designation 10 in foundation and plinth including curing complete in: 6.20.1 Lime mortar 1:1:1 (1 lime putty : 1 surkhi : 1 fine sand) 6.20.2 Cement lime mortar 1:1:6 (1 cement : 1 lime putty : 6 fine sand) 6.20.3 Cement lime mortar 1:1:6 (1 cement : 1 lime putty : 6 coarse sand) 6.20.4 Cement mortar 1:4 (1 cement : 4 coarse sand) 6.20.5 Cement mortar 1:6 (1 cement : 6 coarse sand)	cum cum cum cum cum	13770.50 14311.65 14311.65 14291.10 13801.80
6.21	Tile brick masonry with common burnt clay machine moulded tile bricks of class designation 12.5 conforming to IS 2690 (Part 1) - 1993 in foundation and plinth in cement mortar 1:6 (1 cement: 6 coarse of sand) including curing complete.	cum	NA
6.22	Extra for tile bricks masonry with common burnt clay tile bricks in superstructure above plinth level upto floor five level.	cum	1553.55
6.23	Deduct for using common burnt clay tile bricks of class designation 7.5 instead of tile bricks of class designation 10 in tile brick masonry.	cum	NA
6.24	Extra for tile bricks masonry with common burnt clay tile bricks in square or rectangular pillars.	cum	1083.15
6.25	Extra for tile brick masonry with common burnt clay tile bricks curved on plan upto a mean radius not exceeding 6 meters.	cum	1666.25
6.26	Tile brick masonry with common burnt clay non modular tile bricks of class designation 10 in plain arch work in superstructure above plinth level upto floor five level in cement mortar 1:4 (1cement :4 coarse sand) including curing, centering and shuttering complete.	cum	21475.65
6.27	Tile brick masonry with common burnt clay non modular tile bricks of class designation 10 in gauged arch work in superstructure in cement mortar 1:4 (1 cement : 4 coarse sand) including curing, centering and shuttering complete.	cum	24675.65
6.28	Tile brick masonry work 5cm thick with common burnt clay non modular tile bricks of class designation 10 in cement mortar 1:3 (1 cement : 3 coarse sand) and curing complete in superstructure above plinth level upto floor five level.	sqm	1012.25
6.29	Honey comb work Honey-comb brick work 10/11.4 cm thick with common burnt clay (non-modular) bricks of class designation 7.5 in superstructure above plinth level upto floor five level in cement mortar 1:4 (1 cement : 4 coarse sand) including curing complete	sqm	713.10
6.30	Moulding and cornices Providing 10cm/7.0cm thick and 5cm/5.7cm projected string course with bricks of class designation 7.5 in cement mortar 1:4 (1 cement: 4 coarse sand) and curing complete.	meter	42.90
6.31	Moulding and cornices with brick masonry in cement mortar 1:4 (1 cement: 4 coarse sand) girth to be measured in cm and length in running meter.	per meter per cm girth	4.95
6.32	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	cum per meter depth	788.25

6.0 (MASONRY WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	the quantity of brick work in cum executed under the sub-soil water. The depth of centre of gravity shall be reckoned correct to 0.1m, 0.05m or more shall be taken as 0.1m and less than 0.05m ignored.		
6.33	Extra for laying brick work in or under foul position.	cum	337.15
6.34	<u>Exposed Brick work</u> Brick work with common burnt clay selected bricks of class designation 7.5 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 coarse sand) including curing complete in: 6.34.1 From ground level upto plinth level 6.34.1.1 With Non Modular bricks 6.34.1.2 With Modular bricks 6.34.2 Above plinth level and upto floor V level 6.34.2.1 With Non Modular bricks 6.34.2.2 With Modular bricks	cum cum cum cum	7744.60 NA 9274.25 NA
6.35	Brick work with common burnt clay machine moulded bricks of class designation 12.5 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 coarse sand) including curing complete in: 6.35.1 From ground level upto plinth level 6.35.1.1 With Modular bricks 6.35.1.2 With Non Modular bricks 6.35.2 Above plinth level and upto floor V level 6.35.2.1 With Modular bricks 6.35.2.2 With Non Modular bricks	cum cum cum cum	NA NA NA NA
6.36	Brick work with common burnt clay machine moulded perforated bricks of class designated 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 coarse sand) including curing complete. 6.36.1 From ground level upto plinth level 6.36.1.1 With Modular bricks 6.36.1.2 With Non Modular bricks 6.36.2 Above plinth level and upto floor V level 6.36.2.1 With Modular bricks 6.36.2.2 With Non Modular bricks	cum cum cum cum	NA NA NA NA
6.37	Brick work in clay fly ash (non-modular) bricks of class designation 7.5 in superstructure above plinth level upto floor five level and curing complete in: 6.37.1 Cement mortar 1:4 (1 cement : 4 coarse sand) 6.37.2 Cement mortar 1:6(1cement : 6 coarse sand)	cum cum	8664.95 8359.15
6.38	Brick work with non modular fly ash bricks confirming to IS:12894, class designation 10 average compressive strength in superstructure above plinth level upto floor five level including curing complete in: 6.38.1 Cement mortar 1:4 (1 cement : 4 coarse sand) 6.38.2 Cement mortar 1:6(1cement : 6 coarse sand)	cum cum	7155.05 6885.90
6.39	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 including curing complete in: 6.39.1 Cement mortar 1:4 (1 cement : 4 coarse sand) 6.39.2 Cement mortar 1:6(1cement : 6 coarse sand)	cum cum	7871.75 7602.65
6.40	Brick work with modular extruded burnt fly ash clay sewer brick (conforming to IS:4885) in foundation and plinth including curing complete in cement mortar 1:4 (1 cement : 4 coarse sand)	cum	6031.25
6.41	Brick work with modular extruded burnt fly ash clay sewer brick (conforming to IS: 4885) in arches in foundation and plinth in cement mortar 1:3 (1 cement: 3 fine sand) including curing complete.	cum	12471.05

6.0 (MASONRY WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
6.42	Providing and laying autoclaved aerated cement blocks masonry with 100 mm thick AAC blocks in superstructure above plinth level upto floor V level in cement mortar 1:4 (1 Cement : 4 coarse sand) and curing complete. The rate includes providing and placing in position 2 nos. 6 mm dia M.S bars at every third course of masonry work.	cum	8650.00
6.43	Providing and laying gypsum panel partitions 100mm thick with water proof gypsum panels of size 666 x 500 x 100mm made of calcite phosphor gypsum fixed with tongue and groove jointed with bonded plaster as per manufacturers' specifications in super structure above plinth level up to V floor level. Gypsum blocks will have a minimum compressive strength of 9.3kg per/cm ²	Sqm	859.95
6.44	Extra for gypsum panel partition in super structure above floor V level for every four floors or part thereof.	sqm	128.00
6.45	Half brick masonry with non modular fly ash bricks of class designation 10, conforming to IS: 12894, in superstructure above plinth level and upto floor V level and curing complete in:		
	6.45.1 Cement mortar 1:3 (1 cement : 3 coarse sand)	sqm	914.90
	6.45.2 Cement mortar 1:4 (1 cement : 4 coarse sand)	sqm	880.65
6.46	DELETED		
6.47	Making plinth protection with common burnt clay bricks of class designation 7.5 laid on edge in cement mortar 1:6 (1 cement : 6 coarse sand) with 12 mm thick bed of cement mortar 1:6 (1 cement : 6 coarse sand) over 75 mm bed of dry brick aggregate 40mm nominal size rammed, consolidated and grouted with fine sand. The top of bricks pointed with cement mortar 1:3 (1cement: 3 fine sand) and curing complete.	sqm	1390.45
6.48	Brick edging 7cm wide 11.4cm deep to plinth protection with common burnt clay (non-modular) bricks of class designation 7.5 including grouting with cement mortar 1:4 (1 Cement : 4 fine sand) and curing complete.	meter	66.25
6.49	DELETED		
6.50	DELETED		
6.51	DELETED		
6.52	Providing and laying autoclaved aerated cement blocks masonry with 150mm/230mm/300 mm thick AAC blocks 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 of Engineer-in-Charge. (The payment of RCC band and reinforcement shall be made for separately).	cum	6868.60

SUB HEAD: 7.0
STONE WORK

7.0 (STONE WORK)

7.0 (STONE WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
7.1	<u>RANDOM RUBBLE MASONRY</u> Random Rubble masonry with hard stone in foundation and plinth including leveling up with cement concrete 1:6:12 (1 Cement : 6 coarse sand : 12 graded stone aggregate 20mm nominal size) upto plinth level and curing complete with: 7.1.1 Cement mortar 1:6 (1 Cement : 6 coarse sand) 7.1.2 Lime mortar 1:1:1 (1 Lime putty: 1 Surkhi: 1 Fine sand)	Rate per cum A Quarry B Nallah	7677.35 5402.90 7651.55 5377.05
7.2	Random Rubble masonry with hard stone in superstructure above plinth level and upto floor five level, including levelling up with cement concrete 1:6:12 (1 Cement : 6 coarse sand : 12 graded stone aggregate 20mm nominal size) and curing complete at window sills, ceiling level and the like: 7.2.1 Cement mortar 1:6 (1 Cement : 6 coarse sand) 7.2.2 Lime mortar 1:1:1 (1 Lime putty: 1 Surkhi: 1 Fine sand)	Rate per cum A Quarry B Nallah	9131.90 6857.45 9106.10 6831.60
7.3	Dry random rubble masonry with hard stone in foundation and plinth: 7.3.1 With bond stone. 7.3.2 Without bond stone	Rate per cum A Quarry B Nallah	5536.55 3262.10 2793.80
7.4	Extra for random rubble masonry with hard stone in:	cum	769.35
	7.4.1 Square or rectangular pillars	cum	2584.65
	7.4.2 Circular pillars		
7.5	Extra for random rubble masonry with hard stone curved on plan for a mean radius not exceeding 6 m.	cum	978.40
7.6	<u>COURSED RUBBLE MASONRY</u> Coursed Rubble Masonry with hard stone in foundation and plinth and curing complete with: 7.6.1 Cement mortar 1:6 (1 Cement : 6 coarse Sand) 7.6.2 Lime mortar 1:1:1 (1 Lime putty: 1 Surkhi: 1 Fine sand)	Rate per cum A 1 st Sort B 2 nd Sort	9259.90 8553.15 9236.40 8529.65
7.7	Coursed rubble masonry with hard stone (first or second sort) in superstructure above plinth level and upto floor five level including curing complete with: 7.7.1 Cement mortar 1:6 (1 Cement : 6 coarse Sand) 7.7.2 Lime mortar 1:1:1 (1 Lime putty: 1 Surkhi: 1 Fine sand)	Rate per cum A 1 st Sort B 2 nd Sort	10691.15 9984.35 10667.65 9960.90
7.8	Extra for coursed rubble masonry with hard stone (First or second sort) in :	cum	857.75
	7.8.1 Square or rectangular pillars	cum	2926.50
	7.8.2 Circular pillars		
7.9	Extra for coursed rubble masonry with hard stone (First or second sort) curved on plan for a mean radius not exceeding 6 metres.	cum	1069.45
7.10	<u>ASHLAR MASONRY</u> Stone work in super structure upto floor five level in cement mortar 1:6 (1 cement :6 coarse sand) including pointing with cement mortar 1:2 (1 white cement: 2 stone dust) with an admixture of pigment matching the stone shade and curing complete: 7.10.1 In Plain Ashlar 7.10.1.1 One face desssed A Red sand stone B White sand stone 7.10.1.2 Both faces dressed A Red sand stone B White sand stone 7.10.2 In Ashlar Punched (ordinary) 7.10.2.1 One face punched A Red sand stone	cum cum cum cum cum	48741.05 73709.65 66592.65 91561.25 45893.15

7.0 (STONE WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	B White sand stone	cum	70861.75
	7.10.2.2 Both faces punched		
	A Red sand stone	cum	60896.75
	B White sand stone	cum	85865.35
7.11	Stone work plain ashlar in super structure upto floor five level in cement mortar 1:3 (1 cement :3 coarse sand) including centering, shuttering and pointing with cement mortar 1:2 (1 white cement: 2 stone dust) with an admixture of pigment matching the stone shade and curing complete:		
	7.11.1 In Arches		
	7.11.1.1 One face dressed		
	A Red sand stone	cum	55959.25
	B White sand stone	cum	80927.85
	7.11.1.2 Both faces dressed		
	A Red sand stone	cum	73810.80
	B White sand stone	cum	98779.40
	7.11.2 In Domes		
	7.11.2.1 One face dressed		
	A Red sand stone	cum	90146.65
	B White sand stone	cum	115115.20
	7.11.2.2 Both faces dressed		
	A Red sand stone	cum	135619.65
	B White sand stone	cum	160588.25
7.12	Extra for stone work, random rubble masonry/coarse rubble masonry/ashlar masonry above floor V level for every four floors or part thereof.	cum	1479.75
7.13	Extra for plain ashlar or ashlar punched in :		
	7.13.1 Square or rectangular pillars	cum	3000.35
	7.13.2 Circular pillars	cum	9001.00
7.14	Extra for stone work, plain ashlar or ashlar punched curved on plan with a mean radius not exceeding 6 m.	cum	2087.20
7.15	Extra for additional cost of centering for arches exceeding 6m span including all strutting, bolting, wedging etc. and removal (area of soffit to be measured).	sqm	1118.90
7.16	Stone work, ashlar sunk or moulded or sunk and moulded upto floor five level in cement mortar 1:6 (1Cement: 6 coarse sand) including pointing with white cement mortar 1:2 (1 White cement: 2 Stone Dust) with an admixture of pigment matching the stone shade and curing complete.		
	A Red sand stone	cum	71372.55
	B White sand stone	cum	96341.15
7.17	Extra for stone work, ashlar sunk or moulded or sunk and moulded or carved in:		
	7.17.1 Triangular or Square or Rectangular pillars	cum	3913.45
	7.17.2 Circular or polygonal pillars	cum	11088.15
7.18	Extra for stone work, ashlar sunk or moulded in cornice	per mtr per cm girth	46.50
7.20	Extra for stone work (Veneer work) curved on plan with a mean radius not exceeding 6 m.	cum	3000.35
7.23	Providing and fixing stone dowels 10 x 5 x 2.50 cm cut to double wedge shape as per design in cement mortar 1:2 (1 cement: 2 coarse sand) including making the necessary chases.	each	56.40
7.25	Providing and fixing sloping chajja of stone 40mm thick and upto 80cm wide beyond the wall as measured along the slope in cement mortar 1:4 (1 Cement : 4 coarse sand) with 12mm diameter anchoring steel bar 45 cm long fixed in each stone and supported on and including with brick cover in		

7.0 (STONE WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	cement mortar 1:4 (1 cement : 4 coarse sand) including pointing in cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade.: 7.25.1 Red sand stone. 7.25.1.1 With common burnt clay (non modular) bricks of class designation 7.5 7.25.2 White sand stone 7.25.2.1 With common burnt clay (non modular) bricks of class designation 7.5	sqm sqm	2261.00 2294.45
7.26	Providing and fixing horizontal chajja of stone 40mm thick and upto 80cm projection in cement mortar 1:4 (1 Cement : 4 Coarse sand) including pointing in white cement mortar 1:2 (1 White cement : 2 Stone dust) with an admixture of pigment matching the stone shade. 7.26.1 Red sand stone 7.26.2 White sand stone	sqm sqm	1414.15 1446.25
7.27	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 coarse sand) including finishing and curing complete.	sqm	1650.35
7.28	Providing and fixing red sand stone brackets 55 x 22.5 x 45 cm sunk and moulded including providing and fixing with 4 No's, gun metal cramps 25 x 6mm 30cm long and dowel bars 7.5cm long 6mm dia as per design.	each	5308.30
7.29	Stone work, plain in copings, cornices, string courses and plinth courses, upto 75mm thick, in cement mortar 1:6 (1 cement : 6 Coarse sand) including pointing with white cement mortar 1:2 (1 cement : 2 Stone dust) with an admixture of pigment matching the stone shade& curing complete. 7.29.1 Red sand stone 7.29.2 White sand stone	cum cum	69239.25 94207.85
7.30	30 mm thick red sand stone shelves fixed in walls in cement mortars 1:3 (1 cement: 3 coarse sand) including finishing& curing complete.	sqm	761.80
7.31	30 mm thick red sand stone shelves (chisel dressed) supported on 40 x 40 x 6 mm T or angle iron brackets 0.75 mtr apart fixed on 15 x 10 x 10 cm blocks of cement concrete 1: 3 : 6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) and curing complete.	sqm	879.35
7.32	30 mm thick red sand stone shelves (chisel dressed) supported on precast reinforced cement concrete brackets 1:1½:3 (1 cement: 1½ coarse sand: 3 graded stone aggregate 12.5mm nominal size) fixed 0.75m apart in walls with cement mortar 1:4 (1 cement: 4 coarse sand) with section of the bracket 5x10cm at the wall and tapering to 5x5cm at the free end with a loop reinforcement of one 10 mm dia bar per bracket including curing complete.	sqm	1167.30
7.33	30 mm red sand stone shelves (chisel dressed) supported on 5 x 10cm sal wood brackets 0.75mtr apart fixed in wall with cement mortar 1:4 (1 cement : 4 coarse sand) and curing complete.	sqm	2315.70
7.34	Providing and fixing in cement mortar 1:6 (1 cement : 6 coarse sand) red sand stone slab 30mm thick and curing complete over : 7.34.1 Drains 7.34.2 Flue tops	sqm sqm	595.40 589.30
7.35	Providing and fixing stone jali 40 mm thick throughout in cement mortar 1:3 (1 cement : 3 Coarse sand) including pointing in white cement mortar 1:2 (1 cement : 2 Stone dust) with an admixture of pigment matching the stone shade, Jali slab without any chamfers etc and curing complete. 7.35.1 Red sand stone 7.35.2 White sand stone	sqm sqm	11842.90 11872.35

7.0 (STONE WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
7.36	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 measured 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 reckoned correct to 0.1 m, 0.05 m or more shall be taken as 0.1 m and less than 0.0m ignored.	cum Per mtr depth	788.25
7.37	Extra for laying stone work in or under foul positions	cum	337.15
7.40	Stone tile work for wall lining upto 10m height with special adhesive like araldite or equivalent over 12mm thick bed of cement mortar 1: 3 (1 cement : 3 coarse sand) including pointing in white cement with an admixture of pigment to match the stone shade. 7.40.1 8mm thick (mirror polished and machine cut edges) 7.40.1.1 Granite stone of any colour and shade 7.40.1.2 Raj Nagar plain white marble/Udaipur green marble/Zebra black marble	 sqm sqm	 2774.30 NA
7.44	<u>DEVRI STONE WORK</u> Providing and laying chisel dressed Devri Stone of size 300x200 mm face with 150 mm depth in cement mortar 1: 6 (1 cement : 6 coarse sand) upto plinth level including curing. One face dressed 7.44.1 Fine chisel dressed 7.44.2 Rough chisel dressed	 sqm sqm	 10055.90 8617.05
7.45	Extra for fine chisel dressed Devri Stone in square or rectangular Pillars	sqm	128.60
7.46	Providing and laying rough chisel dressed Devri Stone in kerbs, of size 200x200 mm face with chamfer in cement mortar 1: 6 (1 cement : 6 coarse sand) including curing.	metre	2616.20

SUB HEAD: 8.0
CLADDING WORK

8.0 (CLADDINGWORK)

8.0 (CLADDINGWORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
8.1	Marble work gang saw cut (polished and machine cut) of thickness 16 mm for wall lining (veneer work), backing filled with a grout of 12 mm thick average in cement mortar 1:3 (1 cement: 3 coarse sand), 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).	Rate per sqm 16mm18mm	
	8.1.1 Raj Nagar plain white marble/Udaipur green marble/zebra black marble		
	8.1.1.1 (Area of slab upto 0.5 sqm)	4954.95	NA
	8.1.1.2 (Area of slab over 0.5 sqm)	5609.40	NA
8.2	Providing and fixing 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 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), 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	Rate per sqm 16mm18mm	
	8.2.1 Raj Nagar plain white marble/Udaipur green marble/zebra black marble		
	8.2.1.1 (Area of slab upto 0.5 sqm)	3281.75	NA
	8.2.1.2 (Area of slab over 0.5 sqm)	3455.20	NA
	8.2.2 Granite of any colour or shade		
	8.2.2.1 (Area of slab upto 0.5 sqm)	4550.35	4655.70
8.2.2.2 (Area of slab over 0.5 sqm)	2994.60	2994.60	
8.3	Providing edge moulding to 18 mm/16 mm thick marble stone counters, Vanities etc. including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge.		
	8.3.1 Marble Work	metre	224.25
	8.3.2 Granite Work	metre	381.70
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	471.65
8.5	Extra for providing opening of required size and shape for wash basin/ kitchen sink in kitchen platform, vanity counters 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	778.50
8.6	Mirror polishing on marble work/granite/stone work where ever required to give high gloss finish complete.	sqm	372.30
8.7	Providing and fixing cramps of required size and shape in RCC/CC/brick masonry backing with cement mortar 1:2 (1 cement: 2 coarse sand) including curing & drilling necessary hole in stones and embedding the cramp in the whole (fastener to be paid separately).		
	8.7.1 Gunmetal cramps	kg	674.90
	8.7.2 Stainless steel cramps.	kg	677.10
8.8	Providing and fixing expansion hold fasteners on CC / R.C.C./brick masonry surface backing including drilling necessary holes and the cost of bolt etc. complete.		
	8.8.1 Wedge expansion type		
	8.8.1.1 Fastener with threaded dia 6mm	each	33.10
	8.8.1.2 Fastener with threaded dia 10mm	each	33.45
	8.8.1.3 Fastener with threaded dia 12mm	each	53.85
8.9	Stone tile (polished) work for wall lining over 12mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and cement slurry @ 3.3kg/sqm including pointing in white cement with curing complete.		
	8.9.1 8mm thick		
	8.9.1.1 Raj Nagar white marble/Udaipur green marble/ zebra black marble	sqm	2632.40
	8.9.1.2 Granite of any colour and shade	sqm	3180.95
	8.9.2 18 mm thick Doongri Adanaga marble	sqm	2738.45

8.0 (CLADDINGWORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
8.10	Providing and fixing stone slab with table rubbed, edges rounded and polished, of size 75x50 cm deep, 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 coarse sand: 4 graded stone aggregate 6 mm nominal size) as per direction of Engineer-in-Charge and finished smooth.	Rate per sqm	
		16mm	18mm
8.10.1	White Agaria Marble Stone	3698.40	3698.40
8.10.2	Granite Stone of approved shade	3698.40	3698.40
8.11	Providing and fixing machine cut, mirror / egg shell 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 12 mm (average) thick cement mortar 1:3 (1 cement : 3 coarse sand) 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 directed by the Engineer- in-Charge. a. 18 mm thick Italian Marble stone slab, Perlato, Rosso Verona, Fire Red or Dark Emperadore etc.	sqm	9580.45
8.13	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 m height, backing filled with a grout of average 12 mm thick cement mortar 1:3 (1cement: 3 coarse sand) including pointing in white cement mortar 1:2 (1 White cement: 2 stone dust) with an admixture of pigment matching the stone shade and curing complete : (To be secured to the backing by means of cramps which shall be paid for separately):		
8.13.1	Red sand stone - exposed face fine dressed with rough backing		
8.13.1.1	70mm thick	sqm	4644.75
8.13.1.2	60mm thick	sqm	4502.30
8.13.1.3	50mm thick	sqm	4359.90
8.13.1.4	40mm thick	sqm	4216.80
8.13.1.5	30mm thick	sqm	4074.05
8.13.2	Red Sand Stone - Exposed face machine cut and table rubbed with rough backing		
8.13.2.1	70mm thick	sqm	6440.05
8.13.2.2	60mm thick	sqm	6298.45
8.13.2.3	50mm thick	sqm	6156.10
8.13.2.4	40mm thick	sqm	6013.00
8.13.2.5	30mm thick	sqm	5870.20
8.13.3	White Sand Stone - Exposed face fine dressed with rough backing.		
8.13.3.1	70mm thick	sqm	6393.15
8.13.3.2	60mm thick	sqm	6000.75
8.13.3.3	50mm thick	sqm	5609.30
8.13.3.4	40mm thick	sqm	5214.85
8.13.3.5	30mm thick	sqm	4823.10
8.13.4	White sand stone - Exposed face machine cut and table rubbed with rough backing		
8.13.4.1	70mm thick	sqm	8188.75
8.13.4.2	60mm thick	sqm	7796.95
8.13.4.3	50mm thick	sqm	7405.45
8.13.4.4	40mm thick	sqm	7011.05
8.13.4.5	30mm thick	sqm	6619.25
8.13.5	Gang saw cut stone		
8.13.5.1	30 mm thick white sand stone	sqm	2636.55
8.13.5.2	30 mm thick red sand stone	sqm	2518.50
8.14	Providing and fixing 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 coarse sand) including making the necessary chases in stone and holes in		

8.0 (CLADDINGWORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	walls wherever required		
	8.14.1 Gunmetal Cramps 25 x 6 mm - 30 cm long	each	133.00
	8.14.2 Stainless Steel Cramp	kg	677.10
8.15	Providing and fixing adjustable stainless steel cramps of approved quality and of required shape and size adjustable with stainless steel nuts, bolts and washers (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 the direction of engineer-in-charge.	each	357.20
8.16	Providing and fixing copper pins 7.5 cm long 6 mm diameter for securing adjacent stones in stone wall lining in cement mortar 1:2 (1 cement : 2 coarse sand) including making the necessary chases.	each	47.75
8.17	Wall lining butch work upto 10 m 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 75 x 75mm and by providing layer of 75 thick strips including 12mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) including ruled pointing in cement mortar 1: 2 (1 white cement : 2 stone dust) with an admixture of pigment to match the shade of the stone and curing complete as per the directions of engineer-in-charge.	sqm	2626.30
8.18	Stone work (machine cut edges Veneer work) for wall lining upto 10 m height, backing filled with a grout of 12 mm thick cement mortar 1:3 (1 Cement : 3 coarse sand) and jointed with Cement mortar 1:2 (1 cement : 2 stone dust), including 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) 8.39.1 Kota stone slab exposed face dressed & rubbed 8.39.1.1 25 mm thick	sqm	3256.40
8.19	Extra stone work for wall lining on exterior walls of height more than 10 m from ground level for every additional height of 3 m or part thereof.	sqm	148.65
8.20	Providing and fixing dry cladding upto 10 m heights with 30 mm thick gang saw cut stone with(machine cut edge) 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 of Engineer-in-charge(The steel frame work, stainless steel cramps and pins etc shall be paid for separately) 8.42.1 Red sand stone 8.42.2 White sand stone.	sqm sqm	2427.05 2545.05
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 MS 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 coarse sand: 4 graded stone agg 20mm nominal) size) of size 300x230x300mm including cost of necessary centering & 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 payments, stainless steel cramps shall be paid for separately and nothing extra shall be paid.)	kg.	240.40

8.0 (CLADDINGWORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
8.22	Providing 50x50x50mm 2nd class teak wood plugs including cutting brick work and fixing in cement mortar 1:3 (1cement:3 fine sand)and making good the walls, etc	each	38.65
8.23	Providing and fixing expandable fasteners of specified size with necessary plastic sleeves and galvanized M.S. screws including drilling holes in masonry work / CC / R.C.C. and making good, etc. complete 8.23.1 25 mm long 8.23.2 32 mm long 8.23.3 40 mm long 8.23.4 50 mm long	each each each each	27.05 30.10 32.80 35.45
8.24	Providing and fixing plain lining tongued and grooved, including wooden plugs complete with necessary screws and priming coat on unexposed surface 8.24.1 Second class Teak Wood 8.24.1.1 12 mm thick 8.24.1.2 20 mm thick 8.24.1.3 25mm thick 8.24.1.4 40 mm thick 8.24.2 Second class Deodar Wood 8.24.2.1 12 mm thick 8.24.2.2 20 mm thick 8.24.2.3 25mm thick 8.24.2.4 40 mm thick 8.24.3 DELETED	 sqm sqm sqm sqm sqm sqm sqm sqm	 2640.05 4020.05 4959.30 7546.70 2219.70 3319.45 4083.55 6145.55
8.25	Providing and fixing in wall lining of specified medium density board, pre-laminated one side decorative lamination other side balancing lamination Grade I, exterior grade, with necessary fixing arrangement and screws etc. complete. 8.25.1 Flat pressed 3 layer particle board or graded wood particle board grade-I type-II, IS: 12823 marked including primer coat on unexposed surfaces 8.25.1.1 12 mm thick 8.25.1.2 18 mm thick 8.25.1.3 25 mm thick 8.25.2 MDF board IS: 1998 marked 8.25.2.1 12 mm thick 8.25.2.2 18 mm thick 8.25.2.3 25 mm thick	 sqm sqm sqm sqm sqm sqm	 1224.95 1313.25 1740.05 1307.50 1454.70 2308.30
8.26	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: 8.26.1 Second Class Teak Wood 8.26.2 Second Class Kail Wood 8.26.3 Kiln seasoned and chemically treated hollock wood	 cum cum cum	 256889.45 188049.35 170209.30
8.27	Providing and fixing plain panelling with skirting chair rails, and cornice with necessary screws, priming coat on unexposed surface etc., complete. 8.27.1 Second class Teak Wood 8.27.1.1 12 mm thick 8.27.1.2 20 mm thick 8.27.1.3 25 mm thick 8.27.1.4 40 mm thick 8.27.2 Second class Deodar Wood 8.27.2.1 12 mm thick 8.27.2.2 20 mm thick 8.27.2.3 25 mm thick 8.27.2.4 40 mm thick	 sqm sqm sqm sqm sqm sqm sqm sqm	 6066.40 7211.45 7952.50 10175.65 5605.40 6510.85 7076.75 8774.50
8.28	Providing and fixing ply wood 4mm thick one side decorative veneer conforming to IS: 1328(type 1), for plain lining/cladding with necessary screws, including priming coat on		

8.0 (CLADDINGWORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	unexposed surface with. Decorative veneer facings of approved manufactures	sqm	1677.70
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	1550.75
8.30	Providing and fixing skirting of specified board pre laminated with (one side decorative and other side balancing lamination), medium density Grade I exterior grade, with necessary fixing arrangements and screws including drilling necessary holes for rawl Plugs etc complete. 8.30.1 Flat pressed 3 layer particle board or graded wood particle board grade-I type-II, IS: 12823 marked including priming coat on unexposed surfaces 8.30.2 MDF board conforming to IS: 14587 edges to be sealed with PVC edge bending tape 2.00 mm thick of approved brand.	Rate per sqm 18mm 25mm 1791.95 2180.90 2218.75 3034.50	
8.31	CERAMIC GLAZED TILES 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 by Engineer- in-Charge, in skirting, risers of steps and dados over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3 kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	sqm	1229.10
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 building, for all heights and all levels etc. including: a) Structural analysis & design and preparation of shop drawings for pressure equalization 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 Galvanized 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 items 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 directed by the 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.	sqm	5219.35

8.0 (CLADDINGWORK)

SUB HEAD: 9.0

WOOD AND PVC WORK

9.0 (WOOD& PVC WORK)

9.0 (WOOD& PVC WORK)

Note: - Wood work items may be substituted with available species of wood/ type of ply wood as per direction of Engineer-in-charge for which rates shall be derived from the relevant items.			
CODE NO.	DESCRIPTION	UNIT	RATE ₹
9.1	<u>Frames and trusses</u> 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 and length (hold fast lugs or with dash fasteners shall be paid for separately): 9.1.1 First class teak wood 9.1.2 Second class teak wood 9.1.3 First class deodar wood 9.1.4 Second class deodar wood 9.1.5 First class kail wood 9.1.6 Second class kail wood 9.1.7 Sal wood 9.1.8 Kiln seasoned and chemically treated hollock wood 9.1.9 DELETED	cum cum cum cum cum cum cum cum	192677.45 161716.15 164074.65 151248.45 108897.35 101081.85 142085.65 74353.45
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 fixed in position with hold fast lugs or with dash fasteners of required dia and length (hold fast lugs or with dash fasteners shall be paid for separately).	cum	114415.95
9.3	Providing hoisting and fixing trusses/purlins /rafters/posts/ post-plates or like components including cost of screws etc. complete 9.3.1 Second class Kail wood 9.3.2 First class Budloo/Fir wood	cum cum	177013.90 126976.45
9.4	Providing wood work in frames of false ceiling, partitions etc. sawn and fixed in position : 9.4.1 DELETED 9.4.2 DELETED 9.4.3 Sal wood 9.4.4 DELETED 9.4.5 DELETED 9.4.6 Budloo / Fir wood 9.4.7 Kiln seasoned and chemically treated hollock wood	cum cum cum cum	131448.55 40509.40 63629.15
9.5	Extra for circular works, such as in frames of fan light 9.5.1 Second class teak wood 9.5.2 First class deodar wood 9.5.3 Second class deodar wood 9.5.4 First class kail wood 9.5.5 Second class kail wood 9.5.6 Sal wood 9.5.7 Kiln seasoned and chemically treated hollock wood	cum cum cum cum cum cum cum	16171.60 16407.45 15124.85 10889.75 10108.20 14208.55 7435.65
9.6	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). 9.6.1 Second class teak wood 9.6.2 First Class deodar wood 9.6.3 Second class deodar wood 9.6.4 First class kail wood 9.6.5 Second kail wood 9.6.6 Kiln seasoned & chemically treated hollock wood 9.6.7 Kiln seasoned selected planks of sheesham wood 9.6.8 Foreign Wood (DELETED)	Rate for thickness of shutter in mm per sqm 35 mm 30 mm 4432.40 3933.40 4463.50 3959.70 3665.80 3284.70 3201.80 2892.10 2853.95 2597.75 2483.15 2286.15 3493.30 3138.75	

9.0 (WOOD& PVC WORK)

[illegible]

9.0 (WOOD& PVC WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	9.8.14 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	1540.30
	9.8.15 12 mm thick Marine plywood conforming to IS: 710	sqm	2283.55
	9.8.16 12 mm thick Fire retardant plywood conforming to IS: 5509	sqm	2432.75
9.9	Providing and fixing fly proof wire gauge to windows and clerestory windows using wire gauge with average width of aperture 1.4 mm in both directions all complete. 9.9.1 With Galvanized M.S. Wire gauge with wire of dia 0.63 mm 9.9.1.1 With 2 nd class teak wood beading 62x19 mm 9.9.1.2 With 12 mm mild steel U beading 9.9.2 With stainless steel grade 304 wire gauge with wire of dia 0.50 mm 9.9.2.1 With 2 nd class teak wood beading 62x19 mm 9.9.2.2 With 12 mm mild steel U beading	sqm sqm sqm sqm	1308.35 827.40 1547.70 1066.75
9.10	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4mm thick float glass panes including ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws. 9.10.1 Second class teak wood 9.10.2 First class deodar wood 9.10.3 Second class deodar wood 9.10.4 First class kail wood 9.10.5 Second class Kail wood 9.10.6 Kiln seasoned and chemically treated hollock wood 9.10.7 Kiln seasoned and selected planks of sheesham wood. 9.10.8 Foreign Wood (DELETED)	Rate for thickness of shutters in mm per sqm 35mm 30mm 5267.50 4768.50 5302.20 4798.35 4412.45 4031.35 3894.90 3585.20 3506.90 3250.75 3091.70 2894.70 4220.5 3865.50	
9.11	Providing and fixing 30 mm thick 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 fixing with ISI marked butt hinges of required size with necessary screws as per directions of Engineer-in-charge.(Note:- Butt hinges and necessary screws shall be paid separately)	sqm	2329.80
9.12	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) 9.12.1 5.0mm thick instead of 4 mm thick	sqm	127.10
9.13	Extra for providing frosted glass panes 4 mm thick instead of ordinary float glass panes 4 mm thick in doors, windows and clerestory window shutters. (Area of opening for glass panes excluding portion inside rebate shall be measured)	sqm	246.20
9.14	Deduct for providing pin headed glass panes instead of ordinary float glass panes 4 mm thick in doors, windows and clerestory window shutters. (Area of opening for glass panes excluding portion inside rebate shall be measured).	sqm	20.05
9.15	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	136.00
9.16	Deduct for not providing hinges in doors, windows and clerestory windows shutters for 2 nd class teak wood and other class of wood shutters with: 9.16.1 Stainless steel butt hinges with Stainless Steel Screws : 9.16.2 ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws	sqm sqm	202.55 66.55
9.17	Providing and fixing 25 mm thick shutters for cupboard etc, including ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws: 9.17.1 Panelled or paneled and glazed shutters: 9.17.1.1 Second class teak wood	sqm	4377.60

9.0 (WOOD& PVC WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	9.17.1.2 First class deodar wood .9.17.1.3 Second class deodar wood 9.17.1.4 First class kail wood 9.17.1.5 Second class kail wood 9.17.1.6 Foreign Wood (DELETED) 9.17.2 Glazed shutters 9.17.2.1 Second class teak wood 9.17.2.2 First class deodar wood .9.17.2.3 Second class deodar wood 9.17.2.4 First class kail wood 9.17.2.5 Second class kail wood 9.17.2.6 Foreign Wood (DELETED) 9.17.3 MDF board shutters including ISI marked nickel plated bright finished M.S. piano hinges IS: 3818 marked with necessary screws complete: 9.17.3.1 Pre-laminated medium density fibre board exterior grade (Grade-I) IS:14587:1998 marked one side decorative and other side balancing lamination, edges to be sealed with PVC edge bending tape 2.00 mm thick of approved brand.	sqm sqm sqm sqm sqm sqm sqm sqm sqm sqm	4401.65 3783.45 3423.85 3154.25 4345.75 4371.45 3711.80 3328.10 3040.45 2449.90
9.18	Extra for providing ISI marked Nickel plated bright finished M.S. Piano hinges IS: 3818 instead of IS marked M.S. pressed butt hinges bright finished of required size with necessary screws for cupboard shutters: (shutter area to be measured).	sqm	100.10
9.18 A	Extra for providing ISI marked Anodized Aluminium butt hinges instead of M.S. pressed butt hinges bright finished of required size with necessary screws for cupboard shutters. (Shutter area to be measured).	sqm	142.85
9.19	Providing and fixing specified board medium density exterior grade (Grade I) to frame, backing or studding with screws etc. complete (Frames, backing or studding to be paid separately) : 9.19.1 Flat pressed 3 layer particle board or graded wood particle board IS:3087 9.19.2 Pre-laminated with decorative lamination on both sides MDF board conforming to IS:14587.	Rate per sqm 12mm 18mm 603.05 969.70 1242.25 1621.55	
9.20	Providing and fixing specified pre-laminated medium density board with one side decorative and other side balancing lamination Grade I (exterior grade) in shelves with screws and fittings wherever required, (fittings to be paid separately). 9.20.1 Flat pressed 3 layer particle board or graded wood particle board grade-I type-II conforming to IS” 3087 edges to be painted with polyurethane primer. 9.20.2 MDF board conforming to IS: 14587 edges to be sealed with PVC edge bending tape 2.00 mm thick of approved brand.	Rate per sqm 18mm 25mm 1084.20 1491.60 1528.40 2343.20	
9.21	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters. 9.21.1 With ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws 9.21.2 25 mm thick (for cupboard) including ISI marked nickel plated bright finished M.S. Piano hinges IS: 3818 marked with necessary screws.	Rate per sqm 35mm 30mm 3234.20 2974.65 Sqm 2895.95	
9.22	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters. 9.22.1 With ISI marked M.S. pressed butt hinges bright finished of required	Rate per sqm 35mm 30mm	

9.0 (WOOD& PVC WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	size with necessary screws 9.22.2 25 mm thick (for cupboard) including ISI marked nickel plated bright finished M.S. Piano hinges IS: 3818 marked with necessary screws.	2078.20 Sqm	2014.00 2031.65
9.23	Extra for providing and fixing flush doors with decorative veneering instead of non-decorative ISI marked flush door shutters conforming to ISI: 2202 (Part-I) 9.23.1 On one side only	sqm	508.40
9.24	Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of flush door shutters (over all area of door shutter to be measured)	sqm	401.40
9.25	Extra for providing vision panel not exceeding 0.1 sqm in all types of flush doors (Cost of glass excluded) (overall area of door shutter to be measured) 9.25.1 Rectangular or square 9.25.2 Circular.	sqm sqm	194.00 194.00
9.26	Extra if louvers (not exceeding 0.2 sqm) are provided in flush door shutters (overall area of door shutters to be measured) 9.26.1 Decorative type door.	sqm	388.00
9.27	Extra for cutting rebate in flush door shutters (Total area of the shutter to be measured).	sqm	107.05
9.28	Providing and fixing wire gauze shutters using galvanized M.S. wire gauze of average width for aperture 1.4 mm in both directions with wire of dia. 0.63 mm for doors, windows and clerestory windows with ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws as per direction of Engineer-in-charge : 9.28.1 Second class teak wood 9.28.2 First class deodar wood 9.28.3 Second class deodar wood 9.28.4 First class kail wood 9.28.5 Second class Kail wood 9.28.6 Kiln seasoned and chemically treated hollock wood 9.28.7 Kiln seasoned and selected planks of sheesham wood. 9.28.8 Foreign Wood (DELETED)	Rate for thickness of shutters in mm per sqm 35mm 30mm 5013.80 4437.15 5044.50 4463.45 4256.00 3788.50 3797.40 3395.90 3453.55 3101.55 3086.95 2789.95 4085.50 3642.55	
9.29	Extra for using stainless steel grade 304 wire gauge with wire of dia. 0.5 mm instead of Galvanized M.S. Wire gauge with wire of dia. 0.63 mm for doors, windows and clerestory windows with necessary screws: (shutter area to be measured)	sqm	142.35
9.30	Providing and fixing wire gauge laminated veneer lumber shutters conforming to IS 14616 and as per TADS 15:2001(Part B) using galvanized wire gauze with average width of aperture 1.4mm in both direction with wire of dia 0.63mm as per IS: 1568 for doors, windows and clerestory windows, including ISI marked MS pressed butt hinges bright finished of required size with necessary screws, as per direction of engineer in charge	Rate for thickness of shutters in mm per sqm 35mm 30mm 2736.55 2375.30	
9.40	Providing and fixing wooden moulded beading to door and window frames with iron screws, plugs and priming coat on unexposed surface etc. complete: 9.40.1 2nd class teak wood 9.40.1.1 50 x 12 mm 9.40.1.2 50 x 20 mm 9.40.2 2nd class deodar wood 9.40.2.1 50x12mm 9.40.2.2 50 x 20 mm 9.40.3 2nd class kail wood 9.40.3.1 50 x 12 mm 9.40.3.2 50 x 20 mm 9.40.4 Budloo/ Fir wood 9.40.4.1 50x12mm	meter meter meter meter meter meter meter	214.75 275.05 193.75 240.05 171.45 202.95 143.70

9.0 (WOOD& PVC WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	9.40.4.2 50 x 20 mm	meter	156.75
	9.40.5 Kiln seasoned and chemically treated hollock wood		
	9.40.5.1 50x12mm	meter	160.25
	9.40.5.2 50 x 20 mm	meter	184.25
9.41	Providing and fixing plain jaffri of 35x10 mm laths placed 35 mm apart (frames to be paid separately) including fixing 50x12 mm beading complete with :		
	9.41.1 Second class teak wood.	sqm	3042.40
	9.41.2 First class deodar wood.	sqm	3061.20
	9.41.3 Second class deodar wood.	sqm	2579.20
	9.41.4 First class kail wood.	sqm	2298.90
	9.41.5 2nd class kail wood	sqm	2088.70
9.42	Providing and fixing 18 mm thick, 150 mm wide pelmet of flat pressed 3 layer or graded wood particle board medium density Grade I, 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 25x3 mm M.S. flat 10 cm long fixed to pelmet with hollock wood cleats of size 100mm x 40mmx40 mm on both inner side of pelmet and rawl plugs 75mm long etc. all complete.	meter	553.15
9.43	Providing and fixing 18 mm thick, 150 mm wide pelmet of coir veneer board ISI marked IS: 14842-2000, including top cover of 6mm coir veneer board, nickel plated M.S. pipe 20 mm dia (heavy type) curtain rod with nickel plated brackets including fixing with 25x3 mm M.S. flat 10 cm long fixed to pelmet with hollock wood cleats of size 100mm x 40mmx40 mm on both inner side of pelmet and rawl plugs 75mm long etc. all complete.	meter	642.65
9.44	Extra for using veneered particle board conforming to IS: 3097 Grade I, in item of pelmet 18mm thick 150mm wide.		
	9.44.1 Non decorative Veneer on both sides.	meter	33.80
	9.44.2 Particle board with decorative veneering on both sides.	meter	107.05
9.45	Providing and fixing teak wood lipping of size 25x3mm in pelmet	meter	69.80
9.46	Providing and fixing chromium plated brass curtain rod having wall thickness of 1.25mm with two chromium plated brass brackets fixed with C.P. brass screws and PVC sleeves etc., wherever necessary complete :		
	9.46.1 12 mm dia.	meter	306.90
	9.46.2 20 mm dia.	meter	413.95
	9.46.3 25 mm dia.	meter	534.35
9.47	Providing and fixing nickel plated M.S. pipe curtain rods with nickel plated brackets		
	9.47.1 20 mm dia (heavy type)	meter	174.60
	9.47.2 25 mm dia (heavy type)	meter	192.00
9.48	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.		
	9.48.1 Fixed to steel windows by welding	Kg	212.00
	9.48.2 Fixed to openings / wooden frames with rawl plugs screws etc.	Kg	231.15
9.49	Providing and fixing expanded metal 20x60mm strands 3.25 mm wide and 1.6 mm thick for windows etc. including 62x19 mm beading of 2 nd class teak wood and priming coat with approved steel primer all complete.	Sqm	1539.00
9.50	Providing and fixing hard drawn steel wire fabric 75x25 mm mesh of weight not less than 7.75 kg/sqm to window frames etc. including 62x19 mm beading of second class teak wood and priming coat with approved steel primer all complete..	sqm	1640.95

9.0 (WOOD& PVC WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
9.51	Deduct for fixing 75x25 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 4mm thick.	sqm	113.70
9.52	Providing 40x5 mm flat iron hold fast 40 cm long including fixing to frame with 10 mm diameter bolts, nuts and wooden plugs and embeddings in cement concrete block 30x10x15 cm 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size).	each	207.35
9.53	Providing beams including hoisting, fixing in position and applying wood preservative for the unexposed surfaces, etc. complete with :		
9.53.1	Sal wood	cum	128108.95
9.53.2	Second class deodar wood	cum	136960.50
9.53.3	Second class kail wood	cum	88497.80
9.53.4	Hollock wood	cum	60848.90
M.S. FITTINGS			
9.54	Providing and fixing ISI marked M.S. pressed butt hinges bright finished with necessary screws etc. complete :		
9.54.1	125x65x2.12 mm	each	51.60
9.54.2	100x58x1.90 mm	each	41.30
9.54.3	75x47x1.70 mm	each	33.30
9.54.4	50x37x1.50 mm	each	17.10
9.55	Providing and fixing IS : 1341 marked M.S. heavy weight - Butt Hinges with necessary screws etc., complete :		
9.55.1	125x90x4.00 mm	each	60.30
9.55.2	100x75x3.50 mm	each	52.00
9.55.3	75x60x3.10 mm	each	39.30
9.55.4	50x40x2.50 mm	each	21.75
COPPER OXIDIZED MILD STEEL FITTINGS			
(Copper Oxidized as per IS : 1378)			
9.56	Providing and fixing ISI marked oxidized M.S. pressed butt hinges with necessary screws etc. complete:		
9.56.1	125x65x2.12 mm	each	49.45
9.56.2	100x58x1.90 mm	each	43.25
9.56.3	75x47x1.70 mm	each	35.20
9.56.4	50x37x1.50 mm	each	18..55
9.57	Providing and fixing ISI marked oxidized M.S. pressed parliamentary hinges with necessary screws etc. complete:		
9.57.1	150x125x27x2.80 mm	each	80.40
9.57.2	125x125x27x2.80 mm	each	75.70
9.57.3	100x125x27x2.80 mm	each	69.05
9.57.4	75x100x20x2.24 mm	each	58.95
9.58	Providing and fixing ISI marked oxidized M.S. spring hinges with necessary screws etc. complete:		
9.58.1	Single Acting Spring hinge		
9.58.1.1	150 mm	each	277.80
9.58.1.2	125 mm	each	251.00
9.58.1.3	100 mm	each	220.10
9.58.2	Double Acting Spring hinge		
9.58.2.1	150 mm	each	304.55
9.58.2.2	125 mm	each	277.80
9.58.2.3	100 mm	each	249.55
9.59	Providing M.S. Piano hinges ISI marked IS: 3818 finished with nickel plating and fixing with necessary screws etc., complete.		
9.59.1	Overall width 35 mm	meter	290.50

9.0 (WOOD& PVC WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	9.59.2 Overall width 50 mm	meter	294.50
	9.59.3 Overall width 65 mm	meter	313.25
9.60	Providing and fixing ISI marked oxidized M.S. sliding door bolts with nuts and screws etc. complete :		
	9.60.1 300x16 mm	each	218.25
	9.60.2 250x16 mm	each	202.25
9.61	Providing and fixing ISI marked oxidized M.S. tower bolt black finish, (Barrel type) with necessary screws etc complete.		
	9.61.1 250x10 mm	each	84.60
	9.61.2 200x10 mm	each	72.35
	9.61.3 150x10 mm	each	61.40
	9.61.4 100x10 mm	each	46.05
9.62	Providing and fixing ISI marked 85 mm x 42 mm oxidized M.S. pull bolt lock conforming to IS: 7534 with necessary screws, bolts, nut and washers etc. complete.	each	110.85
9.63	Providing and fixing ISI marked oxidized M.S. door latches conforming to IS : 5930 with screws etc. complete :		
	9.63.1 300x20x6 mm	each	97.60
	9.63.2 250x20x6 mm	each	77.55
9.64	Providing and fixing ISI marked oxidized M.S. handles conforming to IS : 4992 with necessary screws etc. complete :		
	9.64.1 125 mm	each	41.80
	9.64.2 100 mm	each	32.45
	9.64.3 75 mm	each	28.40
9.65	DELETED		
9.66	DELETED		
9.67	DELETED		
9.68	Providing and fixing oxidized M.S. hasp and staple (Safety type) conforming to IS : 363 with necessary screws etc. complete :		
	9.68.1 150 mm	each	32.60
	9.68.2 115 mm	each	28.75
	9.68.3 90 mm	each	24.20
9.69	Providing and fixing oxidized M.S. casement stays (straight peg type) with necessary screws etc. complete.		
	9.69.1 300 mm weighing not less than 200 gms.	each	73.20
	9.69.2 250 mm weighing not less than 150 gms.	each	65.80
	9.69.3 200 mm weighing not less than 120 gms.	each	52.40
9.70	Providing and fixing oxidized M.S. Safety chain with necessary fixtures for doors. (Weighing not less than 450 gms.)	each	97.80
9.71	Stainless Steel Fittings Providing and fixing ISI: 12817 marked Stainless Steel Butt Hinges with Stainless Steel screws etc. complete.		
	9.71.1 125x64x1.90 mm	each	94.00
	9.71.2 100x58x1.90 mm	each	84.65
	9.71.3 75x47x1.80 mm	each	62.95
	9.71.4 50x37x1.50 mm	each	35.95
9.72	Providing and fixing ISI: 12817 marked Stainless Steel Butt Hinges (heavy weight) with Stainless Steel screws etc. complete.		
	9.72.1 125x64x2.50 mm	each	102.70
	9.72.2 100x60x2.50 mm	each	83.95
	9.72.3 75x50x2.50 mm	each	69.65

9.0 (WOOD& PVC WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
9.73	Brass Fittings Providing and fixing bright finished brass butt hinges with necessary screws etc. complete : 9.73.1 125x85x5.5 mm (heavy type) 9.73.2 125x70x4 mm (ordinary type) 9.73.3 100x85x5.5 mm (heavy type) 9.73.4 100x70x4 mm (ordinary type) 9.73.5 75x65x4 mm (heavy type) 9.73.6 75x40x2.5 mm (ordinary type) 9.73.7 50x40x2.5 mm (ordinary type)	each each each each each each each	250.60 171.70 187.85 131.65 156.85 89.95 37.95
9.74	Providing and fixing bright finished brass parliamentary hinges with necessary screws etc. complete: 9.74.1 150x125x27x5mm 9.74.2 125x125x27x5mm 9.74.3 100x125x27x5mm 9.74.4 75x100x20x3.2 mm	each each each each	427.65 382.15 351.40 304.30
9.75	Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete. : 9.75.1 250x10 mm 9.75.2 200x10 mm 9.75.3 150x10 mm 9.75.4 100x10 mm	each each each each	373.35 300.05 231.80 159.85
9.76	Providing and fixing bright finished brass door latch with necessary screws etc. complete. : 9.76.1 300x16x5 mm 9.76.2 250x16x5 mm	each each	292.55 285.90
9.77	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	784.20
9.78	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	663.80
9.79	Providing and fixing bright finished brass night latch of approved quality including necessary screws etc. complete.	each	1078.55
9.80	Providing and fixing special quality bright finished brass cupboard or ward robe locks with four levers of approved quality including necessary screws etc. complete: 9.80.1 40 mm 9.80.2 50 mm 9.80.3 65 mm 9.80.4 75 mm	each each each each	422.95 436.35 489.85 509.90
9.81	Providing and fixing 50 mm bright finished brass cup board or wardrobe knob of approved quality with necessary screws.	each	68.60
9.82	Providing and fixing bright finished brass handles with screws etc. complete : 9.82.1 125 mm 9.82.2 100 mm 9.82.3 75 mm	each each each	232.60 219.20 172.35
9.83	Providing and fixing bright finished brass hanging type floor door stopper with necessary screws, etc. complete	each	143.70
9.84	Providing and fixing aluminum die cast body tubular type universal hydraulic door closer (having brand logo with 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	1628.00

9.0 (WOOD& PVC WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
9.85	Providing and fixing aluminum extruded section body tubular type universal hydraulic door closer,(having brand logo with 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	938.95
9.86	Providing and fixing bright finished brass casement window fastener with necessary screws etc. complete.	each	76.35
9.87	Providing and fixing bright finished brass casement stays (straight peg type) with necessary screws etc. complete. 9.87.1 300 mm weighing not less than 330 gms. 9.87.2 250 mm weighing not less than 280 gms. 9.87.3 200 mm weighing not less than 240 gms.	each each each	218.95 149.95 149.95
9.88	DELETED		
9.89	Providing and fixing bright finished brass hasp and staple (safety type) with necessary screws etc. complete : 9.89.1 150 mm 9.89.2 115 mm 9.89.3 90 mm	each each each	133.05 119.25 105.90
9.90	<u>CHROMIUM PLATED BRASS FITTINGS</u> 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	931.35
9.91	Providing and fixing chromium plated brass night latch of approved quality including necessary screws etc. complete.	each	931.35
9.92	Providing and fixing special quality chromium plated brass cupboard locks of approved quality with six levers including necessary screws etc. complete : 9.92.1 40 mm 9.92.2 50 mm 9.92.3 65 mm 9.92.4 75 mm	each each each each	402.90 431.00 472.45 499.20
9.93	Providing and fixing chromium plated brass 50 mm cupboard or wardrobe knobs with nuts complete.	each	135.50
9.94	Providing and fixing chromium plated brass handles with necessary screws etc. complete : 9.94.1 125 mm 9.94.2 100 mm 9.94.3 75 mm	each each each	266.05 239.25 205.80
9.95	Providing and fixing chromium plated brass casement window fastener with necessary screws etc. complete. :	each	141.90
9.96	Providing and fixing chromium plated brass casement stays (straight peg type) with necessary screws etc. complete. 9.96.1 300 mm weighing not less than 330 gms. 9.96.2 250 mm weighing not less than 280 gms. 9.96.3 200 mm weighing not less than 240 gms.	each each each	228.85 202.10 182.05
9.97	<u>ANODIZED ALUMINUM FITTINGS</u> (All fittings shall be ISI marked) Providing and fixing ISI marked aluminum butt hinges ISI marked anodized (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 : 9.97.1 125x75x4 mm 9.97.2 125x63x4 mm 9.97.3 100x75x4 mm 9.97.4 100x63x4 mm 9.97.5 100x63x3.2 mm	each each each each each	132.80 126.10 116.20 106.85 106.85

9.0 (WOOD& PVC WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	9.97.6 75x63x4 mm	each	87.20
	9.97.7 75x63x3.2 mm	each	78.20
	9.97.8 75x45x3.2 mm	each	74.45
9.98	Providing and fixing aluminum sliding door bolts ISI marked anodized (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 :		
	9.98.1 300x16 mm	each	298.75
	9.98.2 250x16 mm	each	251.95
9.99	Providing and fixing aluminum tower bolts ISI marked anodized (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 :		
	9.99.1 300x10 mm	each	124.15
	9.99.2 250x10 mm	each	108.75
	9.99.3 200x10 mm	each	95.35
	9.99.4 150x10 mm	each	83.80
	9.99.5 100x10 mm	each	63.35
9.100	Providing and fixing aluminum pull bolt lock anodized ISI marked (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour and shade with necessary screws bolt nuts and washers etc. complete.	each	94.10
9.101	Providing and fixing 50 cm long aluminum kicking plate of size 100x3.15 mm, anodized (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.	each	236.00
9.102	Providing and fixing aluminum handles ISI marked anodized (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.		
	9.102.1 125 mm	each	68.00
	9.102.2 100 mm	each	60.00
	9.102.3 75 mm	each	51.95
9.103	Providing and fixing aluminum hanging floor door stopper, ISI marked, anodized (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 :		
	9.103.1 Single rubber stopper	each	55.40
	9.103.2 Twin rubber stopper	each	63.45
9.104	Providing and fixing aluminum casement stays, ISI marked, anodized (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 :	each	68.30
9.105	Providing and fixing bright finished brass 100 mm mortice latch and lock, ISI marked, with six levers and a pair of anodized (anodic coating not less than grade AC 10 as per IS : 1868) aluminum lever handles of approved quality with necessary screws etc. complete.	each	747.10
9.106	Providing and fixing aluminum tee channels (heavy duty) with rollers, stop end in pelmets as curtain rods.	meter	170.20
9.107	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		

9.0 (WOOD& PVC WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	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 framework 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 of engineer in charge all complete.		
9.107.1	75mm overall thickness partitions with 12.5 thick double skin fire rated Glass Reinforced Gypsum (GRG), plaster board confirming to IS : 2095 (Part 3) 1996 (Board with BIS Certification marks)	sqm	1893.55
9.107.2	75mm over all thickness partitions with 12.5 mm thick double skin tapered edge Plain Gypsum plaster Board confirming to IS : 2095 (Part I) 2011(Board with BIS Certification marks)	sqm	1759.75
9.107.3	66mm over all thickness partitions with 8mm thick double skin Calcium Silicate Board made with Calcareous and Siliceous materials reinforced with cellulose fiber manufactured through autoclaving process with compressive strength 225 kg /sq.cm, Bending strength 100kg/sq.cm.	sqm	1906.95
9.107.4	66mm over all thickness partitions using 8mm thick double skin non asbestos multipurpose cement board reinforced with cellulose fiber manufactured through autoclaving process (high pressure steam cured) as per IS: 14862 with suitable fiber cement screws	sqm	1773.15
9.107.5	66mm overall thickness partition using 8 mm thick double skin multipurpose cement bonded wood particle board manufactured as per IS: 14276 with suitable cement bonded board screws	sqm	1960.45
9.108	Providing and fixing PTMT handles with necessary screws etc. Complete		
9.108.1	125x34x24mm weighing not less than 23gms	each	52.20
9.108.2	150x34x24mm weighing not less than 26gms	each	60.20
9.109	Providing and fixing PTMT butt hinges with necessary screws etc. Complete		
9.109.1	75x60x10mm fitted with 5.5mm dia MS bright bar rod weighing not less than 34gms	each	98.15
9.109.2	100x75x10mm fitted with 5.5mm dia M.S. bright bar rod weighing not less than 53gms	each	121.55
9.110	Providing and fixing PTMT tower bolts with 12 mm one piece rod inside and necessary screws etc. Complete		
9.110.1	152x42x18mm weighing not less than 60gms	each	105.70
9.110.2	202x42x18mm weighing not less than 78gms	each	138.50
9.111	Providing and fixing PTMT door catcher of length 72 mm and dia of 42 mm with suitable washers weighing not less than 33gms	each	43.10
9.112	Providing and fixing Bamboo jaffery/fencing consisting of superior quality 25 mm dia. (average) half cut bamboo placed vertically and fixed together with three number horizontal running members of hollock wood in scantling of section 50x25 mm fixed with nails and G.I. wire on existing support complete as per direction of engineer- in-charge	sqm	589.05
9.113	Providing and fixing wooden moulded corner beading of size 50x50 mm (base and height) of triangular shape to the junction of paneling etc. with iron screws, plugs and priming coat on unexposed surface etc. complete.		
9.113..1	Second class teak wood	meter	354.70
9.113..2	Second class deodar wood	meter	310.90
9.113..3	Second class kail wood	meter	264.50

9.0 (WOOD& PVC WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
9.114	Providing and fixing 2nd class teak wood lipping/moulded beading or Taj beading of size 18x5mm fixed with wooden adhesive of approved quality and screws/nails on the edges of the pre laminated particle board as per directions of the engineer-in-charge	meter	89.90
9.115	Providing and fixing bright finished 100mm mortice lock with 6 levers without pair of handles for aluminum doors of approved quality with necessary screws etc. complete as per direction of Engineer-in-charge.	each	726.85
9.116	Providing and fixing magnetic catcher of approved quality in cupboard/ward robe shutters including fixing with necessary screws etc. complete. 9.116.1 Triple strip (Vertical type) 9.116.2 Double strip (Horizontal type)	each each	48.85 42.15
9.117	Providing and fixing powder coated telescopic drawer channels 300mm long with necessary screws etc. complete as per directions of engineer-in-charge	each set	394.75
9.118	Providing and fixing sliding arrangement in racks/cupboards/cabinets shutter by with stainless steel rollers to run inside C or E aluminum channel section (the payment for C or E channel shall be made separately)	each	20.85
9.119	Providing and fixing factory made UPVC door frame made of UPVC extruded, section having an overall dimension, as below (tolerance+/-1mm with wall thickness 2.0mm +/-0.2mm, corners of the door frame to be joined with galvanized brackets and stainless steel screws, joint mitred and plastic welded. The hinges side vertical of the frames reinforced by galvanized MS tube of size 19x19mm and 1mm +/-0.1mm wall thickness and three numbers stainless steel hinges fixed to the frame complete as per manufacturers' specifications and direction of engineer-in-charge) 9.119.1 Extruded section profile size 48x40mm 9.119.2 Extruded section profile size 42x50mm	meter meter	230.15 297.05
9.120	Providing and fixing to existing door frames 9.120.1 24mm thick factory made PVC door shutters made of styles and rails of a UPVC hollow section of size 59x24mm and wall thickness 2mm +/-0.2mm with inbuilt edging on both sides. The styles and rails mitred and joined at the corners by means of MS galvanized/plastic brackets of size 75x220mm having wall thickness 1.0mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanized MS tube of size 20x20mm and 1mm +/-0.1mm wall thickness. The lock rail made up of 'H' section, a UPVC hollow section of size 100x24mm and 2mm +/-0.2mm wall thickness fixed to the shutter styles by means of plastic/galvanized MS 'U' cleats. The shutter frame filled with UPVC multi-chambered single panels of size not less than 620mm, having over- all thickness of 20mm and 1mm +/-0.1mm wall thickness. The pannels filled vertically and tie bar at two places by inserting horizontally 6mm galvanized MS rod and fastened with nuts and washers, complete as per manufacturers' specification and direction of engineer-in-charge. (For W.C and bathroom door shutters). 9.120.2 30mm thick factory made PVC door shutters made of styles and rails of a UPVC hollow section of size 60x30mm and wall thickness 2mm +/-0.2mm with inbuilt decorative moulding edging on one sides. The styles and rails mitred and joined at the corners and by means of MS galvanized/plastic brackets of size 75x220mm having wall thickness 1.0mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanized MS tube of size 25x20mm and 1mm +/-0.1mm wall thickness. The lock rail made up of 'H' section, a UPVC hollow section of size 100x30mm and 2mm +/-0.2mm wall thickness fixed to the shutter styles by means of plastic/galvanized MS 'U' cleats. The shutter frame filled with UPVC multi-chambered single panels of size not less than 620mm, having over- all thickness of 20mm and 1mm +/-0.1mm wall thickness. The pannels filled vertically and tie bar at two places by inserting horizontally 6mm galvanized MS rod and fastened with nuts and	sqm	2857.50

9.0 (WOOD& PVC WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	washers, complete as per manufacturers' specification and direction of engineer-in-charge.	sqm	2972.55
	9.120.3 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 (± 0.3 mm). PVC foam end cap of size 23x10 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 (± 0.1 mm) 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	3155.85
9.121	Providing and fixing factory made PVC door frames of size 50x47mm with a wall thickness of 5mm, made out of extruded 5mm rigid PVC foam sheet mitred at corners and jointed with two numbers of 150mm long brackets of 15x15mm MS square tube, the vertical door profiles to be reinforced with 19x19mm MS square tube of 19 gauge, EPDM rubber gasket weather seal to be provided throughout the frame. The door frame to be fixed to the wall using MS screws of 65/100mm size complete as per manufacturers' specifications and directions of engineer-in-charge	meter	406.20
9.122	Providing and fixing 30 mm thick 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 15x15 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 30 mm 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. 10 mm (5 mm x 2) thick, 20 mm wide cross PVC sheet be provided as gap insert for top rail & bottom rail, paneling 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.	sqm	2907.20
	9.122.1 Plain PVC door shutters	sqm	3367.45
	9.122.2 Pre-laminated PVC door shutters	sqm	
9.123	Providing and fixing fiber glass reinforced plastic (FRP) door frames of cross section 90mmx45mm having single rebate of 32mmx15mm to receive shutter of 30mm thickness The laminate shall be moulded with fire resistant grade unsaturated polyester resin and chopped mat. Door frame laminates shall be 2 mm thick and shall be filled with suitable wooden block in all three legs. The frame shall be covered with fiber glass from all sides. MS stay shall be provided at the bottom to steady the frame	meter	748.70
9.124	Providing and fixing 30 mm thick door shutters to existing door frames.		
	9.124.1 Glass fiber reinforced plastic (FRP) paneled door shutter of required colour and approved brand and manufacture, made with fire retardant grade unsaturated polyester resin, moulded to 3mm thick FRP laminate for forming hollow rails and styles, with wooden frames and suitable blocks of seasoned		

9.0 (WOOD& PVC WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	wood inside at required places for fixing or fittings, cast monolithically with 5mm thick FRP laminate for panels confirming to TADS 6 : 1993 and /or IS :14856-2000 including fixing to frames	sqm	3734.05
	9.124.2 Fiberglass reinforced plastic (FRP) Flush door shutter in different plain and wood finished made with fire retardant grade unsaturated polyester resin, moulded to 3mm 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 FRP laminate confirming to table- 3 of IS : 14856-2000, complete as per directions of engineer-in-charge.	sqm	3954.80
9.125	Providing and fixing factory made door frame (single rebate) made out of single piece extruded solid PVC foam profile with homogenous fine cellular structure having smooth outer integral skin having 62 mm width & 32 mm thickness, frame will be mitred & Jointed with self driven self tapping screws of size 38 mm x 4 mm & PVC solvent cement, including fixing the frame to wall with suitable dia& length anchor fastener as per manufacturer's specification and direction of Engineer-in-charge.	meter	513.20
9.126	Providing and fixing factory made 30 mm thick door shutter made of solid PVC foam profile. The styles & rails shall be of size 75 mm x 30 mm having wall thickness 5 mm. The styles, top & bottom rails shall have one side wall thickness of 15 mm integrally extruded on the hinge side of the profile for better screw holding power. The styles and rails shall be reinforced with M.S. tubes of size 33 mm x 17 mm x 1 mm, painted with primer , all four corners of reinforcement to be welded or sealed. Solid PVC extruded bidding (push fit type) will be set inside the styles and the rails with a cavity, to receive single piece extruded 5 mm PVC sheet as panel. The styles and rails will be mitred cut and joint with the help of PVC solvent cement &self driven self tapping screws. Single piece extruded solid PVC lock rail of size 100 mm x 30 mm with wall thickness 5 mm & 15 mm integrally extruded in the middle of the lock rail & fixed with styles with the help of PVC solvent cement &self driven self tapping screws of size 100 mm x 8 mm complete as per manufacturer's specifications and direction of Engineer-in-charge.		
	9.126.1 Non decorative finish	sqm	3319.25
	9.126.2 Decorative finish (both side wood grained finish)	sqm	3774.15
9.127	Providing and fixing PVC rigid foam sheet 1mm thick on existing door shutters (bathroom and W.C. doors) using synthetic rubber based adhesive	sqm	1285.35
9.128	Providing and 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		
	9.128.1 1.5mm thick	sqm	906.30
	9.128.2 1mm thick	sqm	779.75
9.129	Providing and fixing factory made fiberglass reinforced plastics (F.R.P) chajja 4mm 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 & duly reinforced by 2 Nos. vertically and 1 no. horizontally 50x2mm thick M.S flat with 12mm inbuilt hole for grouting on the existing wall along with the 50mm 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 fiberglass chopped strand mat(CSM) as per IS:11551 complete with		

9.0 (WOOD& PVC WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	protective Gel coat U/V coating on top for complete resistance from the extreme temperature, weather & sunlight (Only plan area of chajjas shall be measured for making payments)	sqm	5434.75
9.130	Providing and fixing cupboard shutters 25mm 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 one side decorative lamination and other side a balancing lamination including second class teak wood lipping of 25mm wide x 12mm thick with necessary screws and bright finished stainless steel piano hinges complete as per directions of Engineer- in-charge	sqm	1981.75
9.131	Providing and fixing cupboard shutters with 25mm thick veneered particle board IS: 3097 marked exterior grade (Grade I) of approved make including second class teak wood lipping of 25mm wide x 12mm thick with necessary screws and bright finished stainless steel piano hinges complete as per directions of engineer-in-charge 9.131.1 With decorative veneering on one side and commercial veneering on other side 9.131.2 With non decorative veneering on both sides.	sqm sqm	1785.05 1679.35
9.132	Deduct for providing nickel plated bright finished M.S. Piano hinges instead of Bright Finished stainless steel piano hinges in item no. 9.130 and 9.131.	sqm	-5.35
9.133	Providing and fixing factory made flush door shutters 30 mm thick made of pre-laminated flat pressed three layer particle board conforming to IS: 12823 exterior grade (Grade I Type II) having one side decorative lamination of approved shade and other side balancing lamination including second class teak wood lipping of 25mm wide x 12mm thick with necessary screws and black enameled M.S. butt hinges complete as per directions of Engineer- in-charge	sqm	1952.35
9.134	Providing and fixing 15 cm high drawer of the cupboard with 12 mm thick base and side planks with wooden handles and 20x25 mm runner fixed with screws complete including painting and polishing. Note: Overall plan area of the drawer shall be measured. 9.134.1 Superior class Teak Wood 9.134.2 First class Teak Wood 9.134.3 Second class Teak Wood 9.134.4 Second class Deodar Wood 9.134.5 First class Kail Wood 9.134.6 Second class Kail Wood	sqm sqm sqm sqm sqm sqm	NA 10640.80 8970.25 7849.10 7170.55 6661.80
9.135	Providing and fixing 25 mm thick 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 I Type II, of approved design and edges sealed with water resistant paint and lipped with aluminum 'U' type edge beading all-round the shutter, including fixing with angle cleat, grip strip, cadmium plated steel screws including fixing of aluminum hinges 100x63x4mm etc. Complete as per architectural drawing and directions of Engineer- in-charge (cost of 'U' beading and hinges will be paid for separately)	sqm	1669.05
9.136	Providing and fixing aluminum 'U' beading of required size to pre-laminated/flush door shutter including fixing etc. complete as per directions of engineer-in-charge.	kg	628.85
9.137	Providing and fixing, in position concealed G.I section for wall panelling using board of required thickness fixed on the 'W' profile (0.55mm thick) having a knurled web of 51.55mm and two flanges of 26mm each with lips of 10.55mm placed @ 610mm C/C in perimeter channel having one flange of 20mm and another flange of 30mm with thickness of 0.55mm and web of length 27mm. Perimeter channel is fixed on the floor and the ceiling with the nylon sleeves @ 610mm C/C with fully threaded self-tapping dry w all screws. Board is fixed to		

9.0 (WOOD& PVC WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	the 'W' profile with 25mm countersunk ribbed head screws @ 200mm C/C, all complete as per the drawing and directions of engineer- in-charge. The joints of the boards are finished with specially formulated jointing compound and 48mm wide jointing tape to provide seamless finish 9.137.1 10 mm thick Tapered edge calcium silicate board made with calcareous and siliceous materials reinforced with cellulose fiber manufactured through autoclaving process to give stable crystalline structure with compressive strength 225kg/sqcm, Bending strength 100kg/sqcm 9.137.2 Multipurpose cement board reinforced with suitable fibre cement screw. 9.137.2.1 8 mm thick cement fibre board as per IS : 14862 9.137.2.2 8 mm thick Cement bonded wood particle boards per IS:14276 9.137.3 Plain Gypsum plaster board conforming to IS: 2095 (Part -1) :2011 (Board with BIS certification marks) 9.137.3.1 12.5 mm thick	sqm sqm sqm sqm	1484.90 1190.45 1293.50 1183.10
9.138	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) duly filled with vermiculite based concrete mix, suitable for mounting 60 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).	meter	1470.25
9.139	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/ m ²) 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 (paneling to be paid for separately).	sqm	6472.55
9.140	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/m ²) 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):2016and 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 manufacturers 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 2.42sqm.	sqm	36495.55
9.141	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	each	7152.80
9.142	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		

9.0 (WOOD& PVC WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	frame work, complete as per direction of Engineer-in-charge (Frame work shall be paid for separately). 9.142.1 12mm thick commercial ply conforming to S : 1328 BWR type	sqm	1084.65
9.143	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 x 100 mm long anchor fasteners complete, all as per manufacturer's specification and direction of Engineer -in- charge.	sqm	636.20
9.144	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 35 mm x 5 mm, 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 20 mm 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 5 mm thick solid PVC Lock rail of size 115 x 35x 35 mm, out of which 95 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. 9.144.1 Non decorative finish (matt finish) 9.144.2 Decorative finish (wood grained finish)	Sqm sqm	3460.40 4011.65
9.145	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 fasteners, all complete as per manufacturer's specification and direction of Engineer-in-charge.	meter	543.25
9.146	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). Lock rail of size 100 mm x 37 mm, wall thickness 2 mm (± 0.2 mm) will be fixed to the vertical styles. Providing with PVC snap fit 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.	sqm	3642.85
9.147	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 (± 0.2 mm). Both verticals sides of the frame reinforced with PVC profile of cross section size 28 mm x 30 mm x 2 mm thickness (± 0.2 mm) and 75 mm x 200 mm long,		

9.0 (WOOD& PVC WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	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	meter	608.80
9.148	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 inbuilt 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 and direction of Engineer-in-charge.	sqm	3942.55
9.149A	<p>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 ± 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 x 8 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 & direction of Engineer-in-Charge. (Single / double glass panes and silicon sealant shall be paid separately)</p> <p>Note: For uPVC frame, sash and mullion extruded profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable. Variation in profile dimension in higher side shall be accepted but no extra payment on this account shall be made.</p> <p>9.149A.1 Casement window single panel 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 both having wall thickness of 1.9 ± 0.2 mm and single glass pane glazing bead of appropriate dimension. (Area of window upto 0.75 sqm.)</p> <p>9.149A.2 Casement window double panels with S.S. friction hinges (300x 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 ± 0.2 mm and single glazing bead of appropriate dimension. (Area of window above 0.75 sqm upto 1.50 sqm).</p> <p>9.149A.3 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 ± 0.2 mm and single glazing bead of appropriate dimension. (Area of window upto 2.50 sqm).</p> <p>9.149A.4 Casement window single panel with S.S. friction hinges (400 x 19 x</p>	<p>sqm</p> <p>sqm</p> <p>sqm</p>	<p>10570.85</p> <p>9699.40</p> <p>7816.75</p>

9.0 (WOOD& PVC WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	1.9 mm) made of (big series)frame 67 x 60 mm & sash 67 x 80 mm both having wall thickness of 2.3 ± 0.2 mm and single glazing bead / double glazing bead of appropriate dimension. (Area of window above 0.75 sqm.)	sqm	10438.00
	9.149A.5 Casement window double panels with S.S. friction hinges (350 x 19 x 1.9 mm) made of (big series)frame 67 x 60 mm & sash / mullion 67 x 80 mm both having wall thickness of 2.3 ± 0.2 mm and single glazing bead/ double glazing bead of appropriate dimension. (Area of window above 1.50 sqm).	sqm	10800.25
	9.149A.6 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 ± 0.2 mm and single glazing bead/double glazing bead of appropriate dimension. (Area of window above 3.00 sqm upto 5.00 sqm).	sqm	8157.35
9.149B	<p>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 1.60 ± 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 fasteners 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 & direction of Engineer-in-Charge. (Single / double glass panes and silicon sealant shall be paid separately).</p> <p>Note: For uPVC frame, sash and mullion extruded profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable. Variation in profile dimension in higher side shall be accepted but no extra payment on this account shall be made.</p> <p>9.149B.1 Fixed window / ventilator made of (small series) frame 47 x 50 mm & mullion 47 x 68 mm both having wall thickness of 1.9 ± 0.2 mm and single glazing bead of appropriate dimension. (Area upto 0.75 sqm.)</p>	sqm	7393.95
9.149C	<p>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 ± 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, 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 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, 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 & direction of Engineer-in-Charge. (Single / double glass panes and silicon sealant shall be paid separately).</p> <p>Note: For uPVC frame, sash and mullion extruded profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable. Variation in profile dimension in higher side shall be accepted but no extra payment on this account shall be made.</p>		

9.0 (WOOD& PVC WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	<p>9.149C.1 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 ± 0.2 mm and single glazing bead / double glazing bead of appropriate dimension. (Area of door upto 2.00 sqm).</p> <p>9.149C.2 Casement door with top hung ventilator with 3D and S.S. friction hinges (400 x 19 x 1.9 mm) 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 ± 0.2 mm and single glazing bead / double glazing bead of appropriate dimension. (Area of door upto 2.50 sqm)</p>	<p>sqm</p> <p>sqm</p>	<p>10330.45</p> <p>10487.55</p>
9.149D	<p>Providing and fixing factory made uPVC white colour sliding glazed window upto 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 ± 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 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 & direction of Engineer-in-Charge. (Single / double glass panes, wire mesh and silicon sealant shall be paid separately)</p> <p>Note: For uPVC frame and sash extruded profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable. Variation in profile dimension in higher side shall be accepted but no extra payment on this account shall be made.</p> <p>9.149D.1 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 ± 0.2 mm and single glazing bead of appropriate dimension. (Area of window upto 1.75 sqm)</p> <p>9.149D.2 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 ± 0.2 mm and single glazing bead of appropriate dimension (Area of window upto 1.75 sqm).</p> <p>9.149D.3 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 ± 0.2 mm and single glazing bead / double glazing bead of appropriate dimension. (Area of window above 1.75 sqm upto 2.50 sqm).</p> <p>9.149D.4 Three track three panels sliding window 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 62 mm both having wall thickness of 2.3 ± 0.2 mm and single glazing bead / double glazing bead of appropriate dimension. (Area of window above 1.75 sqm).</p> <p>9.149D.5 Three track three panels sliding window made of (big series) frame 116 x 45 mm & sash 46 x 62 mm both having wall thickness of 2.3 ± 0.2 mm and single glazing bead / double glazing bead of appropriate dimension. (Area of window above 1.75 sqm)</p>	<p>Sqm</p> <p>sqm</p> <p>sqm</p> <p>sqm</p> <p>sqm</p>	<p>7687.45</p> <p>10083.65</p> <p>7863.75</p> <p>9678.15</p> <p>9218.85</p>
9.149E	<p>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 ± 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</p>		

9.0 (WOOD& PVC WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	<p>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 & direction of Engineer-in Charge. (Single / double glass panes, wire mesh and silicon sealant shall be paid separately).</p> <p>Note: For uPVC frame and sash extruded profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable. Variation in profile dimension in higher side shall be accepted but no extra payment on this account shall be made.</p> <p>9.149E.1 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 ± 0.2 mm and single glazing bead / double glazing bead of appropriate dimension. (Area of window above 2.50 sqm upto 4.00 sqm.)</p> <p>9.149E.2 Two track four panels sliding window made of (big series) frame 67 x 50 mm & sash 46 x 62 mm both having wall thickness of 2.3 ± 0.2 mm and single glazing bead / double glazing bead of appropriate dimension. (Area of window above 4.00 sqm upto 8.00 sqm).</p>	<p>sqm</p> <p>sqm</p>	<p>7822.30</p> <p>6795.70</p>
9.149F	<p>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 ± 0.2 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 & 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 & direction of Engineer-in-Charge. (Single / double glass panes, wire mesh and silicon sealant shall be paid separately).</p> <p>Note: For uPVC frame and sash extruded profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable. Variation in profile dimension in higher side shall be accepted but no extra payment on this account shall be made.</p> <p>9.149F.1 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 ± 0.2 mm and single glazing bead / double glazing bead of appropriate dimension. (Area of door above 2.00 sqm upto 5.00 sqm)</p> <p>9.149F.2 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 ± 0.2 mm and</p>	<p>sqm</p>	<p>.</p> <p>6902.95</p>

9.0 (WOOD& PVC WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	single glazing bead / double glazing bead of appropriate dimension. (Area of door above 2.00 sqm upto 5.00 sqm)	sqm	6151.20
	9.149F.3 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 ± 0.2 mm and single glazing bead/ double glazing bead of appropriate dimension. (Area of door above 5.00 sqm)	sqm	6954.20
	9.149F.4 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 ± 0.2 mm and single glazing bead / double glazing bead of appropriate dimension. (Area of door above 2.00 sqm upto 5.00 sqm)	sqm	8787.45
9.150	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.		
	9.150.1 200 x 19 x 1.9 mm	each	310.95
	9.150.2 250 x 19 x 1.9 mm	each	344.40
	9.150.3 300 x 19 x 1.9 mm	each	375.20
	9.150.4 350 x 19 x 1.9 mm	each	510.30
	9.150.5 400 x 19 x 1.9 mm	each	515.65
9.151	Providing and fixing casement handle made of zinc alloyed (white powder coated) for UPVC casement window with necessary screws etc. complete.	each	187.80
9.152	Providing and fixing zinc alloyed (white powder coated) touch lock for UPVC sliding window with necessary screws etc. complete	each	166.40
9.153	Providing and fixing steel roller for UPVC sliding window with necessary screws etc. complete.	each	94.15
9.154	Providing and fixing steel roller for UPVC sliding door with necessary screws etc. complete.	each	154.35
9.155	Providing and fixing steel (white powder coated) crescent lock for UPVC sliding window/ door with necessary screws etc. complete	each	161.05
9.156	Providing and fixing frame work for partitions/ wall lining etc. made of 50x50x1.6 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 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.	kg	131.20
9.157	DELETED		
9.158	Providing and fixing fire resistant door frame of section 50 x 60 mm on horizontal side & 35 x 60 mm on vertical sides having built in rebate made out of 1.6 mm thick GI sheet (Zinc coating not less than 120gm/ m ²) suitable for mounting 120 min Fire Rated Glazed Door Shutters. The frame shall be filled with Mineral wool Insulation having density min 96Kg/m ³ . The frame will have a provision of G.I. Anchor fastners 14 nos (5 each on vertical style & 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 or Powder coating of not less than 30 micron in desired shade as per the directions of Engineer - in- charge. (Cost of SS ball bearing hinges is excluded).	metre	1824.30
9.159	Providing and fixing 60 mm thick glazed fire resistant door shutters of 120 min 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		

9.0 (WOOD& PVC WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	mounting on door frame, consisting of vertical styles, top rail & side rail 60 mm x 60 mm wide and bottom rail of 110 mm x 60 mm made out of 1.6mm thick G.I. sheet (zinc coating not less than 120gm/m ²) duly filled mineral wool insulation having density min 96 kg/ m ³ and fixing with necessary stainless steel ball bearing hinges of size 100x89x3mm of approved make, including applying a coat of approved fire resistant primer or powder coating not less than 30 micron etc all complete as per direction of Engineer-in-charge (panelling to be paid for separately).	sqm	9795.60
9.160	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 70 mm of 1.6 mm 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 (EI20).The profile has to be fixed to the supporting construction by means of anchor fasteners of size M10 x 80, every 150 mm from the edges and every 500 mm (approx) c/c. Linear measurement of frame shall be measured for payment. The frame shall be filled with mineral wool insulation of density min 96kg/ m ³ and finished with a approved fire resistant primer or Powder coating of not less than 30 micron in desired shade as per NBC 2016, IS 16231 (Part 3):2016 and directions of Engineer- in- charge.	metre	1824.30
9.161	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/m ²) 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 NBC2016, IS 16231 (Part 3):2016 and as per direction of Engineer-in-charge with glass of required thickness having 120 minutes of fire resistance both integrity & radiation control (EW120) and minimum 20 minutes of insulation (EI20). The manufacturers 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	39840.40
9.162	Providing and fixing bright /matt finished Stainless Steel handles of approved quality & make with necessary screws etc all complete.		
	9.162.1 125 mm	each	101.45
	9.162.2 100 mm	each	77.40
	9.162.3 75 mm	each	48.60

SUB HEAD: 10.0
STEEL WORK

10.0 (STEEL WORK)

10.0 (STEEL WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
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	120.80
10.2	Structural steel work 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.		
10.2.1	Riveted and bolted	kg	142.90
10.2.2	Welded	kg	138.20
10.3	Providing and fixing in position collapsible steel shutters with vertical channels 20x10x2mm 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	10401.50
10.4	Providing and fixing 1mm thick M.S. sheet sliding-shutters with frame and diagonals braces of 40x40x6mm angle iron, 3mm M.S. gusset plates at the junction and corners, 25mm dia pulley, 40x40x6mm angle and T-iron guide at the top and bottom respectively including applying a priming coat of approved steel primer,	sqm	6441.70
10.5	Providing and fixing 1mm thick M.S. sheet door with frame of 40x40x6mm 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.		
10.5.1	Using M.S. angles 40x40x6mm for diagonal braces	sqm	5493.90
10.5.2	Using flats 30x6mm for diagonal braces and central cross piece.	sqm	5338.50
10.6	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 confirming to IS:4454 part-1 and M.S. top cover of required thickness for rolling shutters.		
10.6.1	80x1.25 mm M.S. laths with 1.25 mm thick top cover	sqm	3305.00
10.6.2	80x1.20 mm M.S. laths with 1.20 mm thick top cover	sqm	3354.95
10.6.3	80x0.90 mm M.S. laths with 0.90 mm thick top cover	sqm	2916.10
10.7	Providing and fixing ball bearing for rolling shutters.	each	531.55
10.8	Extra for providing mechanical device chain crank operation for operating rolling shutters.		
10.8.1	Exceeding 10.00 sqm and upto 16.80 sqm in the area	sqm	1222.60
10.8.2	Exceeding 16.80 sqm in area	sqm	1222.60
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	668.95
10.10	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 to be paid separately).		
10.10.1	Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size).	kg	52.40
10.10.2	Fixing with carbon steel galvanized dash fastener of required dia and size (to be paid for separately).	kg	20.60

10.0 (STEEL WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
10.11	Providing and fixing factory made ISI marked steel glazed doors, windows and ventilators, side / top/ center hung, with beading and all members such as F7D, F4B, K11B and K12B etc. complete of standard rolled steel sections, joints mitered 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 payments.)		
	10.11.1 Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	kg	163.40
	10.11.2 Fixing with carbon steel galvanized dash fastener of required dia and size (to be paid for separately).	kg	113.85
10.12	Extra for providing and fixing steel beading of size 10x10x1.6 mm (box type), approved shape and section with screws instead of glazing clips and metal sash putty, in steel doors, windows, ventilators and composite units.	meter	58.45
10.13	Providing & fixing T-iron frames for doors, windows & ventilators of mild steel Tee-sections, joints mitred & welded, including fixing of necessary butt hinges & screws and applying a priming coat of approved steel primer.		
	10.13.1 Fixing with 15x3 mm lugs 10cm long embedded in cement concrete blocks 15x10x10cm of C.C. 1:3:6 (1cement : 3 coarse sand :6 graded stone aggregate 20mm nominal size) .	kg	144.55
	10.13.2 Fixing with carbon steel galvanized dash fastener of required dia and size (to be paid for separately).	kg	139.50
10.14	Providing and fixing pressed steel door frames conforming to IS: 4351, manufactured from commercial mild steel sheet of 1.60mm thickness, including hinges jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25mm, or base ties of 1.60mm 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 directed by Engineer-in-charge:		
	10.14.1 Profile B		
	10.14.1.1 Fixing with adjustable lugs with split end tail to each jamb	meter	460.60
	10.14.1.2 Fixing with carbon steel galvanized dash fastener of required dia and size (to be paid for separately).	meter	447.25
	10.14.2 Profile C		
	10.14.2.1 Fixing with adjustable lugs with split end tail to each jamb	meter	487.40
	10.14.2.2 Fixing with carbon steel galvanized dash fastener of required dia and size (to be paid for separately).	meter	474.00
	10.14.3 Profile E		
	10.14.3.1 Fixing with adjustable lugs with split end tail to each jamb	meter	527.50
	10.14.3.2 Fixing with carbon steel galvanized dash fastener of required dia. and size (to be paid separately)	meter	514.15
10.15	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.		
	10.15.1 Fixing with 15x3 mm lugs 10cm long embedded in cement concrete blocks 15x10x10cm of C.C. 1:3:6 (1cement : 3 coarse sand :6 graded stone aggregate 20mm nominal size) .	kg	151.75
	10.15.2 Fixing with carbon steel galvanized dash fastener of required dia and size (to be paid for separately).	kg	139.40

10.0 (STEEL WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
10.16	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. 10.16.1 Hot finished welded type tubes 10.16.2 Hot finished seamless type tubes 10.16.3 Electric resistance or induction butt welded tubes	kg kg kg	156.95 171.00 142.90
10.17	Providing and fixing 20x6mm mild steel 15cm long clamps for securing chick tops.	each	NA
10.18	Providing and fixing mild steel rings of 6mm round bar and 40mm internal dia for fastening ropes of chicks	each	29.60
10.19	Providing and fixing M.S. fan clamp 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	237.15
10.20	Providing and fixing circular/hexagonal cast iron box for ceiling fan clamp, of internal dia 140 mm, 73mm height, top lid of 1.5mm 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 3.3mm dia. round headed screws, one lock at the corners. Clamps shall be made of 12mm dia M.S. bar bent to shape as per standard drawing.	each	207.65
10.21	Providing and fixing mild steel round holding down bolts with nuts and washer plates complete.	kg	96.00
10.22	Providing and fixing bolts including nuts and washers complete.	kg	131.20
10.23	Providing and fixing M.S. rivets of sizes in position.	kg	274.90
10.24	Welding, including transportation of plant at site etc. complete 10.24.1 By gas plant 10.24.2 By electric plant	cm cm	12.90 6.20
10.25	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. 10.25.1 In stringers, treads, landings etc. of stair cases, including use of chequered plate wherever required, all complete. 10.25.2 In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works.	kg kg	141.40 181.60
10.26	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. 10.26.1 M.S. tube 10.26.2 E.R.W. tubes 10.26.3 G.I. pipes	kg kg kg	161.05 154.70 197.45
10.27	Providing and fixing carbon steel galvanized (minimum coating 5 micron)dash fastener of 10 mm dia double threaded 6.8 grade (yield strength 480 N/mm ²) counter sunk head, comprising of 10 m dia polyamide PA 6 grade sleeve, including drilling of hole in frame , concrete masonry etc. as per direction of Engineer-in-charge. 10.27.1 10x60 mm 10.27.2 10x80 mm 10.27.3 10x120mm 10.27.4 10x140mm 10.27.5 10x160mm	each each each each each	111.70 114.35 144.30 159.70 195.65

10.0 (STEEL WORK)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
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 ,including fixing the railing with necessary accessories and 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-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	kg	753.75
10.29	Providing and fixing fly proof wire gauze to windows, clerestory windows and doors with M.S Flat 15x3 mm and nuts and bolts complete. 10.29.1 Galvanized M.S wire gauze with 0.63 mm dia wire and 1.4 mm aperture on both sides 10.29.2 Stainless steel (grade 304) wire gauze of 0.5mm dia wire and 1.4 mm aperture on both sides.	sqm sqm	775.50 1014.85
10.30	Providing and fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows, all complete with : 10.30.1 4.0mm thick glass panes 10.30.2 5.0mm thick glass panes	sqm sqm	1070.20 1210.00
10.31	Providing and fixing angle iron frames for doors, windows and ventilators of mild steel Angle sections of size 35x35x5 mm, joints mitred and welded by angle iron 35x35x5 mm or 35x 5 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	135.05

SUB HEAD: 11.0
FLOORING

11.0 (FLOORING)

11.0 (FLOORING)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
11.1	Brick on edge flooring in required pattern with common burnt clay non-modular bricks of class designation 7.5 on a bed of 12 mm cement mortar, including filling the joints with same mortar and curing complete 11.1.1 1:4 (1cement : 4 coarse sand) 11.1.2 1:6 (1cement : 6 coarse sand)	sqm sqm	1046.20 993.10
11.2	Dry brick on edge flooring in required pattern with common burnt clay non-modular bricks of class designation 7.5 on a bed of 12 mm cement mortar, including filling the joints with fine sand	sqm	868.50
11.3	Cement concrete flooring 1:2:4 (1cement: 2 coarse sand: 4 graded stone aggregate) finished with a floating coat of neat cement including cement slurry and curing complete, but excluding the cost of nosing of steps etc. complete. 11.3.1 25mm thick with 12.5 mm nominal size stone aggregate. 11.3.2 40mm thick with 20 mm nominal size stone aggregate. 11.3.3 50 mm thick with 20mm nominal size stone aggregate.	sqm sqm sqm	409.25 510.25 562.15
11.4	DELETED		
11.5	DELETED		
11.6	52mm thick cement concrete flooring with concrete hardener topping, under layer 40 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and top layer 12mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 stone aggregate 6 mm nominal size) by volume, hardening compound mixed @ 2 liter per 50kg of cement or as per manufacturer's specifications, including cost of cement slurry and curing complete, but excluding the cost of nosing of steps etc. complete.	sqm	816.00
11.7	62mm thick cement concrete flooring with concrete hardener topping under layer 50 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and top layer 12mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6 mm nominal size) by volume, hardening compound mixed @ 2 liter per 50kg of cement or as per manufacturer's specifications, including cost of cement slurry and curing complete, but excluding the cost of nosing of steps etc. complete.	sqm	880.60
11.8	Cement plaster skirting upto 30cm height with cement mortar 1:3 (1 cement: 3 coarse sand), finished with a floating coat of neat cement and curing complete. 11.8.1 18 mm thick 11.8.2 DELETED	sqm	550.60
11.9	Red oxide plaster skirting (upto 30cm height) with top layer of 6 mm thick plaster of cement mortar red oxide mix, using 3.5 kg of red oxide of iron per 50 kg of cement in mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of cement red oxide mix of same proportion. 11.9.1 18 mm thick with under layer 12 mm thick cement plaster 1:3 (1 cement : 3 coarse sand) 11.9.2 21 mm thick with under layer 15 mm thick cement plaster 1:3 (1cement: 3 coarse sand).	sqm sqm	624.80 643.40
11.10	Cement concrete pavement with 1:2:4 (1cement: 2 coarse sand: 4 graded crushed stone aggregate 20 mm nominal size) including finishing and curing complete.	cum	7176.05
11.11	Extra for making chequers of approved pattern on cement concrete floors, steps, landing, pavements etc	sqm	66.50

11.0 (FLOORING)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
11.12	TERRAZO FLOORING 40mm thick marble chips flooring rubbed and polished to granolithic finish, under layer 34 mm thick cement concrete 1:2:4 (1 cement: 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size and top layer 6 mm 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 and curing complete :		
	11.12.1 Dark shade pigment with ordinary cement.	sqm	912.55
	11.12.2 Light shade pigment with white cement.	sqm	964.35
	11.12.3 Medium shade pigment with 50% white cement and 50% ordinary cement.	sqm	933.75
	11.12.4 White cement without any pigment.	sqm	927.40
	11.12.5 Light shade pigment with ordinary cement.	sqm	922.05
	11.12.6 Ordinary cement without any pigment.	sqm	880.25
11.13	40mm thick marble chips flooring rubbed and polished to granolithic finish, under layer 31mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size) and top layer 9mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from 4 mm to 7mm 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 and curing complete :		
	11.13.1 Dark shade pigment with ordinary cement.	sqm	963.90
	11.13.2 Light shade pigment with white cement.	sqm	1037.85
	11.13.3 Medium shade pigment with 50% white cement and 50% ordinary cement.	sqm	994.10
	11.13.4 White cement without any pigment.	sqm	987.25
	11.13.5 Light shade pigment with ordinary cement.	sqm	973.40
	11.13.6 Ordinary cement without any pigment.	sqm	917.85
11.14	40mm thick marble chips flooring rubbed and polished to granolithic finish, under layer 28mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size) and top layer 12mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from 7 mm 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 and curing complete :		
	11.14.1 Dark shade pigment with ordinary cement.	sqm	1018.50
	11.14.2 Light shade pigment with white cement.	sqm	1122.10
	11.14.3 Medium shade pigment with 50% white cement and 50% ordinary cement.	sqm	1060.80
	11.14.4 White cement without any pigment.	sqm	1043.25
	11.14.5 Light shade pigment with ordinary cement.	sqm	1037.45
	11.14.6 Ordinary cement without any pigment.	sqm	958.60
11.15	Marble chips skirting upto 30 cm height, rubbed and polished to granolithic finish, top layer 6 mm 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 : 11.15.1 18 mm thick with under layer 12 mm thick cement plaster 1:3 (1 cement : 3 coarse sand) – 11.15.1.1 Dark shade pigment with ordinary cement.	sqm	1489.60

11.0 (FLOORING)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	11.15.1.2 Light shade pigment with white cement.	sqm	1541.40
	11.15.1.3 Medium shade pigment with 50% white cement and 50% ordinary cement.	sqm	1520.30
	11.15.1.4 White cement without any pigment.	sqm	1504.50
	11.15.1.5 Light shade pigment with ordinary cement.	sqm	1499.10
	11.15.1.6 Ordinary cement without any pigment.	sqm	1457.30
	11.15.2 21 mm thick (DELETED)		
11.16	Providing and fixing strips in joints of terrazzo/ cement concrete floors.		
	11.16.1 Glass strips		
	11.16.1.1 40 mm wide and 4 mm thick	meter	72.60
	11.16.1.2 40 mm wide and 6 mm thick	meter	78.50
	11.16.2 Aluminum strips (DELETED)		
11.17	Extra for terrazzo flooring laid as floor borders, margins and similar bands exceeding 7.5 cm but not exceeding 30 cm in width.	sqm	49.25
11.18	Extra for laying terrazzo flooring on staircase treads not exceeding 30 cm in width, including cost of forming, nosing etc	sqm	73.85
11.19	Extra for laying terrazzo in narrow bands not exceeding 7.5cm in width.	meter	5.25
11.20	Extra for making moulded nosing in terrazzo including returned moulded ends and angles to mouldings.	meter	208.70
11.21	Special surface finishing to treads, risers and the ends of concrete steps and the like, including form work	sqm	77.25
11.22	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 1mm to 4mm nominal size by volume), with under layer 25mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size), including rubbing, polishing and cement slurry and curing complete.		
	11.22.1 18 mm thick crazy marble stone white, black or as specified.	sqm	1570.05
11.23	TILE FLOORING Precast terrazzo tiles 22mm thick with graded marble chips of size upto 12 mm, laid in floors, and landing, jointed with neat cement slurry mixed with pigment to match the shade of the tiles including rubbing polishing and curing complete, on 20 mm thick bed of cement mortar 1:4 (1 cement : 4 coarse sand)		
	11.23.1 Light shade using white cement	sqm	1438.30
	11.23.2 Medium shade using 50% white cement and 50% ordinary cement.	sqm	1375.60
	11.23.3 Dark shade using ordinary cement.	sqm	1337.90
	11.23.4 Ordinary cement without any pigment.	sqm	1270.55
11.24	Extra if terrazzo tiles are laid in treads of steps not exceeding 30 cm in width.	sqm	92.25
11.25	Precast terrazzo tiles 22mm thick with graded marble chips of size upto 12 mm, in skirting and risers of steps not exceeding 30 cm in height, on 12 mm thick cement plaster 1:3 (1cement : 3 coarse sand), jointed with neat cement slurry mixed with pigment to match the shade of the tiles, including rubbing, polishing and curing complete with tiles of :		
	11.25.1 Light shade using white cement	sqm	2095.90
	11.25.2 Medium shade using 50% white cement and 50% ordinary cement.	sqm	2016.50
	11.25.3 Dark shade using ordinary cement.	sqm	1967.30
	11.25.4 Ordinary cement without any pigment.	sqm	1882.45

11.0 (FLOORING)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
11.26	Precast terrazzo tiles 22mm thick with graded marble chips of size upto 12mm fixed on walls, on 12mm thick cement plaster 1:3 (1 cement : 3 coarse sand), jointed with neat cement slurry mixed with pigment to match the shade of the tiles, including rubbing, polishing and curing complete with tiles of : 11.26.1 Light shade using white cement 11.26.2 Medium shade using 50% white cement and 50% ordinary cement 11.26.3 Dark shade using ordinary cement. 11.26.4 Ordinary cement without any pigment.	sqm sqm sqm sqm	2027.75 1948.40 1899.15 1814.35
11.27	Extra if cut tiles other than half tiles are used in risers of steps, skirting and dado.	sqm	318.20
11.28	Chequerred terrazzo tiles 22mm thick with graded marble chips of size upto 6mm in floors, jointed with neat cement slurry mixed with pigment to match the shade of the tiles, including rubbing, polishing and curing complete, on 20 mm thick bed of cement mortar 1:4 (1 cement : 4 coarse sand) . 11.28.1 Light shade using white cement 11.28.2 Medium shade using 50% white cement and 50% ordinary cement. 11.28.3 Dark shade using ordinary cement. 11.28.4 Ordinary cement without any pigment.	sqm sqm sqm sqm	1460.40 1397.65 1359.95 1292.85
11.29	Chequerred precast cement concrete tiles 22mm thick in footpath and courtyard, jointed with neat cement slurry mixed with pigment to match the shade of the tiles, including rubbing, cleaning and curing complete, on 20 mm thick bed of cement mortar 1:4 (1 cement : 4 coarse sand) . 11.29.1 Light shade using white cement 11.29.2 Medium shade using 50% white cement and 50% ordinary cement. 11.29.3 Dark shade using ordinary cement. 11.29.4 Ordinary cement without any pigment.	sqm sqm sqm sqm	1293.60 1150.75 971.15 903.85
11.30	Chequerred terrazzo tiles 30mm thick with graded marble chips of size upto 12mm in stairs treads jointed with neat cement slurry mixed with pigment to match the shade of the tiles, including rubbing and polishing, rounding of nosing and curing complete on 20 mm thick bed of cement mortar 1:4 (1 cement : 4 coarse sand) 11.30.1 Light shade using white cement 11.30.2 Medium shade using 50% white cement and 50% ordinary cement. 11.30.3 Dark shade using ordinary cement. 11.30.4 Ordinary cement without any pigment.	sqm sqm sqm sqm	NA NA NA NA
11.31	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 direction of Engineer-in-charge 11.31.1 In flooring on a bed of 10mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand) 11.31.2 In dado/skirting on 12mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand)	sqm sqm	1608.30 1714.20
11.32	Tile work in skirting, risers of step and dedo upto 2 metre height, over 12mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointed with grey cement slurry @ 3.3 kg/sqm, including pointing in white cement mixed with pigment of matching shade complete. 11.32.1 Marble tiles (polished) Raj Nagar.		

11.0 (FLOORING)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	11.32.1.1 8 mm thick	Sqm	1294.80
11.33	MARBLE STONE FLOORING Flooring with marble stone of specified thickness as per sample of marble approved by Engineer-in-charge, over 20 mm (average) thick base of cement mortar 1:4 (1 cement:4 coarse sand) laid and jointed with grey cement slurry including rubbing, polishing and curing complete with:	Rate per sqm	
		16mm	18mm
	11.33.1 Makrana White Second quality	3316.05	3300.65
	11.33.2 Makrana Doongri adanga veined.	5531.70	5762.45
	11.33.3 Raj Nagar plain	2192.85	2262.10
	11.33.4 Agaria White	3876.10	3876.10
	11.33.5 Black zebra	2423.65	2608.30
	11.33.6 Udaipur green marble	1992.85	2023.60
11.33.7 Pink plain marble	2085.15	2123.60	
11.34	Extra for pre finished nosing to treads of steps of marble stone	meter	553.70
11.35	Extra for marble stone flooring in treads of steps and risers using single length up to 2.00 meter.	sqm	644.25
11.36	KOTA STONE FLOORING Kota stone slab flooring 25 mm thick over 20mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing, polishing and curing complete with base of cement mortar 1:4 (1 cement : 4 coarse sand) :	sqm	1891.75
	11.37	Kota stone slab 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement:3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing, polishing and curing complete.	sqm
11.38	SAND STONE FLOORING 40mm thick fine dressed stone flooring over 20mm (average) thick base of cement mortar 1:5 (1 cement: 5 coarse sand) with joints finished flush and curing complete:		
	11.38.1 Red sand stone	sqm	950.85
	11.38.2 White sand stone	sqm	980.30
11.39	40mm thick fine dressed stone flooring over 20mm (average) thick base of cement mortar 1:5 (1 cement: 5 coarse sand), including pointing with cement mortar 1:2 (1 cement : 2 stone dust) with an admixture of pigment to match the shade of stone and curing complete.		
	11.39.1 Red sand stone	sqm	1147.50
	11.39.2 White sand stone	sqm	1176.95
11.40	40 mm thick fine dressed and rubbed stone flooring over 20mm (average) thick base of cement mortar 1:5 (1 cement: 5 coarse sand), with joints 3mm thick, side buttered with cement mortar 1:2 (1 cement : 2 stone dust) admixture with pigment to match the shade of stone and pointing with the same mortar and curing complete.		
	11.40.1 Red sand stone	sqm	1238.85
	11.40.2 White sand stone.	sqm	1268.30
11.41	Extra for pre finished nosing in treads of steps of kota stone/ sand stone slab.	meter	161.75
11.42	Extra for kota stone/sand stone flooring in treads of steps and risers using single length up to 1.05 meter.	sqm	34.45
11.43	WOODEN FLOORING Wooden planking, tongued and grooved in flooring including fixing with iron screws complete:		
	11.43.1 12 mm thick		

11.0 (FLOORING)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	11.43.1.1 Second class teak wood	sqm	2668.10
	11.60.1.2 Second class deodar wood	sqm	2048.10
	11.43.2 15 mm thick		
	11.43.2.1 Second class teak wood	sqm	3229.50
	11.43.2.2 Second class deodar wood	sqm	2473.90
	11.43.3 18 mm thick		
	11.43.3.1 Second class teak wood	sqm	3789.35
	11.43.3.2 Second class deodar wood	sqm	2898.55
	11.43.4 25 mm thick		
	11.43.4.1 Second class teak wood	sqm	5098.75
	11.43.4.2 Second class deodar wood	sqm	3891.80
11.44	38mm thick wood block flooring of first class teak wood laid over 25mm thick leveling layer of cement concrete 1:2:4 (1 cement: 2 coarse sand: 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	11999.65
11.45	Extra for planing the lower surface of wooden planking	Sqm	203.95
11.46	DELETED		
11.47	DELETED		
11.48	Providing and fixing M.S. angle 50x50x5 mm to act as nosing with lugs of M.S. flat 10x5 mm, 10 cm 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	172.00
11.50	Providing and laying Ceramic glazed floor tiles 300x300 mm (thickness to be specified by the manufacturers) of 1st quality conforming to IS: 15622 of approved make, laid on 20 mm thick bed of cement mortar 1: 4 (1 cement : 4 coarse sand) including pointing the joints with white cement and matching pigment etc., complete.		
	11.50.1 In colour such as White, Ivory, Grey, Fume Red Brown	sqm	1107.65
	11.50.2 In all colours, shades, except White, Ivory, Fume Red Brown	sqm	1170.75
11.50A	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 12 mm thick bed of cement Mortar 1:3 (1 cement: 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete.	sqm	1106.05
11.51	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, laid on 20 mm thick cement mortar 1:4 (1Cement : 4 Coarse sand), including grouting the joints with white cement and matching pigments etc., complete.		
	11.51.1 In colour such as White, Ivory, Grey, Fume Red Brown	sqm	1222.30
	11.51.2 In all colours, shades, except White, Ivory, Fume Red Brown	sqm	1222.30

11.0 (FLOORING)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
11.52	VITRIFIED FLOOR TILES Providing and laying vitrified floor tiles in different sizes (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 20mm thick cement mortar 1:4 (1cement :4 coarse sand) including grouting the joints with white cement and matching pigments etc. complete		
11.52.1	Size of tile 500x500 mm	sqm	1312.85
11.52.2	Size of tile 600x600 mm	sqm	1395.10
11.52.3	Size of tile 800x800 mm	sqm	1857.90
11.52.4	Size of tile 1000x1000 mm	sqm	2529.90
11.53	Deduct for not using 20mm thick cement mortar 1:4 (1 cement: 4 coarse sand) bedding in laying of floor tiles.	sqm	750.20
11.54	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 and manufacturer, in all colours and shades, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS: 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately).		
11.54.1	Size of tile 500x500 mm	sqm	1407.75
11.54.2	Size of tile 600x600 mm	sqm	1490.05
11.54.3	Size of tile 800x800 mm	sqm	1956.30
11.54.4	Size of tile 1000x1000 mm	sqm	2628.30
11.55	Deduct for not grouting the joints with white cement and matching pigment in the items of fixing of vitrified tiles.	sqm	13.80
11.56	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours and shades, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), including grouting the joint with white cement and matching pigments etc. complete.		
11.56.1	Size of tile 500x500 mm	sqm	1366.60
11.56.2	Size of tile 600x600 mm	sqm	1448.90
11.56.3	Size of tile 800x800 mm	sqm	1915.15
11.56.4	Size of tile 1000x1000 mm	sqm	2587.15
11.56A	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 Coarse sand) and jointing with grey cement slurry @ 3.3 kg/sqm including pointing with white cement mixed with pigment of matching shade, all complete as approved by Engineer - in - Charge	Metre	169.45
11.57	Providing and laying Vitrified tiles 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 & manufacturer, in all colours and shades, in skirting, riser of steps, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS: 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately).		
11.57.1	Size of tile 500x500 mm	sqm	1535.65
11.57.2	Size of tile 600x600 mm	sqm	1617.95
11.57.3	Size of tile 800x800 mm	sqm	2084.20
11.57.4	Size of tile 1000x1000 mm	sqm	2756.20

11.0 (FLOORING)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
11.58	Grouting the joints of flooring tiles having joints of 3 mm width, using epoxy grout mix of 0.70 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin per kg), including filling / grouting and finishing complete as per direction of Engineer-in-charge.		
11.58.1	Size of tile 500x500 mm	sqm	305.30
11.58.2	Size of tile 600x600 mm	sqm	253.70
11.58.3	Size of tile 800x800 mm	sqm	202.10
11.58.4	Size of tile 1000x1000 mm	sqm	145.40
11.59	Fixing glazed/Ceramic/Vitrified floor tiles with cement based high polymer modified quick-set tile adhesive (water based) conforming to IS:15477, in average 3mm thickness	sqm	649.10
11.60	Crazy ceramic tile flooring, with under layer 12 mm thick cement mortar 1:4 (1 cement: 4 coarse sand), with joints not exceeding 5 mm, 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 6 mm , mixing fibre @ 125 grams per 50 kg of cement in cement mortar, including providing and mixing water proofing material in mortar @ 1 kg per 50 kg of cement , all complete as per direction of Engineer-in-charge.	sqm	754.45
11.61	Providing and laying 500x500x40 mm thick Turf paver (Turf pave XD) on 150 mm thick sub grade of compacted bed of 20 mm thick nominal size stone aggregate and base course and filling with 150 mm thick fine sand, including spreading, well ramming, consolidating and finishing smooth etc. all complete as per direction of Engineer-in-charge.	sqm	1295.25
11.62	DELETED		
11.63	Providing and laying machine cut, mirror polished, Italian Marble stone flooring laid in required pattern in linear portion of the building all complete as per architectural drawings, with 18 mm thick stone slab laid over 20 mm (average) thick base of cement mortar 1:4 (1 cement: 4 coarse sand) 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 and as directed by the Engineer-in-Charge. a. 18 mm thick Italian Marble stone slab, Perlato, Rossoverona, Fire Red or Dark Emperadore etc.	sqm	6593.80
11.64	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 18 mm thick stone slab laid over 20 mm (average) thick base of cement mortar 1:4 (1 cement: 4 coarse sand) 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 and as directed by the Engineer-in-Charge. a. 18 mm thick Italian Marble stone slab, Perlato, Rossoverona, Fire Red or Dark Emperadore etc.	sqm	7695.15
11.65	Providing and fixing Glass mosaic tiles at finished plain wall surface of size 20 mm x 20 mm x 4 mm in all colour, design, fixing in customize design as per direction of Engineer-in- Charge. The glass mosaic 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		

11.0 (FLOORING)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	inclusive of all operation, material and required pattern approved by Engineer-in-Charge:	sqm	3393.95
11.66	<p>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 directed by the Engineer-in-Charge :</p> <p>11.66.1 Flamed finish granite stone slab Jet Black, Cherry Red, Elite Brown, Cat Eye or equivalent.</p>	sqm	10160.15
11.67	<p>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 directed by Engineer-in-charge consisting of:</p> <p>(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.</p> <p>(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 directed by the Engineer-in-charge.</p> <p>(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 Pyro grip non-combustible 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</p>		

11.0 (FLOORING)

CODE NO.	DESCRIPTION	UNIT	RATE₹
	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. 11.67.1 300 mm Finished Floor Height (FFH) 11.67.2 450 mm Finished Floor Height (FFH).	sqm sqm	5142.35 5469.85
11.68	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 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 directed by the Engineer-in-Charge. 11.68.1 Polished Granite stone slab jet Black, Cherry Red, Elite Brown, Cat Eye or equivalent.	sqm	2336.45

SUB HEAD: 12.0

ROOFING

12.0 (Roofing)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
12.1	C.G.I. SHEETS ROOFING 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 (upto any pitch in horizontal/vertical or curved surface)excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.		
12.1.1	1.60 mm thick with zinc coating not less than 350 gram/m ²	sqm	1908.75
12.1.2	1.25 mm thick with zinc coating not less than 350 gram/m ²	sqm	1579.95
12.1.3	1.00 mm thick with zinc coating not less than 275 gram/m ²	sqm	1345.75
12.1.4	0.80 mm thick with zinc coating not less than 275 gram/m ²	sqm	1158.35
12.1.5	0.63 mm thick with zinc coating not less than 275 gram/m ²	sqm	974.05
12.1.6	0.50 mm thick with zinc coating not less than 275 gram/m ²	sqm	852.50
12.2	Extra for straight cutting in C.G.S. sheet roofing for making opening of area exceeding 40sq.decimetre for chimney stacks, sky light etc.		
12.2.1	1.60 mm thick	metre	145.45
12.2.2	1.25 mm thick	metre	115.15
12.2.3	1.00 mm thick	metre	90.90
12.2.4	0.80 mm/0.63 mm/0.50 mm thick	metre	72.75
12.3	Extra for circular cutting in C.G.S. sheet roofing for making opening of area exceeding 40 square decimeter.		
12.3.1	1.60 mm thick	metre	814.15
12.3.2	1.25 mm thick	metre	636.70
12.3.3	1.00 mm thick	metre	509.65
12.3.4	0.80 mm/0.63 mm thick	metre	407.10
12.3.5	0.50 mm thick	metre	319.00
12.4	Providing ridges or hips of width 60cm overall width plain G.S. sheets fixed with polymer coated J. or L hooks, bolts and nuts 8mm dia G.I. limpet and bitumen washers complete.		
12.4.1	0.80 mm thick with zinc coating not less than 275 gram/m ²	metre	840.15
12.4.2	0.63 mm thick with zinc coating not less than 275 gram/m ²	metre	761.95
12.4.3	0.50 mm thick with zinc coating not less than 275 gram/m ²	metre	690.85
12.5	Providing valleys of 90cm wide overall in plain G.S. sheets fixed with polymer coated J. or L. hooks, bolts and nuts 8 mm dia G.I. limpet and bitumen washers complete.		
12.5.1	1.60 mm thick with zinc coating not less than 350 gram/m ²	metre	1433.25
12.5.2	1.25 mm thick with zinc coating not less than 350 gram/m ²	metre	1234.40
12.5.3	1.00 mm thick with zinc coating not less than 275 gram/m ²	metre	1071.35
12.6	Providing and fixing flashing of 40cm overall width in plain G.S. sheets fixed with polymer coated J or L hooks, bolts and nuts G.I. limpet and bitumen washers complete, bent to shape and fixed in wall with cement mortar 1:3 (1 cement : 3 coarse sand)		
12.6.1	1.25 mm thick with zinc coating not less than 350 gram/m ²	metre	758.60
12.6.2	1.00 mm thick with zinc coating not less than 275 gram/m ²	metre	700.45
12.7	Providing and fixing 15cm wide 45 cm overall semi circular plain G.S. sheet gutter with iron brackets 40x3mm size, bolts, nuts and washers etc. including making necessary connections with rain water pipes complete.		
12.7.1	0.80 mm thick with zinc coating not less than 275 gram/m ²	metre	723.25
12.7.2	0.63 mm thick with zinc coating not less than 275 gram/m ²	metre	795.60
12.14	Providing flat iron brackets 50 x 3 mm size with necessary bolts, nuts and washers etc. for fixing asbestos cement/ G.S. sheets gutters with purlins.	metre	96.55
12.15	Painting top of roofs with bitumen of approved quality at 17 kg per 10sqm impregnated with a cost of coarse sand at 60 cudm per 10 sqm including cleaning the slab surface with brushes and finally with a piece of cloth		

12.0 (Roofing)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	lightly soaked in kerosene oil complete. 12.15.1 with residual type petroleum bitumen of grade VG-10	Sqm	191.90
12.16	Providing reinforced by organic fibres and/or inorganic synthetic fibres cement 6 mm thick corrugated sheets (as per IS: 14871) roofing up to any pitch and fixing with polymer coated J, or L hooks, bolts and nuts 8 mm 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	459.35
12.17	Extra for straight cutting in reinforced by organic fibres and/or inorganic synthetic fibres cement corrugated, semi corrugated 6 mm thick sheet roofing for making openings of area exceeding 40 square decimeter for chimney stacks, skylights etc.	metre	72.75
12.18	Extra for circular cutting in reinforced by organic fibres and/or inorganic synthetic fibres cement corrugated/ semi corrugated 6 mm thick sheet roofing for making openings of area exceeding 40 square decimeter.	metre	200.90
12.19	Extra for providing and fixing wind ties of 40x6mm flat iron section	metre	232.80
12.20	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. 12.20.1 Corrugated serrated adjustable ridges 12.20.2 Plain wing adjustable ridges 12.20.3 Close fitting adjustable ridges 12.20.4 Unserrated adjustable hips	metre metre metre metre	433.95 433.95 487.45 433.90
12.21	ACCESSORIES 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: 12.21.1 Corrugated Apron pieces 12.21.2 Eave's filler pieces 12.21.3 North light curves 12.21.4 Ventilator curves 12.21.5 Barge boards 12.21.6 Ridge finials 12.21.7 Special North light curves 12.21.8 S type louvers	metre metre metre metre metre pair each metre	359.50 291.35 490.35 532.75 624.70 267.90 875.30 493.75
12.22	Providing and fixing UV stabilized fiberglass reinforced plastic sheet roofing upto any pitch including fixing with polymer coated 'J' or 'L' hooks, bolts and 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 rovigs incorporating minimum 0.3% Ultra-violet stabilizer 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. 12.22.1 2mm thick corrugated (2.5" or 4.2" or 6") or step-down (2" or 3" or 6") as specified. 12.22.2 2mm thick flat	sqm sqm	1232.00 1144.85
12.23	Providing and fixing precoated galvanized iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness 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		

12.0 (Roofing)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	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	706.50
12.24	<u>ACCESSORIES</u> Providing and fixing precoated galvanised steel sheet roofing accessories 0.50 mm (+0.05 %) total coated thickness, 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 using self drilling/ self tapping screws complete : 12.24.1 Ridges plain (500 - 600mm) 12.24.2 Flashings/ Aprons.(Upto 600 mm) 12.24.3 North light curves 12.24.4 Barge board (Upto 300 mm) 12.24.5 Crimp curve 12.24.6 Gutter .(600 mm over all girth	metre metre metre metre sqm metre	508.70 468.85 523.25 376.55 419.45 1174.10
12.25	10cm thick (average) mud phaska of damped brick earth on roofs laid to slope consolidated and plastered with 25 mm thick mud mortar mixed with bhusa at 35kg per cum of earth and gobri leaping with mix 1:1 (1 clay: 1 cow dung) and covered with specified tile bricks grouted with cement mortar 1:3 (1 cement: 3 fine sand) mixed with 2% of integral water proofing compound by weight of cement and finishing neat. 12.25.1 With common burnt clay (non modular) brick tiles of class designation 10.0 12.25.2 With machine moulded Common burnt clay (Non modular) brick tiles of class designation 12.5 conforming to IS: 2690	sqm sqm	1063.80 NA
12.26	Extra for every additional 1cm thickness of mud phaska.	sqm	20.40
12.27	Providing and laying common burnt clay (non modular) brick tiles of class designation 10 over mumty roofs grouted with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% of 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.	sqm	759.30
12.28	Providing and laying pressed clay tiles (as per approved pattern 20mm nominal thickness and of approved size) on roofs jointed with cement mortar 1:4 (1 cement : 4 coarse sand) mixed with 2% integral water proofing compound laid over a bed of 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) and finished neat complete	sqm	606.50
12.29	Providing and fixing on roof pressed clay tile (Mangalore tile) of 20 mm nominal thickness and of approved size and as per approved pattern on steel frame work complete (steel frame work to be paid separately).	sqm	344.80
12.30	Providing and fixing on roof pressed clay tile ridge (Mangalore tile) of 20 mm nominal thickness and of approved size and as per approved pattern on steel frame work complete (steel frame work to be paid separately).	sqm	80.85
12.31	Providing gola 75x75 mm in cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 stone aggregate 10 mm and down gauge), including finishing with cement mortar 1:3 (1 cement: 3 fine sand) as per standard design. In 75x75 mm deep chase.	metre	241.45

12.0 (Roofing)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
12.32	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1 m x 1 m x 400 micron, finished with 12 mm cement plaster 1:3 (1 cement: 3 coarse sand) and a coat of neat cement, rounding the edges and making and finishing the outlet complete.	each	262.90
12.33	Providing sand stone slab for roofing and laying them in cement mortar 1 : 4 (1 cement : 4 coarse sand) over wooden karries or R.C.C. 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 sand) complete :		
	12.33.1 Red sand stone slab 40 to 50 mm thick	sqm	844.50
	12.33.2 White sand stone slab 40 to 50 mm thick	sqm	903.40
12.34	CEILING Providing and fixing 20mm thick wooden planks ceiling (frame work for base to be paid for separately) with M.S. screws		
	12.34.1 2 nd class teak wood	sqm	3126.65
	12.34.2 1 st class deodar wood	sqm	3141.45
	12.34.3 1 st class kail wood	sqm	2040.90
	12.34.4 2 nd class kail wood	sqm	1737.45
	12.34.5 Budloo/fir wood	sqm	763.00
12.35	Providing and fixing insulating board ceiling of approved quality with necessary nails etc. complete (frame work to be paid separately) :	Rate for thickness in mm per sqm	
		12 mm	18 mm
	12.35.1 Natural colour insulating board	793.20	NA
	12.35.2 White face insulating board	925.65	NA
	12.35.3 Flame retardant face insulating board	984.55	NA
12.36	Providing and fixing 12 mm thick 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) :	Sqm	822.65
12.37	Providing and fixing plain multipurpose cement board (Height pressure steam cured) with suitable screws for cement particle board in ceiling etc. complete (frame work to be paid separately).		
	12.37.1 6 mm thick Cement fiber board as per IS: 14862	Sqm	756.40
	12.37.2 6 mm thick Cement bonded wood particle board as per IS:14276	sqm	756.40
12.38	Providing and fixing ceiling in Circular opening including cutting with:		
	12.38.1 20 mm thick		
	12.38.1.1 2 nd class Teak Wood planks	Sqm	5098.80
	12.38.1.2 1 st class Deodar Wood planks	Sqm	5124.60
	12.38.1.3 1 st class Kail Wood planks	sqm	4076.45
	12.38.2 12 mm thick Natural colour insulation board	sqm	2852.75
	12.38.3 White face insulating board		
		Rate per sqm	
		12 mm	18 mm
		2973.15	NA
	12.38.4 Flame retardant face insulating board		
		Rate per sqm	
		12 mm	18 mm
		3026.65	NA
	12.38.5 Standard quality hard board sheet		
		Rate per sqm	
		3 mm	4.5 mm
		2712.25	2846.05

12.0 (Roofing)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
12.39	Extra for providing and fixing ceiling to curved surfaces in narrow widths	Sqm	354.00
12.40	Providing and fixing false ceiling with 12 mm thick plain/ semi perforated or with design ceiling tiles of BWP type phenol formaldehyde synthetic resin bonded pressed particle board conforming to IS:3087, finished with a coat of aluminum primer on both sides & edges, including two coats of synthetic enamel paint of approved quality on exposed face, fixed to a grid made out of anodized aluminum (with 15 micron anodic coating) T-sections 35 x15x1.5 mm size main runners, cross runners 23.5x19x1.5 mm fixed to main runners placed 600 mm centre to centre both ways so as to form a grid of 600 mm square. The frame work shall be suspended from ceiling by level adjusting hangers of 6 mm dia M.S rod fixed to roof slab by means of ceiling cleats and dash fastener. The suspenders shall be placed 600 x 1200 mm centre to centre including fixing to the frame with C.P brass screws and applying a priming coat of zinc chromate yellow primer (aluminum frame work shall be paid separately).	sqm	917.55
12.41	Extra for providing 3 mm thick translucent white acrylic plastic sheets of approved quality in false ceiling instead of 12 mm thick plain or design particle board ceiling tiles.	sqm	588.70
12.42	Providing 10 mm thick plaster of Paris (gypsum anhydrous) ceiling upto a height of 5m above floor level over first class kail wood strips 25x6 mm with 10 mm gap in between and reinforced with rabbit wire mesh fixed to wooden frame (frame work to be paid separately) : 12.42.1 Flat surfaces 12.42.2 Curved surfaces	sqm sqm	1817.15 2089.85
12.43	Extra for sunk or raised mouldings in the plaster of Paris (Gypsum anhydrous) ceiling.	sqm	580.20
12.44	Extra for providing plaster of Paris (Gypsum anhydrous) ceiling above 5 meters height from floor level.	sqm/metre height	207.25
12.45	Providing and fixing 12mm thick plaster of Paris (gypsum anhydrous) ceiling tiles upto a height of 5 Metres above floor level over wooden frames and rendered smooth with plaster of Paris (frame work to be paid separately).	sqm	1212.15
12.46	Extra for providing and fixing Plaster of Paris (Gypsum anhydrous) ceiling tiles beyond 5 metres height from floor level (Height beyond 5 m to be measured for extra payment).	sqm/metre height	97.70
12.47	Providing, fixing and applying Plaster of Paris (POP) false ceiling consisting of frame work made with 50mm sq M.S. tubes of 18 G thickness as main runner at 600 mm c/c both ways, suspended/ supported with M.S. flats 25x4 mm from existing R.C.C. slab, finished smooth to line and level including necessary supports, scaffolding etc. as required and also including applying a coat of red oxide zinc chromate primer over the M.S. frame work and suspenders complete. 12.47.1 Including providing and fixing expanded metal of size 5.25 mm x 1.25 mm thickness welded to main runners and applying POP (calcium sulphate semi hydrate variety) to the expanded metal of thickness not less than 10 mm 12.47.2 Including providing and fixing minimum 10 mm thick POP (calcium sulphate semi hydrate variety) jute reinforced tiles of 600 mm x 600 mm of plain or of approved design.	sqm sqm	1881.45 1644.95
12.48	Providing and fixing plain, square edged wooden beading 65x12 mm section with screws of approved quality for ceiling 12.48.1 2 nd class teak wood. 12.48.2 1 st class deodar wood. 12.48.3 1 st class kail wood.	metre metre metre	203.45 204.55 161.60

12.0 (Roofing)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
12.49	Providing and fixing hard board sheet ceiling of approved quality with necessary nails etc. complete (frame work to be paid for separately) 12.49.1 Standard Quality board	Rate per sqm 3 mm 638.70	4.5 mm 785.85
12.50	Providing and fixing thermal insulation of ceiling (under deck insulation) with specified glass wool conforming to IS: 8183, 50mm thick, wrapped in 200 G Virgin Polythene bags fixed to ceiling with metallic cleats (50x50x3mm) @ 60cm c/c and wire mesh of 12.5mm x 24g wire for top most ceiling of building. 12.50.1 With resin bonded fiber glass wool with density 24 kg/cum 12.50.2 With resin bonded rock wool with density 48 kg/cum	sqm sqm	618.45 606.70
12.51	Providing and fixing thermal insulation with specified wool and density conforming to IS: 8183, 50 mm thick, wrapped in 200G Virgin Polythene bags placed over existing false ceiling and held in position by criss-crossing GI wire. 12.51.1 With resin bonded fiber glass wool with density 16 kg/cum 12.51.2 With resin bonded rock wool with density 48 kg/cum	sqm sqm	255.50 307.00
12.52	Providing and fixing thermal insulation with specified wool and density conforming to IS: 8183, 50 mm thick, wrapped in 200G Virgin Polythene bags fixed to walls with screws, rawl plugs and washers and held in position by criss-crossing GI wire etc. complete as per directions of Engineer-in-charge. 12.52.1 With resin bonded fiber glass wool with density 24 kg/cum 12.52.2 With resin bonded rock wool with density 48 kg/cum	sqm sqm	325.45 313.70
12.53	Thermal Insulation of roofing with Expanded polystyrene fixed with suitable adhesive to the false ceiling as per the directions of the Engineer-in-charge. 12.53.1 With Type N-Normal 50 mm thick 12.53.2 With Type SE-Self Extinguishing type 50 mm thick	sqm sqm	302.65 346.80
12.54	<u>RAIN WATER SPOUT AND PIPE</u> Providing and fixing 100 mm diameter and 60 cm long rain water spout in cement mortar 1:4 (1 cement : 4 fine sand) 12.54.1 Stone ware spout.	each	135.40
12.55	Providing and fixing M.S. holder bat clamps of approved design to C.I. or S.C.I. rain water pipes embedded in and including cement concrete blocks 10x10x10cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and cost of cutting holes and making good the walls etc. 12.55.1 100 mm dia. 12.55.2 150 mm dia.	each each	302.25 326.35
12.56	Providing lead caulked joints to sand cast iron water pipes and fittings : 12.56.1 100 mm dia pipe 12.56.2 150 mm dia pipe	each each	493.15 676.95
12.57	Providing, fixing and embedding sand cast iron accessories for rain water pipes in the masonry surrounded with 12 mm thick cement mortar of the same mix, as that of masonry (lead caulking will be paid for separately) : 12.57.1 Sand cast iron plain shoes 12.57.1.1 150 mm diameter	each	440.00
12.58	Providing and fixing on wall face un-plasticized Rigid PVC rain water pipes conforming to IS: 13592 Type A including jointing with seal ring conforming to IS: 5382 leaving 10 mm gap for thermal expansion. (i) Single socketed pipes 12.58.1 75 mm diameter 12.58.2 110 mm diameter	metre metre	226.15 366.30

12.0 (Roofing)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
12.59	Providing and fixing on wall face un-plasticized - PVC moulded fittings/accessories for un plasticized Rigid PVC rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion.		
12.59.1	Coupler		
12.59.1.1	75 mm	each	134.10
12.59.1.2	110 mm	each	179.00
12.59.2	Single push fit coupler		
12.59.2.1	75 mm	each	88.60
12.59.2.2	110 mm	each	118.80
12.59.3	Single tee with door		
12.59.3.1	75x75x75 mm	each	176.45
12.59.3.2	110x110x110 mm	each	289.90
12.59.4	Single tee without door		
12.59.4.1	75x75x75 mm	each	155.05
12.59.4.2	110x110x110 mm	each	255.10
12.59.5	Bend 87.5°		
12.59.5.1	75 mm bend	each	114.05
12.59.5.2	110 mm bend	each	183.05
12.59.6	Shoe (plain)		
12.59.6.1	75 mm shoe	each	119.40
12.59.6.2	110 mm shoe	each	129.50
12.60	Providing and fixing un-plasticised -PVC pipe clips of approved design to un-plasticised - PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with M.S. screws of required length, including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete.		
12.60.1	75 mm	each	323.15
12.60.2	110 mm	each	328.50
12.61	Providing and fixing to the inlet mouth of rain water pipe cast iron grating 15 cm diameter and weighing not less than 440 grams.	each	68.75
12.62	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 25 mm wide x 1.6mm thick with flanges of 27mm and 37 mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 40mm long with 6 mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.5mm of required length with nuts & bolts of required size and other end of angle hanger fixed with G.I. channels 45x15x0.9 mm running at the spacing of 1200 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 10.5 mm 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 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5mm thick 27mm high having flanges of 20mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre to centre, with 25mm long drive-all screws @ 230 mm interval ,including fixing of gypsum board/calcium silicate board to ceiling section and perimeter channel 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 gypsum 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,		

12.0 (Roofing)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	all as per manufacturers' specification and also including the cost of making openings for light fittings, grills diffusers, cutouts made with frame of perimeter channels suitably fixed all complete as per drawing and specification and direction of the Engineer-in-Charge but excluding the cost of painting with: 12.62.1 12.5 mm thick tapered edge gypsum plain board conforming to IS: 2095-Part 1 : 2011 (Board with BIS certification marks) 12.62.2 12.5 mm thick tapered edge gypsum fire resistant board conforming to IS: 2095- Part-I : 2011 (Board with BIS certification marks) 12.62.3 12.5 mm thick tapered edge gypsum moisture resistant board 12.62.4 Fully Perforated Gypsum Plaster Board of size 1200 x 2400x12.5 mm 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 12.62.5 8 mm thick Calcium Silicate Board made with Calcareous and Siliceous materials reinforced with cellulose fiber manufactured through autoclaving process.	sqm sqm sqm sqm sqm	1350.65 1420.90 1447.60 1807.20 1428.85
12.63	Providing and fixing to the inlet mouth of rain water pipe PTMT (an Engineering Thermoplastic) grating square (Slit) 150 mm square with a height of 8 mm and weighing not less than 100 gms.	each	111.60
12.64	Providing and fixing tiled False Ceiling of specified materials of size 595x595mm in true horizontal level suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanized @ 120 gms/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 1200 mm center to center and cross "T" of size 24x25 mm made of 0.30mm thick (minimum) sheet, 1200mm long spaced between main "T" at 600mm center to center to form a grid of 1200 x 600mm and secondary cross "T" of length 600mm and size 24x25 mm made of 0.30mm thick (minimum) sheet to be interlocked at middle of the 1200x600mm panel to form grids of 600x600mm and wall angle of size 24x24x0.30mm and laying false ceiling tiles of approved texture in the grid including, wherever, 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 galvanized butterfly level clips of size 85x30x0.8 mm spaced at 1200mm center to center along size 85x30x0.8 mm spaced at 1200mm center to center along main T, bottom exposed width of 24mm of all T-sections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as directed by Engineer-in-charge. (The rate is excluding the cost of tiles which will be paid for separately). 12.64.1 GI Metal Ceiling Lay in plain Tegular edge Global white colour tiles of size 595x595 mm, and 0.5 mm thick with 8 mm drop; made of G I 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. 12.64.2 GI Metal Ceiling Lay in perforated Tegular edge global white colour tiles of size 595x595 mm and 0.5 mm thick with 8 mm drop; made of GI sheet having galvanizing of 100 gms/sqm (both sides inclusive) and 20% perforation area with 1.8 mm 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	sqm	1760.50

12.0 (Roofing)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	and perforation, and backed with a black Glass fiber acoustical fleece.	sqm	2026.00
	12.64.3 12.5 mm thick square edge PVC Laminated Gypsum Tile of size 595x595 mm, made of Gypsum plasterboard 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 12micron 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	2006.35
	12.64.4 12.5 mm thick fully Perforated Gypsum Board tile made from plasterboard having glass fiber conforming to IS: 2095 part-I, of size 595x595 mm, having perforation of 9.7x9.7 mm at 19.4 mm c/c with center borders of 48mm and the side borders of 30 mm, 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	1303.90
	12.64.5 8 mm thick fully perforated Calcium Silicate Board made with Calcareous and Siliceous materials reinforced with cellulose fiber manufactured through autoclaving process to give stable crystalline structure with minimum compressive strength 225 kg/cm ² , bending strength 100 kg/cm ² , 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 Certificate) of 0.85, with 50 mm thick rock wool of 48 kg/cum backing.	sqm	1964.20
12.65	<p>Providing and Fixing 15 mm thick densified tegular edged eco-friendly light weight calcium silicate false ceiling tiles of approved texture of size 595 x 595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanizing @ 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 24x28 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 1200x600 mm and secondary cross 'T' of length 600 mm and size 24 x28 mm made of 0.33 mm thick (Minimum) sheet to be inter locked at middle of the 1200x 600 mm panel to form grid of size 600x600 mm, resting on periphery walls /partitions on Perimetre wall angle pre-coated steel size (24x24X3000 mm made of 0.40 mm thick (minimum) sheet with the help of rawl plugs at 450 mm centre to centre with 25 mm long dry wall screws@ 230 mm interval and laying 15 mm thick densified edges calcium silicate ceiling tiles of approved texture (Spin tone / 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 25x35x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm G.I. adjustable rods with galvanized steel level clips of size 85 x 30 x 0.8 mm, spaced at 1200 mm centre to centre along main 'T' , bottom exposed with 24 mm of all T-sections shall be pre-painted with polyester baked paint, for all heights, as per specifications, drawings and as directed by engineer-in-charge.</p> <p>Note: - Only calcium silicate false ceiling area will be measured from wall to wall. No deduction shall be made for exposed frames/opening (cut outs) having area less than 0.30 sqm. The calcium silicate ceiling tile shall have NRC value of 0.50 (Minimum), light reflection > 85%, non - combustible as per B.S. 476 part IV, 100% humidity resistance and also having thermal conductivity <0.043 w/m 0 KC.</p>	sqm	1767.00

12.0 (Roofing)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
12.66	Providing and fixing GI Clip in Metal Ceiling System of 600x600 mm module which includes providing and fixing 'C' wall angle of size 20x30x20 mm made of 0.5 mm thick pre painted steel along the perimeter of the room with help of nylon sleeves and wooden screws at 300 mm center to centre, suspending the main C carrier of size 10x38x10 mm made of G.I steel 0.7 mm thick from the soffit with help of soffit cleat 37x27x25x1.6 mm, rawl plugs of size 38x12 mm and C carrier suspension clip and main carrier bracket at 1000 mm c/c. Inverted triangle shaped Spring Tee having height of 24 mm and width of 34 mm made of GI steel 0.45 mm thick is then fixed to the main C carrier and in direction perpendicular to it at 600 mm centers 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	Sqm	2112.90
	12.66.1 GI Metal Ceiling Clip in plain Beveled edge global white colour tiles of size 600x600 and 0.5 mm thick with 25 mm height, made of G I sheet having galvanizing of 100gms/sqm (both sides inclusive) and electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending. 12.66.2 GI Metal Ceiling Clip in plain Beveled edge global white colour tiles of size 600x600 and 0.5 mm thick with 25 mm height, made of G I sheet having galvanizing of 100 gms/ 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.	sqm	2493.60
12.67	Providing and fixing Heat Resistant Terrace Tiles (300 mm x 300mm x 20 mm) 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 coarse sand) 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 150 mm height along the parapet walls in the same manner.	sqm	1481.65
12.68	Providing and laying roof insulation with 40 mm 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 of polyurethane primer applied @ 6-8 sqm per liter, laying 400 G polythene sheet over PUF spray and providing a wearing course of 40 mm thick cement screed 1: 2 : 4 (1 cement : 2 coarse sand : 4 stone aggregate 20 mm 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	1562.35
12.69	Providing and fixing plained eaves boarding.		
	12.69.1 2nd class Deodar wood		
	12.69.1.1 250x32 mm (nominal size)	metre	999.05
	12.69.1.2 300x40 mm (nominal size)	metre	1453.50
	12.69.2 2nd class kail wood		
	12.69.2.1 250x32 mm (nominal size)	metre	702.55
	12.69.2.2 300x40 mm (nominal size)	metre	1007.50
12.70	Providing and applying two coats of High Albedo paint having 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 10 cc/gm. The coating thickness and the methodology of application shall strictly as per manufacturer's specifications and as		

12.0 (Roofing)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	approved by engineer In charge. Surface preparation includes cleaning with metal wire brush to remove all dust, fungus etc., and 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.	sqm	280.75
12.71	Providing and fixing of KHATAM BANDI ceiling of first class budloo/fir wood excluding the cost of frame work which is to be paid separately.		
12.71.1	Changez Khani	sqm	4534.25
12.71.2	Chaar Gul	sqm	5064.10
12.71.3	Chaar Phool	sqm	4156.95
12.71.4	Pahal Gardan	sqm	3779.65
12.71.5	Dawaz-dal-i-girde	sqm	3854.60
12.71.6	Paanch Murabah	sqm	3550.90

SUB HEAD: 13.0

FINISHING

13.0 (Finishing)

Note: - Rates for external plaster are for height upto 10m from ground level unless otherwise stated.

CODE NO.	DESCRIPTION	UNIT	RATE ₹
13.1	CEMENT PLASTER (IN FINE SAND) 12mm Cement plaster of mix: 13.1.1 1 : 4 (1 cement : 4 fine sand) 13.1.2 1 : 6 (1 cement : 6 fine sand)	sqm sqm	283.80 266.20
13.2	15mm Cement plaster on the rough side of single or half brick wall of mix: 13.2.1 1 : 4 (1 cement : 4 fine sand) 13.2.2 1 : 6 (1 cement : 6 fine sand)	sqm sqm	327.85 306.85
13.3	20mm Cement plaster of mix: 13.3.1 1 : 4 (1 cement : 4 fine sand) 13.3.2 1 : 6 (1 cement : 6 fine sand)	sqm sqm	390.05 362.65
13.4	CEMENT PLASTER (IN COARSE SAND) 12mm Cement plaster of mix: 13.4.1 1 : 4 (1 cement : 4 coarse sand) 13.4.2 1 : 6 (1 cement : 6 coarse sand)	sqm sqm	283.80 266.20
13.5	15mm Cement plaster on the rough side of single or half brick wall of mix: 13.5.1 1 : 4 (1 cement : 4 coarse sand) 13.5.2 1 : 6 (1 cement : 6 coarse sand)	sqm sqm	327.85 306.85
13.6	20mm Cement plaster of mix: 13.6.1 1 : 4 (1 cement : 4 coarse sand) 13.6.2 1 : 6 (1 cement : 6 coarse sand)	sqm sqm	390.05 362.65
13.7	CEMENT PLASTER WITH A FLOATING COAT OF NEAT CEMENT 12mm Cement plaster finished with a floating coat of neat cement of mix: 13.7.1 1 : 3 (1 cement : 3 fine sand) 13.7.2 1 : 4 (1 cement : 4 fine sand)	sqm sqm	370.75 353.10
13.8	15mm cement plaster on the rough side of single or half brick wall finished with a floating coat of neat cement of mix : 13.8.1 1 : 3 (1 cement : 3 fine sand) 13.8.2 1 : 4 (1 cement : 4 fine sand)	sqm sqm	418.20 397.20
13.9	20mm cement plaster finished with a floating coat of neat cement of mix : 13.9.1 1 : 3 (1 cement : 3 fine sand) 13.9.2 1 : 4 (1 cement : 4 fine sand)	sqm sqm	486.80 459.40
13.10	Cement plaster 1 : 3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement 13.10.1 12 mm cement plaster 13.10.2 20 mm cement plaster	sqm sqm	370.75 486.80
13.11	15mm Cement plaster 1 : 3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement on the rough side of single or half brick wall	sqm	418.20
13.12	CEMENT PLASTER IN TWO COATS 18mm Cement plaster in two coats under layer 12mm thick cement plaster 1 : 5 (1 cement : 5 coarse sand) finished with a top layer 6mm thick cement plaster 1 : 6 (1 cement : 6 fine sand)	sqm	411.05
13.13	18mm Cement plaster in two coats under layer 12mm thick cement plaster 1 : 5 (1 cement : 5 coarse sand) finished with a top layer 6mm thick cement plaster 1 : 3 (1 cement : 3 coarse sand) finished rough with sponge	sqm	428.65
13.14	12mm Cement plaster 1 : 2 (1 cement : 2 Stone dust)	sqm	322.70
13.15	15mm Cement plaster 1 : 2 (1 cement : 2 Stone dust) on the rough side of single or half brick wall	sqm	374.30
13.16	20mm Cement plaster 1 : 2 (1 cement : 2 Stone dust)	sqm	450.55

13.0 (Finishing)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
13.17	6MM CEMENT PLASTER 6 mm cement plaster to ceiling of mix 1 : 3 (1 cement : 3 fine sand)	sqm	241.25
13.18	6 mm cement plaster 1 : 3 (1 cement : 3 fine sand) 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	NA
13.19	Neat cement punning	sqm	71.20
13.20	CEMENT LIME PLASTER 12mm cement lime plaster of mix: 13.20.1 1 : 1 : 6 (1 cement : 1 lime putty : 6 fine sand) 13.20.2 1 : 2 : 9 DELETED	sqm	284.00
13.21	15mm cement lime plaster on rough side of single or half brick wall of mix 1 : 1 : 6 (1 cement : 1 lime putty : 6 fine sand)	sqm	328.00
13.22	ROUGH CAST PLASTER Rough cast plaster upto 10 m height above ground level with a mixture of sand and gravel or crushed stone from 6 mm to 10 mm nominal size, dashed over and including the fresh plaster in two layers, under layer 12 mm cement plaster 1:4 (1 cement: 4 coarse sand) and top layer 10 mm cement plaster 1:3 (1 cement: 3 fine sand) mixed with 10% finely grounded hydrated lime by volume of cement. 13.22.1 Ordinary cement finish using ordinary cement	sqm	712.95
13.23	PEBBLE DASH PLASTER 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 Coarse sand) and top layer 10mm cement plaster with cement mortar 1:3 (1 cement: 3 fine sand) mixed with 10% finely grounded hydrated lime by volume of cement.	sqm	669.00
13.24	Providing and mixing water proofing material in cement plaster work in proportion recommended by the manufacturers:	kg	67.00
13.25	Extra for plastering exterior walls of the height more than 10m from ground level for every additional height of 3m or part thereof.	sqm	71.55
13.26	Extra for plastering on circular work not exceeding 6m in radius: 13.26.1 In one coat 13.26.2 In two coats	sqm sqm	37.80 57.60
13.27	Extra for plastering done on moulding cornices or architraves including neat finish to line and level : 13.27.1 In one coat 13.27.2 In two coats	sqm sqm	556.40 917.10
13.28	Extra for plastering 13.28.1 Spherical Ceiling 13.28.2 Groined ceiling 13.28.3 Flewing Soffits	sqm sqm sqm	141.00 153.00 93.00
13.29	Providing and applying Plaster of Paris putty of 2mm thickness over plastered surface to prepare the surface even and smooth complete	sqm	233.55
13.30	ARTIFICIAL STONE PLASTER Extra for lining out plaster to imitate stone or concrete blocks walling	sqm	89.10
13.31	18mm thick artificial red stone plaster consisting of 12mm under coat of cement plaster 1 : 4 (1 cement : 4 coarse sand) with 6mm thick finishing coat of cement mortar 1: 1 : 3 (1 cement : 1 marble dust : 3 stone dust) mixed with red oxide to match the shade of red stone	sqm	694.60

13.0 (Finishing)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
13.32	TERRAZO PLASTER 18mm plastering with terrazzo finish rubbed and polished complete, under layer 12mm thick cement plaster 1 : 3 (1 cement : 3 coarse sand) and top layer 6mm thick white, black, chocolate, grey, yellow or Baroda green marble chips of 3mm and down size laid in cement marble powder mix 3 : 1 (3 cement : 1 marble powder) by weight in proportion 4 : 7 (4 cement marble powder mix : 7 marble chips) by volume	sqm	1459.20
13.33	Extra if white cement is used instead of ordinary cement in top layer of 18 mm thick plastering with terrazzo finish	sqm	41.80
13.34	Extra if color is added to grey or white cement in top layer of 18 mm thick plastering with terrazzo finish : 13.34.1 Red, Chocolate, Orange or Buff (yellow) colour 13.34.2 Black Colour 13.34.3 Blue or Green Colour	sqm sqm sqm	91.30 69.45 71.25
13.35	Extra for 18mm thick terrazzo finish marble chips plaster in circular work not exceeding 6 meter radius	sqm	93.00
13.36	PLAIN CEMENT MORTAR BANDS 12 mm thick plain cement mortar bands in cement mortar 1 : 4 (1 cement : 4 fine sand) 13.36.1 Flush Band 13.36.2 sunk Band 13.36.3 Raised Band 13.36.4 Moulded band	cm/meter cm/meter cm/meter cm/meter	6.00 6.55 7.45 12.75
13.37	18mm thick plain cement mortar band in cement mortar 1 : 4 (1 cement : 4 fine sand) 13.37.1 Flush Band 13.37.2 sunk Band 13.37.3 Raised Band 13.37.4 Moulded band	cm/meter cm/meter cm/meter cm/meter	7.30 8.05 9.15 17.05
13.38	18 mm thick moulded cement mortar band in two coats under layer 12 mm thick with cement mortar 1 : 5 (1 cement : 5 coarse sand) top layer 6mm thick with cement mortar 1 : 4 (1 cement : 4 fine sand)	cm per meter	16.95
13.39	POINTING ON BRICK WORK Pointing on brick work or brick flooring with cement mortar 1 : 3 (1 cement : 3 fine sand) 13.39.1 Flush/Ruled/Struck or weathered Pointing 13.39.2 Raised and cut Pointing	sqm sqm	200.80 329.15
13.40	Pointing on brick work or brick flooring with cement mortar 1 : 4 (1 cement : 4 fine sand) 13.40.1 Flush/Ruled/Struck or weathered Pointing	sqm	191.70
13.41	POINTING ON TILE BRICK WORK Pointing on tile brick work with cement mortar 1 : 3 (1 cement : 3 fine sand) 13.41.1 Flush/Ruled/Struck or weathered Pointing	sqm	273.60
13.42	POINTING ON STONE WORK Pointing on stone work with cement mortar 1 : 3 (1 cement : 3 fine sand) 13.42.1 Flush/Ruled Pointing 13.42.2 Raised and cut pointing	sqm sqm	297.00 541.70
13.43	Raised and cut pointing on stone work in white cement mortar 1 : 3 (1 white cement : 3 marble dust)	sqm	563.95
13.44	Pointing on stone slab ceiling with cement mortar 1 : 2 (1 cement : 2 fine sand) 13.44.1 Flush/Ruled Pointing	sqm	166.40

13.0 (Finishing)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
13.45	Extra for pointing on walls on the outside at height more than 10m from ground level for every additional height of 3 m or part thereof.	sqm	8.95
13.46	INTERIOR FINISHING White washing with lime to give an even shade on New Work (three or more coats)	sqm	29.95
13.47	Satna lime wash on walls with one coat	sqm	NA
13.48	Colour washing such as green blue or buff to give an even shade 13.48.1 New work (two or more coats) with a basecoat of white washing with lime. 13.48.2 New work (two or more coats) with basecoat of whitening	sqm sqm	38.60 38.05
13.49	Distempering with dry distemper of approved brand and manufacture (two or more coats) and of required shade on new work, over and including water thinnable priming coat to give an even shade	sqm	127.95
13.50	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade on New work (two or more coats) over and including priming coat with water thinnable cement primer	sqm	164.60
13.51	Distempering with 1st quality acrylic distemper (ready mixed) having VOC content less than 50 gms/litre, two or more coats on new work of approved manufacturer, of required shade and colour complete as per manufacturer's specifications	sqm	89.90
13.52	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface.	sqm	66.85
13.53	EXTERIOR FINISHING Finishing walls with water proofing cement paint of required shade on New work (two or more coats applied @ 3.84 kg/10sqm)	sqm	98.75
13.54	Finishing walls with textured exterior paint of required shade on New work (two or more coats applied @ 3.28 liter/10sqm) over and including base coat of exterior primer applied @ 2.20kg/10sqm	sqm	268.45
13.55	Finishing walls with acrylic smooth exterior paint of required shade on New work (Two or more coats applied @ 1.67 liter/10sqm over and including priming coat of exterior primer applied @ 2.20kg/10sqm)	sqm	185.20
13.56	Finishing wall with premium acrylic smooth exterior paint with silicone additives of required shade on New work (two or more coats applied @ 1.43 liter/10sqm over and including priming coat of water exterior paint applied @ 2.20kg/10sqm)	sqm	178.45
13.57	Finishing with Deluxe multi surface paint system for interiors and exteriors using primer as per manufacturers' specifications: 13.57.1 Two or more coats applied @ 1.25 liter/10sqm over and including one coat of special primer applied @ 0.75liter /10sqm 13.57.2 Painting wood work with deluxe multi surface paint of required shade. Two or more coats applied @ 0.90litre/10sqm over an under coat of primer applied @ 0.75litre/10sqm of approved brand and manufacture 13.57.3 Painting steel work with deluxe multi surface paint of required shade to give an even shade. Two or more coats applied @ 0.90litre/10sqm over an under coat of primer applied @ 0.80litre/10sqm of approved brand and manufacture	sqm sqm sqm	162.80 147.05 142.05
13.58	Applying priming coat: 13.58.1 With ready mixed pink or grey primer of approved brand and manufacture on wood work (hard and soft wood) 13.58.2 With ready mixed aluminum primer of approved brand and manufacture on resinous wood and ply wood 13.58.3 With ready mixed red oxide Zinc Chromate primer of	sqm sqm	64.60 61.40

13.0 (Finishing)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	approved brand and manufacture on steel galvanized iron/steel works	sqm	53.60
	13.58.4 With ready mixed red oxide Zinc Chromate primer of approved brand and manufacture on steel work (second coat)	sqm	28.85
13.59	Painting with silicon and acrylic emulsion based water thinnable sealer of approved brand and manufacture on wet or patchy portion of plastered surfaces:		
	13.59.1 One coat	sqm	81.20
	13.59.2 Two coats	sqm	129.05
13.60	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		
	13.60.1 On steel work	sqm	197.80
	13.60.2 On concrete work	sqm	199.10
13.61	Painting on G.S sheets with synthetic enamel paint of approved band and manufacture of required colour to give an even shade on New work (two or more coats) including a coat of approved steel primer but excluding a coat of mordant solution.	sqm	149.05
13.62	Applying a coat of mordant solution on G.S. sheets:		
	13.62.1 With a solution of 38gms of copper acetate in liter of soft water	sqm	51.80
	13.62.2 With a solution made of 13gms of hydrochloric acid in a solution of 13gms each of copper chloride, copper nitrate and ammonium chloride dissolved in a liter of soft water.	sqm	51.55
13.63	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.		
	13.63.1 75 mm diameter pipe	meter	47.20
	13.63.2 100 mm diameter pipe	meter	63.05
	13.63.3 150 mm diameter pipe	meter	94.05
13.64	Painting (two or more coats) on rain water, soil, waste and vent pipes and fittings with aluminum paint of approved brand and manufacture over a priming coat of ready mixed zinc chromate yellow primer on new work.		
	13.64.1 75 mm diameter pipe	meter	50.25
	13.64.2 100 mm diameter pipe	meter	70.75
	13.64.3 150 mm diameter pipe	meter	105.45
13.65	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 :		
	13.65.1 100 mm diameter pipe	meter	69.65
	13.65.2 150 mm diameter pipe	meter	103.80
13.66	Painting with oil type wood preservative of approved brand and manufacture on New work (two or more coats)	sqm	54.60
13.67	Providing and applying two coats of fire retardant paint on cleaned wood/ply surface @ 3.5sqm per liter per coat including preparation of base surface as per recommendations of manufacturer to make the surface fire retardant	sqm	291.65
13.68	Coal tarring two coats on new work using 0.16 liter and 0.12 liter coal tar per sqm in the 1 st coat and 2 nd coat respectively	sqm	50.45
13.69	Wall Painting with acrylic emulsion paint of approved brand and manufacture to give an even shade. Two or more coats on new work	sqm	136.75
13.70	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade.		

13.0 (Finishing)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	13.70.1 Two or more coats on new work	sqm	131.85
	13.70.2 Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture.	sqm	194.65
13.71	Painting with aluminum paint of approved brand and manufacture to give an even shade. Two or more coats on new work	sqm	125.45
13.72	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	134.65
13.73	Painting with black anti-corrosive bitumastic paint of approved brand and manufacture to give an even shade on new work Two or more coats.	sqm	113.35
13.74	Floor painting with floor enamel paint of approved brand and manufacture of required colour to give an even shade on new work Two or more coats.	sqm	149.25
13.75	Varnishing with varnish of approved brand and manufacture:		
	13.75.1 Two or more coats of glue sizing with copal varnish over and under coat of flatting varnish.	sqm	211.90
	13.75.2 Two or more coats of glue sizing with spar varnish on an under coat of flatting varnish	sqm	216.60
13.76	French spirit polishing, Two or more coats on new works including a coat of wood filler	sqm	380.85
13.77	Polishing on wood work with ready mixed wax polish of approved brand and manufacture on New work	sqm	157.25
13.78	Floor polishing on masonry or concrete floors with wax polish of approved brand and manufacture	sqm	76.50
13.79	Lettering with black Japan paint of approved brand and manufacture.	per letter per cm height	5.00
13.80	Washed stone grit plaster on exterior walls of height upto 10 m above ground level in two layers, under layer 12 mm cement plaster 1:4 (1 cement : 4 coarse sand), furrowing the under layer with scratching tool, applying cement slurry on the under layer @ 2kg of cement per m ² , top layer 15mm cement plaster 1:1/2 :2 (1 cement: 1/2 coarse sand : 2 stone chippings 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	954.55
13.81	Forming groove of uniform size in the top layer of washed stone gritplaster 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 and direction of the Engineer-in-charge :		
	13.81.1 15 mm wide and 15 mm deep groove	metre	62.80
	13.81.2 20 mm wide and 15 mm deep groove	metre	63.90
13.82	Extra for washed grit plaster on exterior walls of height more than 10m ground level for every additional height of 3m or part thereof	sqm	148.65
13.83	Extra for washed stone grit plaster on circular work not exceeding 6m in radius (in two coats)	sqm	108.90
13.84	Forming groove of uniform size from 12x12 mm and upto 25x15 mm in the top layer of washed stone grit plastered surface as per approved pattern, including providing and fixing aluminum channels of appropriate size and thickness (not less than 2 mm), 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.	meter	98.15
13.85	Extra for using white cement in place of ordinary cement in the top layer of the item of washed stone grit plaster	sqm	104.50

13.0 (Finishing)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
13.86	Providing and applying 12 mm thick (average) premixed formulated one coat gypsum lightweight plaster having additives and light weight aggregates as vermiculite/ perlite respectively conforming to IS: 2547(Part - 1 & II) 1976, applied on hacked / uneven background such as bare brick/ block/ RCC work on walls and ceiling at all floors and locations, finished in smooth line and level etc. complete.	sqm	466.05
19.87	Extra for addition of synthetic Polyester triangular fibre of length 6 mm, effective diameter 10-40 microns and specific gravity of 1.34 to 1.40 in cement plaster/mortar by using 125 gms. of synthetic Polyester triangular fibre for 50 Kg cement used in cement mortar as per directions of Engineer-in-Charge.	Per bag of 50 kg of cement	68.55
13.88	Providing and applying white cement based putty of specified thickness, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.		
13.88.1	1 mm thick	sqm	138.10
13.88.2	2 mm thick	sqm	181.05
13.89	Distempering with 1st quality acrylic distemper, having VOC (Volatile Organic Compound) content less than 50 grams/ liter, of approved brand and manufacture, including applying additional coats wherever required, to achieve even shade and colour.		
13.89.1	One coat	sqm	54.50
13.89.2	Two coats	sqm	86.65
13.90	Wall painting with acrylic emulsion paint, having VOC (Volatile Organic Compound) content less than 50 grams/ liter, of approved brand and manufacture, including applying additional coats wherever required, to achieve even shade and colour.		
13.90.1	One coat	sqm	73.80
13.90.2	Two coats	sqm	109.90
13.91	Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ liter of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour.		
13.91.1	One coat	sqm	77.30
13.91.2	Two coats	sqm	115.40
13.92	Painting with synthetic enamel paint, having VOC (Volatile Organic Compound) content less than 150 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour.		
13.92.1	One coat	sqm	NA
13.92.2	Two coats	sqm	NA
13.93	Applying priming coats with primer of approved brand and manufacture, having low VOC (Volatile Organic Compound) content.		
13.93.1	With ready mixed pink or grey primer on wood work (hard and soft wood) having VOC content less than 50 grams/ liter	sqm	63.80
13.93.2	With ready mixed red oxide zinc chromatic on steel / iron works having VOC content less than 250 grams/ liter	sqm	54.10
13.93.3	With water thinnable cement primer on wall surface having VOC content less than 50 grams/liter	sqm	64.15
13.94	Finishing walls with 100% Premium acrylic emulsion paint having VOC less than 50 gm/litre and UV resistance as per IS 15489:2004, Alkali & fungal resistance, dirt resistance exterior paint of required shade (Company Depot Tinted) with silicon additives.		
13.94.1	New work (Two or more coats applied @ 1.43 litre/10 sqm. Over & including priming coat of exterior primer applied @ 0.90 litre/10 sqm.	sqm	157.30

13.0 (Finishing)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
13.95	6 mm plaster on cement concrete or reinforced cement concretework with white cement based polymer modified self curing mortar of approved make as per the direction of Engineer-In-Charge.	sqm	214.90
13.96	White washing with lime to give an even shade : 13.96.1 Old work (two or more coats) 13.96.2 Old work (one or more coats)	sqm sqm	17.75 10.80
13.97	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	sqm	14.50
13.98	Distempering with dry distemper of approved brand and manufacture (one or more coats) and of required shade on old work to give an even shade.	sqm	52.95
13.99	DELETED		
13.100	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	sqm	18.70
13.101	Painting on G.S. sheet with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade on old work (one or more coats)	sqm	80.50
13.102	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 : 13.102.1 75 mm diameter pipes 13.102.2 100 mm diameter pipes 13.102.3 150 mm diameter pipes	meter meter meter	22.55 29.75 42.70
13.103	Painting (two or more coats) on rain water, soil, waste and vent pipes and fittings with aluminum paint of approved brand and manufacture over a priming coat of ready mixed zinc chromate yellow primer on new work : 13.103.1 75 mm diameter pipes 13.103.2 100 mm diameter pipes 13.103.3 150 mm diameter pipes	meter meter meter	24.35 31.30 44.90
13.104	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 : 13.104.1 75 mm diameter pipes 13.104.2 100 mm diameter pipes 13.104.3 150 mm diameter pipes	meter meter meter	24.00 30.85 44.30
13.105	Painting with oil type wood preservative of approved brand and manufacture on old work (one or more coats)	sqm	41.90
13.106	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade, one or more coats on old work.	sqm	88.60
13.107	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	86.75
13.108	Painting with aluminum paint of approved brand and manufacture to give an even shade, one or more coats on old work.	sqm	81.40
13.109	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	88.45
13.110	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	76.00
13.111	French spirit polishing, one or more coats on old work	sqm	191.70
13.112	Polishing on wood work with readymade wax polish of approved brand and manufacture on old work.	sqm	79.60

13.0 (Finishing)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
13.113	Re-lettering with black Japan paint of approved brand and manufacture.	per letter per cm height	3.20
13.114	Painting (one or more coats) with black Japan paint of approved brand and manufacture to give an even shade.	sqm	77.70
13.115	Providing and fixing C.P. brass chain and rubber plug complete for sink or wash basin : 13.115.1 32 mm dia. 13.115.2 40 mm dia.	each each	120.60 147.35
13.116	Distempering with 1 st quality Acrylic/oil bound washable distemper (ready-made) having VOC content less than 50 grams/litre of approved manufacturer and of required shade and colour complete as per manufacturers' specifications, one or more coats on old work	sqm	50.75
13.117	Finishing walls with water proofing cement paint of required shade: 13.117.1 Old work (one or more coats applied @ 2.20 kg/10sqm) over priming coat of primer applied @ 0.80 liters/10sqm complete including cost of priming coat. 13.117.2 Old work (one or more coats applied @ 2.20 kg/10sqm) complete	sqm sqm	94.85 64.45
13.118	Finishing walls with textured exterior paint of required shade: 13.118.1 Old work (two or more coats on existing cement paint surface applied @ 3.28 ltr/10sqm) 13.118.2 Old work (one or more coats) applied @ 1.82 ltr/10sqm	sqm sqm	204.20 120.05
13.119	Finishing walls with Acrylic smooth exterior paint of required shade: 13.119.1 Old work (two or more coats applied @ 1.67 liters/10sqm on existing cement paint surface) 13.119.2 Old work (one or more coats applied @ 0.90 liters/ 10sqm)	sqm sqm	119.20 78.95
13.120	Finishing walls with premium Acrylic smooth exterior paint with silicon additives of required shade: 13.120.1 Old work (Two or more coats applied @ 1.43 liters/ 10 sqm) over existing cement paint surface. 13.120.2 Old work (one or more coats applied @ 0.83 liters/ 10sqm)	sqm sqm	114.15 77.30
13.121	Varnishing with varnish of approved brand and manufacture: 13.121.1 One or more coats with copal varnish. 13.121.2 One or more coats with spar varnish.	sqm sqm	84.60 87.30
13.122	Melamine polishing on wood work (one or more coats)	sqm	108.45
13.123	Varnishing with flatting varnish of approved brand and manufacture one or more coats on old work	sqm	89.25

SUB HEAD: 14.0
REPAIRS TO BUILDING

14.0 (Repairs to Building)

14.0 (Repairs to Building)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
14.1	Repairs to plaster of thickness 12mm to 20 mm in patches of area 2.5 sq. meters 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 within 50 meters lead		
14.1.1	With cement mortar 1:4 (1 cement : 4 fine sand)	sqm	441.40
14.1.2	With cement mortar 1:4 (1 cement : 4 coarse sand)	sqm	441.40
14.2	Fixing chowkhats in existing opening including embedding chowkhats in floors or walls cutting masonry for holdfasts, embedding holdfasts in cement concrete blocks of size 15x10x10cm with cement concrete 1:3:6 (1 cement :3 coarse sand: 6 graded stone aggregate 20 mm 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 within 50 meters lead:		
14.2.1	Door chowkhats	each	1420.85
14.2.2	Window chowkhats	each	882.70
14.2.3	Clerestory window chowkhats	each	652.80
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 chowkhats and 2 nos. on each vertical member of window chowkhats), including cost of dash fasteners/chemical fasteners.	each	211.85
14.4	Making the opening for door/window/clerestory window 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 municipal dumping ground.	sqm	958.05
14.5	DELETED		
14.6	Renewing glass panes, with putty and nails wherever necessary including raking out old putty :		
14.6.1	Float glass panes of thickness 4.0 mm(weight not less than 10kg/sqm)	sqm	991.00
14.6.2	Float glass panes of thickness 5.0 mm(weight not less than 12.5 kg/sqm)	sqm	1130.85
14.7	Renewing glass panes, with wooden fillets wherever necessary :		
14.7.1	Float glass panes of thickness 4.0 mm (weight not less than 10kg/sqm)	sqm	1407.05
14.7.2	Float glass panes of thickness 5.0 mm (weight not less than 12.5 kg/sqm)	sqm	1546.85
14.8	Renewing glass panes and re-fixing existing wooden fillets:		
14.8.1	Float glass panes of thickness 4.0 mm (weight not less than 10kg/sqm)	sqm	1094.70
14.8.2	Float glass panes of thickness 5.0 mm (weight not less than 12.5 kg/sqm)	sqm	1234.50
14.9	Supplying and fixing new wooden fillets wherever necessary :		
14.9.1	2nd class teak wood fillets	meter	68.45
14.9.2	Hollock wood fillets	meter	58.45
14.10	Renewal of old putty of glass panes (length)	meter	44.75
14.11	Re-fixing old glass panes with putty and nails	sqm	581.70
14.12	Fixing old glass panes with wooden fillets (excluding cost of fillets)	sqm	534.40
14.13	Providing and fixing 16 mm M.S. Fan clamps of standard shape and size in existing R.C.C. slab, including cutting chase, anchoring clamp to		

14.0 (Repairs to Building)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	reinforcement bar, and cleaning, refilling the chase with matching concrete, plastering and painting the exposed portion of the clamps complete.	each	473.75
14.14	Regrading terracing of mud phaska covered with tiles or bricks, in cement by dismantling tiles or bricks, removing mud plaster, preparing the surface of mud phaska to proper slope, relaying mud plaster gobri leaping and tiles or bricks, grouted in cement mortar 1:3 (1 cement: 3 fine sand), including replacing unserviceable tiles or bricks with new ones and disposal of unserviceable material to the dumping ground (the cost of the new tiles or brick excluded) within 50 meters lead.	sqm	545.75
14.15	Replacing sand stone slabs in roofing, laid in cement mortar 1:4 (1 cement : 4 coarse sand), including necessary repairs and cement pointing with same mortar complete, including disposal of rubbish to dumping ground within 50 meters of lead :	sqm	1004.15
	14.15.1 Red sand stone slabs 30 to 50 mm thick.	sqm	1063.00
	14.15.2 White sand stone slabs 30 to 50 mm thick.	sqm	
14.16	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 dumping ground all complete as per directions of Engineer-in-Charge	cum	125749.50
	14.16.1 Sal wood battens		
14.17	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 dumping ground within 50 meters lead :		
	14.17.1 Not exceeding 4.00 meters in length.		
	14.17.1.1 Sal wood beams	cum	130313.35
	14.17.1.2 Hollock wood beams	cum	62346.75
	14.17.2 Above 4.00 meters and up to 5.00 meters length.		
	14.17.2.1 Sal wood beams	cum	132240.35
	14.17.2.2 Hollock wood beams	cum	64213.30
14.18	DELETED		
14.19	Raking out joints in lime or cement mortar and preparing the surface for re-pointing or re-plastering, including disposal of rubbish to the dumping ground within 50 meters lead.	sqm	51.45
14.20	DELETED		
14.21	Flush pointing with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% of integral water proofing compound by weight of cement for flat tile bricks on top of mud phaska :		
	14.21.1 With non modular brick tiles	sqm	109.15
	14.21.1 With modular brick tiles	sqm	110.60
14.22	Taking out wind ties from roof including cutting out rusted bolts, nuts etc. and removing materials to any distance within compound and stacking.	kg.	4.10
14.23	Fixing of old wind ties with new fittings including painting two or more coats with anticorrosive bitumastic paint of approved brand and manufacture over and including priming coat of ready mixed zinc chromate yellow primer of approved brand.	meter	111.35
14.24	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 manufacturer:	kg	265.90
14.25	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.		

14.0 (Repairs to Building)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	14.25.1 Wheel 50 mm dia. and below	per wheel	182.65
	14.25.2 Wheel above 50 mm dia	per wheel	314.20
14.26	Providing and fixing 25mm thick shutters for cupboard etc, including nickel plated bright finished M.S. piano hinges with necessary screws. 14.26.1 Paneled or paneled and glazed shutters: 14.26.1.1 Superior class teak wood 14.26.1.2 1 st class teak wood 14.26.2 Glazed shutters: 14.26.2.1 Superior class teak wood 14.26.2.2 Ist class teak wood	sqm sqm sqm sqm	NA 4910.25 NA 4744.70
14.27	Providing and fixing plain jaffri door and window shutters including bright or / and black enameled M.S. butt hinges with necessary screws 35x10 mm laths placed 35 mm apart (frames to be paid separately) including fixing 50x12 mm beading complete with 14.27.1 Second class teak wood	sqm	4903.15
14.28	Providing and fixing brass curtain rods of wall thickness 1.25 mm with two brass brackets fixed with brass screws and wooden plugs etc. wherever necessary complete. 14.28.1 20 mm diameter. 14.28.2 25 mm diameter.	meter meter	318.00 398.25
14.29	Providing and fixing M.S. round or square bars at required spacing in wooden frame of windows and clerestory windows.	kg	134.35
14.30	Providing joist (karries) including hoisting, fixing in position and applying wood preservative on unexposed surface etc. complete with : 14.30.1 Sal wood 14.30.2 Hollack wood	cum cum	124263.50 56984.00
14.31	Providing and fixing bright finished brass single acting spring hinges with necessary brass screws etc. complete : 14.31.1 150 mm 14.31.2 125 mm 14.31.3 100 mm	each each each	701.75 514.45 477.50
14.32	Providing and fixing bright finished brass double acting spring hinges with necessary brass screws etc. complete : 14.32.1 150 mm 14.32.2 125 mm 14.32.3 100 mm	each each each	795.40 688.35 638.05
14.33	Providing and fixing bright finished brass flush bolts with necessary brass screws etc. complete : 14.33.1 250 mm 14.33.2 150 mm 14.33.3 100 mm	each each each	230.30 200.30 146.75
14.34	Providing and fixing 150 mm bright finished floor brass door stopper with rubber cushion, necessary brass screws etc. to suit shutter thickness complete	each	266.30
14.35	Providing and fixing bright finished brass hard drawn hooks and eyes 14.35.1 300 mm 14.35.2 250 mm 14.35.3 200 mm 14.35.4 150 mm 14.35.5 100 mm	each each each each each	100.15 97.45 74.70 60.00 52.65
14.36	Providing and fixing bright finished brass fan light pivot with necessary brass screws etc. complete.	each	44.50
14.37	Providing and fixing 300 mm long bright finished brass chain with hook for fan light catch including necessary brass screws etc. complete.	each	69.65

14.0 (Repairs to Building)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
14.38	Providing and fixing bright finished brass quadrant stay 300mm long with necessary brass screws etc. complete.	each	163.30
14.39	Providing and fixing bright finished brass helical door spring (superior quality) with necessary brass screws etc. complete.	each	NA
14.40	Providing and fixing chromium plated brass butt hinges with necessary brass screws etc. complete. 14.40.1 125x70x4 mm (ordinary type) 14.40.2 100x70x4 mm (ordinary type) 14.40.3 75x65x4 mm (heavy type) 14.40.4 75x40x2.5 mm (ordinary type) 14.40.5 50x40x2.5 mm (ordinary type)	each each each each each	174.35 153.10 176.90 105.30 44.75
14.41	Providing and fixing 85x42mm chromium plated brass pull bolt lock with necessary C.P. brass screws, nuts, bolts and washers etc. complete	each	278.75
14.70	Providing and fixing double scaffolding system (cup lock type) on the exterior side, up to seven storey height made with 40 mm dia M.S. tube 1.5 m centre to centre horizontal and vertical tubes joining with cup and lock system with M.S. tubes, M.S. tube challies, M.S. clamps and M.S. staircase system in the scaffoldings for working platform etc. and maintaining it in a serviceable condition for the required duration as approved and removing it thereafter. 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 per directions and approval of Engineer-in-charge. The elevational area of the scaffolding shall be measured for payment purpose. The payment will be made once irrespective of duration of scaffolding. NOTE:- To be used for maintenance work judicially necessary deduction for scaffolding in the existing item to be done	sqm	265.30
14.71	Providing and fixing bright finished brass casement window fasteners or peg stays to windows/ventilators with necessary welding and machine screws etc. complete.	kg	511.05
14.72	Providing and fixing 14 mm bright finished brass spring catch to steel centre hung ventilators with necessary welding and machine screws etc. complete.	each	68.75
14.73	Repair to plaster of thickness 12mm to 20 mm 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	532.75
14.74	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 @ 0.5gm 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 as per direction of Engineer-in-Charge. (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 contractor at his own cost and nothing extra will be paid on this account)	litre	0.40
14.75	Cleaning and desilting of gully trap chamber, including removal of rubbish mixed with earth etc. and disposal of same, all as per the direction of Engineer-in-charge.	each	77.75

14.0 (Repairs to Building)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
14.76	Cleaning of choked 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 de-chocking of sewer lines. De-chocking and flushing of sewer line from one manhole to another by high pressure jetting system of 2200 PSI for sewer line from 150mm dia upto 300mm	metre	284.15
14.77	Cleaning of under ground sump, Over Head R.C.C. Tank (independent staging) including disposal of slit and rubbish, all as per direction of Engineer-in-Charge. The cleaning shall consist following operations:- (i) Tank shall be emptied of water by pumping & bottom shall be cleaned of silt 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 chlorine. (iv) The treated surface shall be dried using air jetting and all loose particles shall be removal from the surface. (v) Finally the surface shall be treated with ultraviolet radiation etc. as per direction of Engineer-in-Charge.	sqm	64.35
14.78	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 as per direction of Engineer-in- charge.	each	323.85
14.79	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. 14.79.1 Long pattern W.C Pan of size 580x440 mm 14.79.2 Orissa pattern W.C Pan of size 580x440 mm	each each	3269.70 3381.45
14.80	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 direction of Engineer-in-charge.	each	254.15
14.81	Dismantling W.C. Pan of all sizes including disposal of dismantled materials i/c malba all complete as per directions of Engineer-in-Charge.	each	95.85
14.82	Hacking of CC flooring including cleaning for surface etc. complete as per direction of the Engineer-in-Charge.	sqm	2.55
14.83	Dismantling 15 to 40 mm dia G.I. pipe including stacking of dismantled pipes (within 50 metres lead) as per direction of Engineer-in-Charge. (a) Internal Work- Exposed on wall	metre	3.35
14.84	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. as required, all complete as per the direction of the Engineer-in-charge.	each	313.20
14.85	Providing and laying in situ seven course water proofing treatment with APP (Atactic poly- propylene) modified Polymeric membrane 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 membrane of specified thickness, weight and centre core, 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		

14.0 (Repairs to Building)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	mortar 1:3 (1cement: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.)		
	14.85.1 Modified Polymeric membrane 1.5 mm thick of 2.25 Kg/ sqm weight consisting of five layers prefabricated with centre core as 20 micron	sqm	640.60
	14.85.2 Modified Polymeric membrane 2.0 mm thick of 3.0 Kg/ sqm weight consisting of five layers prefabricated with centre core as 100 micron	sqm	758.35
14.86	Providing and laying in situ five course water proofing treatment with APP (Atactic Poly Propylene) modified Polymeric membrane over roof consisting of first coat of bitumen primer @ 0.40 litre per sqm, 2nd, 4th 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 membrane APP modified Polymeric membrane 2.0mm thick of 3.00 Kg/sqm weight consisting of five layers prefabricated with centre core as 100micron HMHDPE film sandwiched on both sides with polymeric mix and the polymeric mix is protected on both side with 20micron HMHDPE film, 5th top most layer shall be finished with brick tiles of class designation 100 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	473.75
14.87	Providing and laying APP (Atactic Poly Propylene Polymer) modified prefabricated five layer water proofing membrane, black finishing reinforced with glass fibre mat consisting of a coat of bitumen primer for bitumen membrane @ 0.40 ltr/sq. mt. by the same membrane manufacture of density at 25°C, 0.87- 0.89 kg/ltr and viscosity 70-160 cps. Over the primer coat the layer of membrane shall be laid using Butane torch and sealing all joints etc., and preparing the surface complete. The vital physical and chemical parameters of the membrane shall be as under: Softening point of membrane not less than 150°C. Cold flexibility shall be upto -2°C when tested in accordance with ASTM, D - 5147. The laying of membrane shall be got done through the authorized applicator of the manufacture of membrane.		
	14.87.1 With glass fibre matt: Joint strength in longitudinal and transverse direction at 23°C as 350/300 N/ 5cm. Tear strength in longitudinal and transverse direction as 60/80N.		
	14.87.1.1 2mm thick (for corrugated roof sheets)	sqm	443.80
	14.87.1.2 3mm thick (for corrugated roof sheets)	sqm	523.10
	14.87.2 3 mm thick water proofing membrane with non-woven polyester matt: Joint strength in longitudinal and transverse direction at 23°C as 650/450 N/ 5cm. Tear strength in longitudinal and transverse direction as 300/250N.	sqm	552.55
14.88	Extra for covering top of membrane with Geo textile, 120gmsnon 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 manufactures recommendation.	sqm	100.00
14.89	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 8 hour's shift including necessary T&P like torch, lathi and uniform etc. complete, as per the direction of Engineer-in-charge.(One job means 8 hour's duty).	each job	747.50

14.0 (Repairs to Building)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
14.90	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 8 hour's shift including necessary T&P like torch, lathi and uniform etc. complete, as per the direction of Engineer-in-charge.(One job means 8 hour's duty).	each job	872.85

14.0 (Repairs to Building)

SUB HEAD: 15.0

DISMANTLING & DEMOLISHING

15.0 (Dismantling and Demolishing)

15.0 (Dismantling and Demolishing)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
15.1	Demolishing lime concrete manually/by mechanical means and disposal of material within 50 meters lead as per direction of Engineer-in-charge.	cum	602.80
15.2	Demolishing cement concrete manually/by mechanical means including disposal of material within 50 meters lead as per direction of Engineer-in-charge: 15.2.1 1:3:6 or richer mix (i/c equivalent design mix) 15.2.2 1:4:8 or leaner mix (i/c equivalent design mix)	cum cum	1725.20 1064.55
15.3	Demolishing R.C.C. work manually/by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 meters lead as per direction of Engineer-in-charge.	cum	2516.85
15.4	Demolishing R.B work manually/by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 meters lead as per direction of Engineer-in-charge.	cum	2250.10
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 areas of R.C.C. or R.B. work) as per direction of Engineer-in-charge.	sqm	905.75
15.6	Extra for scrapping, cleaning and straightening reinforcement from R.C.C. or R.B. work	kg	6.95
15.7	Demolishing brick work manually/by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 meters lead as per direction of Engineer-in-charge: 15.7.1 In mud mortar 15.7.2 In lime mortar with old mughal bricks 15.7.3 In lime mortar 15.7.4 In cement mortar	cum cum cum cum	499.20 1261.25 602.80 1458.45
15.8	Removing mortar from bricks and cleaning bricks including stacking within a lead of 50 m. (stacks of cleaned bricks shall be measured) : 15.8.1 From brick work in mud mortar 15.8.2 From brick work in lime mortar 15.8.3 From brick work in cement mortar	1000 nos 1000 nos 1000 nos	3358.40 3923.15 4944.10
15.9	Demolishing stone rubble masonry manually/by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 meters lead as per direction of Engineer-in-charge: 15.9.1 In lime mortar 15.9.2 In cement mortar	cum cum	820.40 1740.45
15.10	Dismantling dressed stone work ashlar face stone work, marble work or precast concrete work manually/by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 meters lead as per direction of Engineer-in-charge: 15.10.1 In lime mortar 15.10.2 In cement mortar	cum cum	1037.55 2036.40
15.11	Removing mortar from and cleaning stones and concrete articles (net quantity of stacks of cleaned materials will be measured) 15.11.1 In lime mortar 15.11.2 In cement mortar	cum cum	346.80 496.05
15.12	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 meters lead : 15.12.1 Of area of 3 sqm. and below 15.12.2 Of area beyond 3 sqm.	each each	285.25 390.50
15.13	Taking out doors, windows and clerestory window shutters (steel or wood) including stacking within 50 meters lead : 15.13.1 Of area of 3 sqm. and below 15.13.2 Of area beyond 3 sqm.	each each	110.05 145.75

15.0 (Dismantling and Demolishing)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
15.14	Dismantling wood work in frames, trusses, purlins and rafters upto 10 meters span and 5 meters height including stacking the material within 50 meters lead : 15.14.1 Of sectional area 40 sqcm. and above. 15.14.2 Of sectional area below 40 sqcm.	cum meter	3488.65 13.95
15.15	Extra for dismantling trusses, rafters, purlins etc. of wood work for every additional span of one meter or part thereof beyond 10 meters : 15.15.1 Of sectional area 40 sqcm and above. 15.15.2 Of sectional area below 40 sqcm.	cum per meter span meter per meter span	463.15 1.30
15.16	Extra for dismantling trusses, rafters, purlins etc. of wood work for every additional height of one meter or part thereof beyond 5 meters : 15.16.1 Of sectional area 40 sqcm. and above. 15.16.2 Of sectional area below 40 sqcm.	cum per meter height meter per meter height	660.25 2.60
15.17	Dismantling steel work in single sections including dismembering and stacking within 50 meters lead in : 15.17.1 R.S. Joists 15.17.2 Channels, angles, tees and flats	kg. kg.	2.55 1.75
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 meters lead.	kg	4.30
15.19	Dismantling steel work manually/by mechanical means in built up sections without dismembering and stacking within 50 meters lead as per direction of Engineer-in-charge:	kg	2.80
15.20	Extra for dismantling trusses, rafters, purlins etc. of steel work for every additional span of one meter or part thereof beyond 10 meters.	kg per meter span	0.60
15.21	Extras for dismantling trusses, rafters, purlins etc. of steel work for every additional height of one meter or part thereof beyond 5 meters.	kg per meter height	0.60
15.22	Extra for marking of structural steel work required to be re-erected.	kg	3.65
15.23	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 meters lead. 15.23.1 For thickness of tiles 10 mm to 25 mm 15.23.2 For thickness of tiles above 25 mm and upto 40 mm.	sqm sqm	57.00 89.95
15.24	Demolishing dry brick pitching in floors, drains etc. including stacking serviceable material and disposal of unserviceable material within 50 meters lead.	cum	934.00
15.25	Dismantling stone slab flooring laid in cement mortar including stacking of serviceable material and disposal of unserviceable material within 50 meters lead.	sqm	189.15
15.26	Demolishing brick tile covering in terracing including stacking of serviceable material and disposal of unserviceable material within 50 meters lead.	sqm	83.45
15.27	Demolishing mud phaska in terracing and disposal of material within 50 meters lead	cum	647.15
15.28	Dismantling roofing including ridges, hips valleys and gutters etc., and stacking the material within 50 meters lead of : 15.28.1 G.S. Sheet 15.28.2 Asbestos sheet	sqm sqm	125.35 58.40

15.0 (Dismantling and Demolishing)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
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 meters lead.	cum	1891.45
15.30	Dismantling jack arch roofing and floors including stacking of serviceable material and disposal of unserviceable material within 50 meters lead.	sqm	180.25
15.31	Dismantling tiled roofing with battens boarding etc. complete including stacking of serviceable material and disposal of unserviceable material within 50 meters lead	sqm	149.20
15.32	Demolishing thatch roofing including mats, bamboo, jaffari etc. complete including stacking of serviceable material and disposal of unserviceable material within 50 meters lead.	sqm	41.15
15.33	Dismantling wooden ballies in posts and struts including stacking within 50 meters lead.	meter	14.85
15.34	Dismantling and stacking within 50 meters lead, fencing posts or struts including all earth work and dismantling of concrete etc. in base of 15.34.1 T or L iron or pipe 15.34.2 R.C.C.	each each	179.20 197.90
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 meters lead.	each	13.90
15.36	Dismantling barbed wire or flexible wire rope in fencing including making rolls and stacking within 50 meters lead.	kg	26.05
15.37	Dismantling wooden trellis work excluding frames but including stacking the serviceable material within 50 meters lead.	sqm	47.75
15.38	Dismantling expanded metal or I.R.C. fabrics with necessary battens and beading including stacking the serviceable material within 50 meters lead.	sqm	55.60
15.39	Dismantling wooden boardings in lining of walls and partitions, excluding supporting members but including stacking within 50 meters lead : 15.39.1 Upto 10 mm thick 15.39.2 Thickness above 10 mm upto 25 mm 15.39.3 Thickness above 25 mm upto 40 mm.	sqm sqm sqm	46.10 58.90 68.50
15.40	Dismantling precast concrete or stone slabs in walls, partition walls etc. including stacking within 50 meters lead: 15.40.1 Thickness upto 40 mm 15.40.2 Thickness above 40 mm upto 75 mm	sqm sqm	209.10 313.20
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 meters lead.	sqm	43.60
15.42	Dismantling C.I. or asbestos rain water pipes with fittings and clamps including stacking the material within 50 meters lead : 15.42.1 75 to 80 mm dia pipe. 15.42.2 100 mm dia pipe. 15.42.3 150 mm dia pipe.	meter meter meter	53.60 55.25 56.95
15.43	Dismantling manually/ mechanically including stacking of serviceable material and disposal of unserviceable material within 50 meters lead as per direction of Engineer-in-charge: 15.43.1 Water bound macadam road. 15.43.2 Bituminous road.	sqm sqm	156.30 305.95
15.44	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 meters lead as per direction of Engineer-in-charge : 15.44.1 15 mm to 40 mm nominal bore. 15.44.2 Above 40 mm nominal bore	meter meter	109.65 121.65

15.0 (Dismantling and Demolishing)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
15.45	Dismantling C.I. pipes manually/ by mechanical means breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes and lead at site within 50 meter lead as per direction of Engineer-in-charge. 15.45.1 Including excavation and refilling trenches after taking out the pipes. 15.45.1.1 Upto 150 mm diameter. 15.45.1.2 Above 150 mm dia upto 300 mm dia. 15.45.1.3 Above 300 mm diameter. 15.45.2 Excluding excavation and refilling trenches after taking out the pipes. 15.45.2.1 Upto 150 mm diameter. 15.45.2.2 Above 150 mm dia upto 300 mm dia. 15.45.2.3 Above 300 mm diameter.	meter meter meter meter meter meter	 303.05 402.10 525.60 112.20 198.35 308.65
15.46	Dismantling steel cylinder R.C. pipes manually/ by mechanical means breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes and lead at site within 50 meter lead as per direction of Engineer-in-charge. 15.46.1 Including excavation and refilling trenches after taking out the pipes 15.46.1.1 Upto 600 mm diameter. 15.46.1.2 Above 600 mm dia. 15.46.2 Excluding excavation and refilling trenches after taking out the pipes. 15.46.2.1 Upto 600 mm diameter. 15.46.2.2 Above 600 mm dia.	meter meter meter meter	 513.15 1303.75 308.65 695.10
15.47	Dismantling asbestos cement pressure pipes including excavation and refilling trenches after taking out the pipes and stacking the pipes manually/mechanical means within 50 meters lead as per direction of Engineer-in-charge : 15.47.1 Upto 150 mm diameter. 15.47.2 Above 150 mm diameter	meter meter	235.00 285.30
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/ mechanical means and stacking of useful materials near the site and disposal of unserviceable materials within 50 meters lead as per direction of Engineer-in-charge :	each	501.80
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/ mechanical means and stacking of useful materials near the site and disposal of unserviceable materials into municipal dumps within 50 meters lead as per direction of Engineer-in-charge.	each	293.75
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 meters lead.	each	3427.60
15.51	Dismantling of road gully chamber of various sizes including C.I. grating with frame including stacking of useful materials near the site and disposal of unserviceable materials into municipal dumps within 50 meters lead including refilling the excavated gap.	each	686.30
15.52	Dismantling of flushing cistern of all types(C.I./PVC/Vitreous china) including stacking of useful materials near the site and disposal of unserviceable materials within 50 meters lead	each	699.55

15.0 (Dismantling and Demolishing)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
15.53	Dismantling of C.I. sluice valve including stacking of useful materials within a lead of 50 meters. 15.53.1 Upto 150 mm diameter. 15.53.2 Above 150 mm diameter.	each each	252.35 913.55
15.54	Dismantling of spindle fire hydrant including stacking of useful materials within 50 meters lead.	each	555.90
15.55	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 near the site and disposal of unserviceable materials within 50 meters lead: 15.55.1 120x120 cm (outside to outside) 15.55.2 210x120 cm (outside to outside) 15.55.3 320x120 cm (outside to outside)	each each each	781.65 1199.05 1696.95
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 meters lead.	sqm	38.90
15.57	Dismantling aluminum / Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable surplus material and stacking of serviceable material within 50 meters lead as directed by Engineer-in-charge.	sqm	43.65
15.58	Dismantling Dry stone pitching in aprons, drains, etc. including stacking of serviceable material & disposal of unserviceable material, stacking /disposal lead upto 100 meters.	cum	1151.60
15.59	Dismantling concrete grouted stone pitching in aprons drains etc. including stacking of serviceable material and disposal of unserviceable material, stacking /disposal lead upto 100 meters.	cum	1535.90
15.60	Dismantling old protection work including cutting of crates and stacking of stones.	cum	398.35
15.61	Demolishing RCC work by mechanical means & stockpiling at designated locations & disposal of dismantled materials upto a lead of 1 kilometer, stacking serviceable & unserviceable material separately including cutting reinforcement bars	cum	2048.70
15.62	Dismantling of flexible pavement (bituminous courses) by mechanical means and disposal of dismantled material upto a lead of 1 kilometer, as per direction of Engineer-in-charge.	cum	336.30

15.0 (Dismantling and Demolishing)

SUB HEAD: 16.0
ROAD WORK

16.0 (Road Work)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
16.1	Preparation of subgrade by excavating earth to an average of 22.5 cm depth, dressing to camber and consolidation with road roller of 8-12 tonne capacity including making good the undulation etc. and disposal of surplus earth upto 50 meters.	sqm	153.00
16.2	Consolidation of subgrade with power road roller of 8 to 12 tonne capacity including making good the undulations etc. with earth or quarry spoils etc. and rerolling the subgrade.	sqm	2.80
16.3	Extra for compaction of earth work in embankment under optimum moisture conditions to give at least 95% of the maximum dry density (proctor density)	cum	18.50
16.4	Supplying and stacking at site 16.4.1 Graded crushed stone aggregate of size 16.4.1.1 90 mm to 45 mm 16.4.1.2 63 mm to 45 mm 16.4.1.3 53 mm to 22.4 mm 6.4.2 Over burnt Brick Aggregate of size 16.4.2.1 120 mm to 40 mm 16.4.2.2 90 mm to 45 mm 6.4.3 Stone screening of size 16.4.3.1 13.2 mm nominal size (Type A) 16.4.3.2 11.2 mm nominal size (Type B) 6.4.4 Red bajri 6.4.5 Good Earth 6.4.6 Moorum	cum cum cum cum cum cum cum cum cum cum cum cum	1204.15 1204.15 1204.15 802.75 802.75 1204.15 1204.15 1204.15 281.30 668.95
16.5	Laying, spreading and compacting stone aggregate of specified sizes to WBM specifications in uniform thickness, hand picking, rolling with 3 wheeled road / vibratory roller 8-10 tonne capacity in stages to proper grade and camber, applying and brooming requisite type of screening /binding material to fill up interstices of coarse aggregate, watering and compacting to the required density.	cum	768.15
16.6	Laying water bound macadam sub-base with brick aggregate and binding material, earth etc. including screening, sorting, spreading to template and consolidation with light power road roller etc. complete (payment for brick aggregate and moorum etc, to be made separately) :	cum	630.00
16.7	Spreading 6 mm thick red bajri, watering and rolling complete including preparation of the surface and rolling (Payment for red bajri to be made separately): 16.7.1 With road roller 16.7.2 With hand roller	sqm sqm	11.10 13.05
16.8	Brick edging in full brick width and half brick depth including excavation, refilling and disposal of surplus earth lead upto 50 meters. 16.8.1 With common burnt clay (non modular) bricks of class designation 7.5	meter	218.55
16.9	Brick edging laid lengthwise with half brick depth including excavation, refilling and disposal of surplus earth lead upto 50 meters. 16.9.1 With common burnt clay (non modular) bricks of class designation 7.5	meter	61.80
16.10	Scarifying metalled (water-bound) road surface including disposal of rubbish lead upto 50m and consolidation of the aggregate received from scarifying with power road roller of 8 to 10 tonne capacity.	sqm	24.45
16.11	Making bajri path including preparation of subgrade, supplying and laying brick aggregate of 50mm nominal size 7.5 cm deep with binding material consisting of 12mm moorum and 12mm red bajri consolidated with road roller.	sqm	151.55

16.0 (Road Work)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
16.12	Dry stone pitching 22.5 cm thick including supply of stones and preparing surface complete.	sqm	713.70
16.13	Dry brick pitching half brick thick in drains including supply of bricks and preparing the surface complete. 16.13.1 With common burnt clay (non modular) bricks of class designation 7.5	sqm	761.50
16.14	Cutting road and making good the same including supply of extra quantities of material i.e. crushed aggregate, moorum screening, red bajri and labour required. 16.14.1 Bituminous portion 16.14.2 Water bound macadam.	cum cum	4000.40 2236.20
16.15	Cutting bajri paths and making good the same including supply of extra quantities of brick aggregate, moorum and red bajri required.	sqm	204.05
16.16	FENCING Supplying at site 16.16.1 R.C.C. Standards post/ struts/rails/ pales of mix 1:1.5:3 (1 cement : 1.5 coarse sand : 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). 16.16.2 Welded steel wire fabric of required width having 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).	cum kg	27585.95 75.95
16.17	Supplying and fixing turn buckles and straining bolts for barbed wire fencing. each	per set	252.05
16.18	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 9.38 kg per 100 meters (minimum), between the two posts fitted and fixed with G.I. staples on wooden plugs or G.I. binding wire tied to 6 mm 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 meter cost of total length of barbed wire used. 16.18.1 With G.I. barbed wire 16.18.2 DELETED	meter	12.45
16.19	DELETED		
16.20	DELETED		
16.21	DELETED		
16.22	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 m (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 meter cost of total length of barbed wire used. 16.22.1 With G.I. barbed wire	meter	19.85
16.23	Supplying at site Angle iron post & strut of required size including bottom to be split and bent at right angle in opposite direction for 10 cm length and drilling holes upto 10 mm dia. etc. complete.	kg	127.30

16.0 (Road Work)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
16.24	Welded steel wire fabric fencing with posts of specified material and of standard design placed and embedded in cement concrete blocks 45x45x60 cm of mix 1:5:10 (1 cement:5 fine sand : 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 70x45x50 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 6 mm 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).	sqm	55.75
16.25	Providing and fixing G.I. chain link fabric fencing of required width in mesh size 50x50 mm including strengthening with 2 mm dia wire or nuts, bolts and washers as required complete as per the direction of Engineer-in-charge.	sqm	809.90
	16.25.1 Made of G.I. wire of dia 4 mm	sqm	852.05
	16.25.2 Made of G.I. wire of dia. 4 mm, PVC coated to achieve outer dia not less than 5 mm in required colour and shade	sqm	
16.26	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 2 mm dia wire or nuts, bolts and washers as required complete as per the direction of Engineer-in-charge.	sqm	929.35
16.27	DELETED		
16.28	DELETED		
16.29	Engraving letters in hard stone	per cm height per letter	9.00
16.30	Providing and fixing 15x15x90 cm boundary stone of hard stone with top 30cm chisel dressed on all four sides and on top (cost of excavation, refilling and concrete etc. to be paid for separately).	each	195.80
16.31	Providing and fixing 15 cm dia at top, 20 cm at bottom and 90cm high precast reinforced cement concrete 1:1.5:3 (1 cement: 1.5 coarse sand: 3 graded stone aggregate 20mm nominal size) boundary stone as per standard design including finishing smooth with cement mortar 1:3 (1 cement: 3 fine sand) (cost of excavation, refilling and concreting to be paid for separately).	each	710.90
16.32	Providing and fixing precast reinforced cement concrete 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20mm nominal size) kilometer stone as per standard design including finishing smooth in 1:3 cement mortar (1cement : 3 fine sand) but excluding the cost of earth work, concrete in foundation, painting and lettering etc. which shall be paid for separately.	each	2587.05
	16.32.1 35x111x25 cm size.	each	4682.25
	16.32.2 50x152.5x25 cm size.	each	1725.10
	16.32.3 35x93.5x18 cm size	each	
16.33	<u>SURFACE DRESSING</u> Surface dressing on new surface with paving bitumen of grade VG – 10 of approved quality using 2.25 kg of bitumen per sqm with 1.65 cum of stone chippings 13.2 mm nominal size per 100 sqm of road surface, including consolidation with road roller of 6 to 8 tonne capacity etc. complete:	sqm	251.40
16.34	Surface dressing on new surface in two coats with bitumen of grade VG - 10 of approved quality using 1.8 kg of bitumen per sqm with 1.5 cum of stone chippings 13.2 mm nominal size per 100 sqm of road surface for		

16.0 (Road Work)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	first coat and 1.1 kg of bitumen per sqm with 1.00 cu. meter of stone chippings 11.2 mm nominal size per 100 sqm of road surface for second coat, including consolidation of each coat separately with road roller of 6 to 8 tonne capacity etc. complete.	sqm	338.90
16.35	Surface dressing on old surface with hot bitumen of grade VG-10 of approved quality using 1.95kg of bitumen per sqm. with 1.50 cum of stone chippings 11.2 mm nominal size per 100 sqm. of road surface including consolidation with road roller of 6 to 8 tonne capacity etc. complete	sqm	198.10
16.36	Surface dressing one coat on new surface with bitumen of specified grade at a rate of 1.95kg/sqm of surface area with 1.5 cum. of stone chippings 13.2 mm nominal size per 100 sqm of road surface including consolidation with road roller of 6 to 8 tonne capacity etc. complete. 16.36.1 Using bitumen emulsion (minimum 50% bitumen content -RS grade conforming to IS: 8887)	sqm	217.85
16.37	Surface dressing one coat on old surface with bitumen of specified grade at a rate of 1.22kg/sqm of surface area with 1.10 cum. of stone chippings 11.2 mm nominal size per 100 sqm of road surface including consolidation with road roller of 6 to 8 tonne capacity etc. complete. 16.37.1 Using bitumen emulsion (minimum 50% bitumen content -RS grade conforming to IS: 8887)	sqm	136.70
16.38	<u>PRE MIX CARPET</u> Providing and applying tack coat using hot straight run bitumen of grade – VG-10, including heating the bitumen, spraying the bitumen with mechanically operated spray unit fitted on bitumen boiler, cleaning and preparing the existing road surface as per specifications. 16.38.1 On W.B.M. @ 0.75 Kg/sqm. 16.38.2 On bitumen surface @ 0.50 Kg/sqm.	sqm sqm	74.35 55.20
16.38A	Providing and applying tack coat using hot straight run bitumen of grade – VG-30, including heating the bitumen, spraying the bitumen with mechanically operated spray unit fitted on bitumen boiler, cleaning and preparing the existing road surface as per specifications. 16.38.1 On W.B.M. @ 0.75 Kg/sqm. 16.38.2 On bitumen surface @ 0.50 Kg/sqm.	sqm sqm	75.75 56.10
16.39	Providing and applying tack coat using bitumen emulsion conforming to IS: 8887, using emulsion pressure distributor including preparing the surface and cleaning with mechanical broom. 16.39.1 With rapid setting bitumen emulsion 16.39.1.1 On W.B.M. /W.M.M. @ 0.4 Kg/sqm. 16.39.1.2 On bituminous surface @ 0.25 Kg/sqm. 16.39.2 With medium setting bitumen emulsion 16.39.2.1 On W.B.M. /W.M.M. @ 0.4 Kg/sqm. 16.39.2.2 On bituminous surface @ 0.25 Kg/sqm. Note: Use of item no. 16.39.1 shall be restricted only for sites at sub zero temperature or for emergency applications.	sqm sqm sqm sqm	30.90 19.95 31.60 20.35
16.40	2 cm premix carpet surfacing with 1.8cum and 0.90 cum of stone chippings of 13.2 mm size and 11.2 size respectively, per 100 sqm and 52kg and 56 kg of hot bitumen per cum of stone chippings of 13.2 mm and 11.2 mm size respectively including a tack coat with hot straight run bitumen, including consolidation with road roller of 6 to 9 tonne capacity etc. complete (tack coat to be paid for separately). 16.40.1 With paving Asphalt grade VG-10 heated and then mixed with solvent at the rate of 70 grams per kg of asphalt. 16.40.2 With paving Asphalt grade VG-30 with no solvent. 16.40.3 With Refinery Modified Bitumen CRMB 55 conforming to IRC : SP : 53	sqm sqm sqm	222.70 221.35 219.75

16.0 (Road Work)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
16.41	2.5 cm premix carpet surfacing with 2.25cum and 1.12 cum of stone chippings of 13.2 mm and 11.2mm size respectively per 100 sqm and 52 kg and 56 kg of hot bitumen per cum of stone chippings of 13.2 mm and 11.2 mm size respectively including a tack coat with hot straight run bitumen including consolidation with road roller of 6 to 9 tonne capacity etc. complete (tack coat to be paid for separately). 16.41.1 With paving Asphalt grade VG-10 heated and then mixed with solvent at the rate of 70 grams per kg of asphalt. 16.41.2 With paving Asphalt grade VG-30 with no solvent. 16.41.3 With Refinery Modified Bitumen CRMB 55 conforming to IRC : SP : 53-1999	sqm sqm sqm	269.85 268.15 266.15
16.42	2 cm premix carpet surfacing with 2.4cum of stone chippings 11.2 mm nominal size per 100 sqm and bitumen emulsion (medium setting min. 65% bitumen content) complying with IS : 8887, using 96 kg per cum of chippings including consolidation with road roller of 6 to 9 tonne capacity etc. complete.	sqm	238.65
16.43	2.5 cm premix carpet surfacing with 3 cum of stone chippings 10 mm nominal size per 100 sqm and bitumen emulsion (medium setting min. 65% bitumen contents) complying with IS: 8887, using 96 kg per cum of chippings of road surface including consolidation with road roller etc. complete.	sqm	291.50
16.44	Providing and laying Bitumen Penetration Macadam with hard stone aggregate of quality, size and grading as specified, with bitumen of suitable penetration grade including required key aggregate as specified, spreading coarse aggregate with the help of self propelled/ tipper tail mounted aggregate spreader and applying bitumen by a pressure distributor and then spreading key aggregate with the help of aggregate spreader complete, including consolidation with road roller of minimum 8 to 10 tonne capacity to achieve specified values of compaction and surface accuracy. 16.44.1 For 50 mm compacted thickness using coarse aggregate of size 50-20mm graded @ 0.60 cum per 10 sqm key aggregate of size 12.5 mm graded @ 0.15 cum per 10 sqm. With paving asphalt grade VG-10 @ 50 kg/10sqm 16.44.2 For 75 mm compacted thickness in two layers using stone aggregate of size 63-41mm graded @ 0.90 cum per 10 sqm key aggregate of size 20.0 mm graded @ 0.18 cum per 10 sqm with paving asphalt grade VG-10 @ 68 kg/10sqm	sqm sqm	552.15 797.40
16.45	<u>MASTIC AND BITUMASTIC BEARING COARSE</u> Providing & laying bitumen mastic wearing course (as per specifications) with industrial bitumen of grade 85/25 conforming to IS : 702, prepared by using mastic cooker & laid to required level and slope, including providing antiskid surface with bitumen pre-coated fine grained hard stone chipping of approved size at the rate of 0.005 cum per 10 sqm& at approximate spacing of 10 cm centre to centre in both directions, pressed into surface protruding 1 mm to 4 mm over mastic surface, including cleaning the surface, removal of debris etc. all complete. (considering bitumen using 10.2% as per MORTH specification) 16.54.1 25mm thick 16.54.2 40mm thick	sqm sqm	714.05 1142.50
16.46	2.5 cm thick bitumastic sheet with hot bitumen of approved quality using stone chippings (60% 12.5 mm nominal size and 40% with 10 mm nominal size) @ 1.65 cum per 100sqm and coarse sand @ 1.65 cum per 100 sqm of road surface and with bitumen @ 56 kg/cum of stone chippings and @ 128 kg/cum of sand over a tack coat with hot straight run		

16.0 (Road Work)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	bitumen including consolidation with road roller of 8 to 10 tonne etc complete (tack coat to be paid separately).		
	16.46.1 With paving Asphalt grade VG-10 heated and then mixed with solvent at the rate of 70 grams per kg of asphalt.	sqm	370.15
	16.46.2 With paving Asphalt grade VG-30	sqm	367.30
	16.46.3 With Refinery Modified Bitumen CRMB 55 conforming to IRC : SP: 53-1999	sqm	363.90
16.47	4 cm thick bitumastic sheet with hot bitumen of approved quality using stone chippings (60% 12.5 mm nominal size and 40% 10 mm nominal size) @ 2.60 cum per 100 sqm and coarse sand at 2.60 cum per 100 sqm of road surface and with bitumen @ 56 kg/cum of stone chippings and @ 128 kg/cum of sand over a tack coat with hot straight run bitumen including consolidation with road roller of 8 to 10 tonne etc complete (Tack coat to be paid separately).		
	16.47.1 With paving Asphalt grade VG-10 heated and then mixed with solvent at the rate of 70 grams per kg of asphalt.	sqm	565.00
	16.47.2 With paving Asphalt grade VG-30 with no solvent	sqm	560.50
	16.47.3 With Refinery Modified Bitumen CRMB 55 conforming to IRC : SP: 53-1999	sqm	555.10
16.48	<u>SEAL COAT</u> Providing and laying seal coat of premixed fine aggregate (passing 2.36 mm and retained on 180 micron sieve) with bitumen using 128 kg of bitumen of grade VG-10 bitumen per cum of fine aggregate and 0.60 cum of fine aggregate per 100 sqm of road surface including rolling and finishing with road all complete.	sqm	101.40
16.48A	Providing and laying seal coat of premixed fine aggregate (passing 2.36 mm and retained on 180 micron sieve) with bitumen using 128 kg of bitumen of grade VG-30 bitumen per cum of fine aggregate and 0.60 cum of fine aggregate per 100 sqm of road surface including rolling and finishing with road all complete	sqm	102.85
16.49	Providing and laying seal coat over prepared surface of road with bitumen heated in bitumen boiler fitted with the spray set spraying using 98 kg of bitumen of grade VG-10 and blinding surface with 0.90 cum of stone aggregate of 6.7mm size (Passing 11.2mm sieve and retained on 2.36 mm sieve) per 100 sqm of road surface including rolling and finishing with power road roller all complete. Note: Seal coat item to be operated only with the prior approval of Chief Engineer concerned.	sqm	134.085
16.50	<u>CONCRETE PAVEMENTS</u> Cement concrete 1:2:4 (1 cement :2 coarse sand : 4 graded stone aggregate 40 mm nominal size) in pavements, laid to required slope and camber in panels as required including consolidation, finishing and tamping complete.	cum	6711.00
16.51	Providing and laying design mix cement concrete of M-30 grade, in roads/taxi tracks/ runways, using cement content as per design mix, using coarse sand and graded stone aggregate of 40 mm nominal size in appropriate proportions as per approved & specified design criteria, providing dowel bars with sleeve/ tie bars wherever required, laying at site, spreading and compacting mechanically by using needle and surface vibrators, leveling to required slope/ camber, finishing with required texture, including steel form work with sturdy M.S. channel sections,		

16.0 (Road Work)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	curing, making provision for contraction/ expansion, construction & longitudinal joints (10 mm wide x 50 mm deep) by groove cutting machine, providing and filling joints with approved joint filler and sealants, complete all as per direction of Engineer-in- charge (Item of joint fillers, sealants, dowel bars with sleeve/ tie bars to ,be paid separately). Note:- Cement content considered in M-30 is @ 340 kg/cum. Excess/ less cement used as per design mix is payable/ recoverable separately.		
	16.51.1 Cement concrete prepared with batch mixing machine	cum	8782.40
	16.51.2 Cement concrete manufactured in automatic batching plant (RMC plant) i/c transportation to site in transit mixer	cum	9281.45
16.52	Extra for providing and mixing hardening compound of approved quality as per manufacturer's specification in cement concrete.	litre	58.85
16.53	Providing and fixing in position pre-moulded joint filler in expansion joints.	per cm. depth per cm. width per m. length	3.10
16.54	Providing and laying in position bitumen hot sealing compound for expansion joints etc. 16.54.1 Using grade 'A' sealing compound.	per cm. depth per cm. width per m. length	3.80
16.55	<u>PAINTING ROAD/ RUNWAY MARKINGS</u> Painting runway / taxi track/ apron marking with adequate no. of coats to give uniform finish with road marking paint of superior make as approved by the Engineer-in-charge including cleaning the surface of all dirt, scales, oil, grease and other foreign material etc. and lining out complete. 16.55.1 New work (Two or more coats) 16.55.2 Old work (One or more coats)	sqm sqm	165.25 105.90
16.56	Painting road surface marking with adequate no. of coats to give uniform finish with read mixed road marking paint conforming to IS: 164, on bituminous surface in white/yellow shade including cleaning the surface of all dirt, scales, oil, grease and foreign material etc. complete. 16.56.1 New work (Two or more coats) 16.56.2 Old work (One or more coats)	sqm sqm	226.60 148.70
16.57	Making bell mouth opening/ entrance of size 100x50x50 cm for drainage pipe under footpath, including providing cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) for shape of bell mouth, including plastering providing and fixing precast R.C.C./ S.F.R.C. slab including plastering with cement mortar 1:3 (1 cement : 3 fine sand) of 6 mm thickness on exposed surface of the slab and bell mouth including centring, shuttering & neat cement punning inside the bell mouth etc. all complete.	each	2482.30
16.58	Providing and fixing Glow studs of size 100x20mm made of heavy duty body shall be moulded ASA (Acrylic styrene Acryloretrite) or HIP (High impact Polystyrene) or ABS having electronically welded micro-prismatic lens with abrasion resistant coating as approved by Engineer-in-charge. The Glow stud shall support a load of 13635 kg tested in accordance with ASTM D4280. The slope of retro-reflective surface shall be 35 +/- 5 degrees to base. The reflective panels on both sides with at least 12cm of reflective area up each side. The luminance intensity should be as per the specification and shall be tested as described in ASTM I: 809 as		

16.0 (Road Work)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	recommended in BS : 873 part 4 : 1973. The studs shall be fixed to the road surface using the adhesive conforming to IS, as per procedure recommended by the manufacturer complete and as per direction of Engineer-in-charge.	each	173.15
16.59	Preparation of sub-base road pavement with commercial dry lime (slaked), fly ash stabilised soil with a mix of 3% lime, 12% fly ash and 85% local suitable soil by weight, so as to achieve minimum field C.B.R. of 20, including mixing, rolling with road roller curing etc. all complete. 16.59.1 Minimum thickness 15 cm	cum	NA
16.60	Providing and fixing precast lime fly ash concrete blocks 1:2:3:6 (1 lime: 2 fly ash: 3 coarse sand : 6 graded stone aggregate 20 mm nominal size), including finishing with 10mm thick cement mortar 1:3 (1 cement : 3 coarse sand) in foot paths, including preparation of sub grade with a hand rammer, laying 10 mm thick leveling course of fine sand and filling the joints with fine sand.	cum	NA
16.61	Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 meter openable length (total length 90m), having 50 nos rounds per 6 meter length, upto 3 m height of wall with existing angle iron 'Y' shaped placed 2.4 m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape (R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ meter (cost of M.S. angle, C.C. blocks shall be paid separately)	meter	305.80
16.62	Providing and laying Dense Graded Bituminous Macadam using crushed stone aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site by tippers, laying with paver finisher equipped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers as per specifications to achieve the desired compaction and density, complete as per specifications and directions of Engineer-in-Charge. 16.62.1 50 to 100 mm average compacted thickness with bitumen of grade VG-30 @5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity. 16.62.2 50 to 100 mm average compacted thickness with bitumen of grade VG-30 @5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate) prepared in Drum Type Hot Mix Plant of 60-90 TPH capacity.	cum cum	11968.50 11962.30
16.63	Providing and laying bituminous macadam using crushed stone aggregates of specified grading premixed with bituminous binder, transported to site by tippers, laid over a previously prepared surface with paver finisher equipped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers as per specifications to achieve the desired compaction and density, complete as per specifications and directions of Engineer-in-Charge. 16.63.1 50 to 100 mm average compacted thickness with bitumen of grade VG-30 @ 3.5% (percentage by weight of total mix) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity. 16.63.1A 50 to 100 mm average compacted thickness with bitumen of grade VG-10 @ 3.5% (percentage by weight of total mix) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.	Cum cum	8740.75 8596.80

16.0 (Road Work)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	16.63.2 50 to 100 mm average compacted thickness with bitumen of grade VG-30 @ 3.5% (percentage by weight of total mix) prepared in Drum Type Hot Mix Plant of 60-90 TPH capacity	cum	8734.85
	16.63.2 A 50 to 100 mm average compacted thickness with bitumen of grade VG-10 @ 3.5% (percentage by weight of total mix) prepared in Drum Type Hot Mix Plant of 60-90 TPH capacity.	cum	8590.95
16.64	Providing and laying semi- dense Bituminous concrete using crushed stone aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site by tippers, laying with paver finisher equipped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction and density as per specification, complete and as per directions of Engineer-in-Charge.		
	16.64.1 25 mm compacted thickness with bitumen of grade VG- 30 @5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.	Sqm	298.70
	16.64.1A 25 mm compacted thickness with bitumen of grade VG-10 @5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.	sqm	293.25
	16.64.2 25 mm compacted thickness with bitumen of grade VG- 30 @ 5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate) prepared in Drum Type Hot Mix Plant of 60-90 TPH capacity.	sqm	298.50
	16.64.2A 25 mm compacted thickness with bitumen of grade VG-10 @ 5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate) prepared in Drum Type Hot Mix Plant of 60-90 TPH capacity.	sqm	293.10
16.65	Providing and laying Bituminous concrete using crushed stone aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site by tippers, laying with paver finisher equipped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction and density as per specification, complete and as per directions of Engineer-in-Charge.		
	16.65.1 40/50 mm compacted thickness with bitumen of grade VG-30 @ 5.5% (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.	cum	13187.00
	16.65.2 40/50 mm compacted thickness with bitumen of grade VG-30 @ 5.5% (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) and waste plastic additive @8% (percentage by weight of bitumen) prepared in Batch Type Hot Mix Plant of 100- 120 TPH capacity.	cum	13741.75
	16.65.3 40/50 mm compacted thickness with bitumen of grade PMB-40 @5.5% (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.	cum	16050.40
	16.65.4 40/50 mm compacted thickness with bitumen of grade CRMB-60 @5.5% (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.	cum	12677.25
	16.65.5 40/50 mm compacted thickness with bitumen of grade VG-30 @5.5% (percentage by weight of total mix) and lime filler @ 3%		

16.0 (Road Work)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	(percentage by weight of Aggregate) prepared in drum Type Hot Mix Plant of 60-90 TPH capacity.	cum	13180.70
	16.65.6 40/50 mm compacted thickness with bitumen of grade VG-30 @5.5% (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) and waste plastic additive @8% (percentage by weight of bitumen) prepared in drum Type Hot Mix Plant of 60-90 TPH capacity.	cum	13735.45
	16.65.7 40/50 mm compacted thickness with bitumen of grade PMB-40 @5.5% (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) prepared in drum Type Hot Mix Plant of 60-90 TPH capacity.	cum	16044.10
	16.65.8 40/50 mm compacted thickness with bitumen of grade CRMB-60 @5.5% (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) prepared in Drum Type Hot Mix Plant of 60-90 TPH capacity.	cum	12670.95
16.66	Manufacturing supplying and fixing retro reflective sign boards made up of 2mm thick aluminum sheet, face to be fully covered with high intensity encapsulated type heat activated retro reflective sheeting conforming to type-IV of ASTM-D-4956-01 in blue and silver white or other colour combination including subject matter, message (bi-lingual), symbols and borders etc. as per IRC : 67-2001, pasted on substrate by an adhesive backing which shall be activated by applying heat and pressure conforming to class -2 of ASTM-D-4956-01 and fixing the same with suitable sized aluminum alloy rivets @ 20cm c/c to back support frame of M.S. angle iron of size 25x25x3mm along with theft resistant measures mounted and fixed with 2 nos. M.S. angles of size 35x35x5mm to a vertical post made upto M.S. Tee section ISMT 50x50x6mm welded with base plate of size 100x100x5mm at the bottom end and including making holes in pipes, angle flats, providing and fixing M.S. message plate of required size steel work to be painted with two or more coats of synthetic enamel paint of required shade and of approved brand & manufacture over priming coat of zinc chromate yellow primer (vertical M.S.-Tee support to be painted in black and white colours). Backside of aluminum sheet to be painted with two or more coats of epoxy paint over and including appropriate priming coats including all leads and lifts etc. complete as per drawing, specification and direction of Engineer-in-charge.		
	16.66.1 Mandatory/Regulatory sign boards of 900 mm diameter with part as length of 3750 mm.	each	6885.35
	16.66.2 Cautionary/warning sign boards of equilateral triangular shape having each side of 900 mm support length of 3650mm.	each	5237.85
16.67	Manufacturing supplying and fixing retro reflective overhead signage boards made up of 2mm thick aluminum sheet, face to be fully covered with high intensity and encapsulated lens type heat activated retro reflective sheeting conforming to type-III of ASTM-D-4956-01 as approved by Engineer-in-charge; letters, borders etc. as per IRC : 67-2001 in silver white with blue colour background and with high intensity grade, pasted on substrate by pressure sensitive adhesive backing which shall be activated by applying pressure conforming to class -II of ASTM-D-4956-01 and fixing the same to the plate of structural frame work by means of suitable sized aluminum alloys, rivets or bolts and nuts @ 300mm c/c all along the periphery as well as in two vertical rows along with theft resistant measures including the cost of painting with two or more coats of epoxy paint in grey colour on the back side of aluminum sheet including appropriate priming coat. The rate includes the cost of rounding off the corners, lowering down the structural frame work from the gantry, fixing		

16.0 (Road Work)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	and erecting the same in position all complete as per drawing, specification and direction of Engineer-in-charge (Structural frame work including M.S. plate to be provided separately. Rectangular area of the sheet only shall be measured for payment). 16.67.1 Overhead informatory road signage.	sqm	6016.65
16.68	Providing Retro-reflective regulatory sign board of size 900mm diameter made out of 2mm thick aluminum sheet, face to be fully covered with high intensity encapsulated lens type retro-reflective sheeting as approved by Engineer-in-charge. Letter, symbols, borders, etc. will be as per IRC:67 with required colour scheme on the boards and with the high intensity grade A. the aluminum sheet to be riveted to M.S. frame of angle iron of size 40x40x4mm. The boards will be fixed to 1 No. 50x50mm square post made of M.S. angle 50x50x4mm, 4m long welded to the frame with adequate anti-theft arrangement. Sheet work to be painted with two or more coats of synthetic enamel paint over an under coat (primer) and back side of aluminum sheet to be painted with two or more coats of epoxy paint including appropriate priming coat complete in all respects as per directions of Engineer-in-charge.	sqm	7748.00
16.69	Providing and applying 2.5mm thick road marking strips (retro-reflective) of specified shade/colour using hot thermoplastic material by fully/semi-automatic thermoplastic paint applicator machine fitted with profile shoe, glass beads dispenser, propane tank heater and profile shoe heater, driven by experienced operator on road surface including cost of material, labour, T&P, cleaning the road surface of all dirt, seals, oil, grease and foreign material etc. complete as per direction of Engineer-in-charge and accordance with applicable specifications.	sqm	638.90
16.70	Providing, laying and making kerb channel 30cm wide and 50mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) over 75mm bed of dry brick ballast 40mm nominal size well rammed and consolidated and grouted with fine sand including finishing the top smooth etc. complete as per direction of Engineer-in-charge.	sqm	518.20
16.71	Providing and laying 75mm thick compacted bed of dry brick aggregate 40mm thick nominal size including spreading, well rammed, consolidated and grouted with fine sand including finishing smooth etc. complete as per direction of Engineer-in-charge	sqm	148.70
16.72	Providing and fixing post delineators made of ABS round body fitted with 2nos. 100mm dia high reflective and reflectors and mounted on M.S. pipe of 65mm dia duly powder coated with anti-rust and anti-theft steel to be installed as per direction of Engineer-in-charge.	each	893.05
16.73	Providing and fixing at or near ground level factory made RCC pavement slab of M-30 grade of size 450x450x50 mm, including reinforcement with 6 mm dia M.S. bars 4 nos on each side, including setting in position in footpath to the required level and line over a bed of 20 mm average thick cement mortar 1:5 (1 cement : 5 coarse sand), having joint thickness not more than 5mm except on curve, including filling of joints with same cement mortar and making grooves etc. complete as per direction of Engineer-in-charge.	sqm	1258.35
16.74	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 and of approved size and design/shape laid in required colour and pattern over and including 50mm thick compacted bed of fine sand, filling the joints with coarse sand etc. all complete as per direction of Engineer-in-charge.	sqm	816.15

16.0 (Road Work)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
16.75	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement in position to the required line, level and curvature jointed with cement mortar 1:3 (1 cement: 3 coarse sand) including making joints with or without grooves (thickness of the joints except at sharp curve shall not to be more than 5mm) including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge (length of finished kerb edging shall be measured for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).	cum	8563.50
16.76	Supplying & stacking of hard stone (for stone pitching) 22.5cm thick at site.	cum	936.55
16.77	Dry stone pitching 22.5cm thick laid in courses required profile with hammer dressed stone having no side less than 15cm, with minimum depth of 20cm including preparing the bedding surface etc. all complete (Payment for stone to be made separately).	sqm	503.00
16.78	75mm thick back filling for pitching including supplying of required materials and consolidation etc. complete with: 16.78.1 Moorum 16.78.2 Stone aggregate 20mm nominal size 16.78.3 Stone aggregate 40mm nominal s	sqm sqm sqm	63.40 106.55 106.55
16.79	Providing and laying C.C. pavement of mix M-25 with ready mixed concrete from batching plant. The ready mixed concrete shall be laid and finished with screed board vibrator, vacuum dewatering process and finally finished by floating, brooming with wire brush etc. complete as per specifications and directions of Engineer-in-charge. (The panel shuttering work shall be paid for separately). Note: Cement content considered in this item is 303 kg/ cum Excess/less cement used as per design mix is payable/recoverable separately	cum	8850.60
16.80	Deduct for using of M-20 grade concrete instead of M-25 grade concrete in C.C. pavement.	cum	266.70
16.81	Scarifying the existing bituminous road surface to a depth of 50mm and disposal of scarified material within all lifts and lead upto 1 km (by mechanical means).	sqm	5.55
16.82	Construction of granular sub-base by providing close graded Material conforming to specifications, mixing in a mechanical mix plant at OMC, carriage of mixed material by tippers to work site, for all leads & lifts, spreading in uniform layers of specified thickness with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications and directions of Engineer-in-Charge. 16.82.1 With material conforming to Grade-I (size range 75 mm to 0.075 mm) having CBR Value-30 16.82.2 With material conforming to Grade-II (size range 53 mm to 0.075 mm) having CBR Value-25 16.82.3 With material conforming to Grade-III (size range 26.5 mm to 0.075 mm) having CBR Value-20	cum cum cum	1880.30 1883.50 1883.50
16.83	Providing, laying, spreading and compacting graded stone aggregate (size range 53 mm to 0.075 mm) to wet mix macadam (WMM) specification including premixing the material with water at OMC in mechanical mix plant, carriage of mixed material by tipper to site, for all leads & lifts, laying in uniform layers with mechanical paver finisher in sub- base / base course on well prepared surface and compacting with vibratory roller of 8 to 10 tonne capacity to achieve the desired density, complete as per specifications and directions of Engineer-in-Charge	cum	1885.95

16.0 (Road Work)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
16.84	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 aggregate not exceeding 25 mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per specifications, 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, for all leads & lifts, laid with a mechanical paver, compacting with 8-10 tonne vibratory roller, finishing and curing etc. complete as per direction of Engineer-in-charge.	cum	3229.80
16.85	Providing and erecting 2.00 metre high temporary barricading at site; each panel of size 2.50mx2.00m made of 40x40x6mm angle iron or 50x50x3mm hollow MS tube posts/horizontal members/bracings covered with 1.63mm thick MS sheet. The sheet shall be fixed with 30x5mm MS flat by suitable welding/riveting. The panels shall be made so that gap of 50cm above the ground is available making overall height as 2.5m. MS channel ISLC75 @ 5.70 kg/m, 50cm long shall be provided at the bottom having oval shaped holes of size 50x25mm at both ends with 50cm long MS angle 40x40x6mm bracing. Suitable arrangement shall be made to fix the barricading to avoid from overturning by providing 250mm long expansion fasteners at both ends. The work shall be executed as per drawing/direction of Engineer-in-Charge which includes writing and painting, arrangement for traffic diversion such as traffic signals during construction at site for day and night, glow lamps, reflective signs, marking, flags, caution tape as directed by the Engineer-in-Charge. The barricading provided shall be retained in position at site continuously i/c shifting of barricading from one location to another location as many times as required during the execution of the entire work till its completion. Rate include its maintenance for damages, painting, all incidentals, labour materials, equipments and works required to execute the job. The barricading shall not be removed without prior approval of Engineer-in-Charge. (Note: - One time payment shall be made for providing barricading from start of work till completion of work i/c shifting. The barricading provided shall remain to be the property of the contractor on completion of the work).	meter	2912.20
16.86	Taking out existing kerb stones of all types from footpath/ central verge, including removal of mortar etc., disposal of unserviceable material to the dumping ground, for which payment shall be made separately and stacking of serviceable material within 50 meter lead as per direction of Engineer-in-Charge.	meter	27.80
16.87	Taking out existing CC interlocking paver blocks from footpath/ central verge, including removal of rubbish etc., disposal of unserviceable material to the dumping ground, for which payment shall be made separately and stacking of serviceable material within 50 meter lead as per direction of Engineer-in-Charge.	sqm	93.40
16.88	Laying old cement concrete interlocking paver blocks of any design/ shape laid in required line, level, curvature, colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in- charge.	sqm	280.95
16.89	Laying at or near ground level old kerb stones of all types in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints, except at sharp curve, shall not be more than 5 mm),		

16.0 (Road Work)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	including making drainage opening wherever required etc. complete as per direction of Engineer-in-charge. (Length of finished kerb edging shall be measured for payment).	meter	87.05
16.90	Providing and laying gang saw cut of specified thickness, mirror polished pre- moulded and pre polished machine cut granite stone of required size and shape of approved shade, colour and texture in footpath, flooring cut granite stone of required size and shape of approved shade, colour and texture in footpath, flooring in road side plazas and similar locations, laid over 20mm thick base of cement mortar 1:4 (1cement : 4 coarse sand) including grouting the joints with white cement mixed with matching pigment, epoxy touch ups etc. complete as per direction of Engineer-in-Charge.		
16.90.1	18 mm thick	sqm	4132.45
16.90.2	30 mm thick	sqm	4272.95
16.91	Providing and laying matt finished vitrified tile of specified size having water absorption less than 0.5% and conforming to IS: 15622 of approved make in all colours and shades in outdoor floors such as footpath, court yard multi models etc., laid on 20mm thick base of cement mortar 1:4 (1cement: 4 coarse sand) in all shapes & patterns including grouting the joints with white cement mixed with matching pigments etc. complete as direction of Engineer-in-Charge.		
16.91.1	100x100x16 mm	sqm	1962.25
16.91.2	300x300x9.8 mm	sqm	1293.30
16.92	Providing and laying tactile tile (for vision impaired persons as per standards) of size 300x300x9.8mm having with water absorption less than 0.5% and conforming to IS: 15622 of approved make in all colours and shades in for outdoor floors such as footpath, court yard, multi modals location etc., laid on 20mm thick base of cement mortar 1:4 (1cement : 4 coarse sand) in all shapes & patterns including grouting the joints with white cement mixed with matching pigments etc. complete as per direction of Engineer-in-Charge.	sqm	1962.25
16.93	Providing and laying factory made chamfered edge Cement Concrete paver blocks in footpath, parks, lawns, drive ways or light traffic parking etc, of required strength, thickness & size/ shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand complete all as per direction of Engineer-in-Charge.		
16.93.1	60mm thick cement concrete paver block of M-35 grade with approved colour, design & pattern.	sqm	875.95
16.94	Providing and laying factory made chamfered edge Cement Concrete paver blocks in footpath, parks, lawns, drive ways or light traffic parking etc, of required strength, thickness & size/ shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand complete all as per direction of Engineer-in-Charge.		
16.94.1	80 mm thick C.C. paver block of M-30 grade with approved color design and pattern.	sqm	929.85
16.95	Providing and fixing 10x10x7.50 cm Granite stone block hand cut and chisel dressed on top, for paving in floors, drains etc. laid over 20mm		

16.0 (Road Work)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	thick base mortar 1:4 (1cement:4 coarse sand) with joints 10mm wide filled with same mortar including ruled pointing etc. complete as per direction of engineer-in charge.	sqm	1814.15
16.96	Providing and placing in position 100mm thick factory made machine batched and machine mixed Precast RCC Rectangular Covers on drains of footpath of various sizes, of M-25 grade cement concrete for RCC work, including cost of centering, shuttering, reinforcement of 8mm dia TMT bars of Fe 500 grade @ maximum 100mm c/c on both ways , neat cement punning on finished surface, properly encased on all edges with 1.6 mm thick , 100mm wide MS sheet duly painted over priming coat , reinforcement to be welded at edges with MS sheet and providing 2 Nos. 12 mm dia bar for hooks etc i/c cost of cartage ,all leads & lift, handling at site etc. all complete as per direction of Engineer-in-Charge.	sqm	3681.60
16.97	Excavating holes upto 0.10 cum, including getting out the excavated soil, then returning the soil as deported in layers not exceeding 20 cm in depth, including consolidating and deposited layer by ramming watering etc., disposing of surplus excavated soil as directed with in a lead of 50 mm and lift upto 1.5 m. 16.97.1 All kind of soil	each	27.80
16.98	Providing & making Gabion structure with Mechanically Woven Double Twisted Hexagonal Shaped Wire mesh Gabion Boxes as per IS 16014:2012,MORTH Clause 2500, of required size, Mesh Type 10x12 (D=100 mm with tolerance of $\pm 2\%$) Zinc coated, Mesh wire diameter 3.0mm, mechanically edged/selvedged with partitions at every 1m interval and shall have minimum 10 numbers of openings per meter of mesh perpendicular to twist, tying with lacing wire of diameter 2.2mm, supplied @ 3% by weight of Gabion boxes, filled with boulders with least dimension of 200 mm, as per drawing, all complete as per direction of Engineer-in-charge.	cum	3093.30
16.99	Providing & making Gabion structure with Mechanically Woven Double Twisted Hexagonal Shaped Wire mesh Gabion Boxes as per IS 16014:2012,MORTH Clause 2500, of required size, Mesh Type 10x12(D=100 mm with tolerance of $\pm 2\%$) Zinic+PVC coated, Mesh wire diameter 2.7/3.7mm, mechanically edged/selvedged with partitions at every 1m interval and shall have minimum 10 numbers of openings per meter of mesh perpendicular to twist, tying with lacing wire of diameter 2.2/3.2mm (ID/OD), supplied @3% by weight of Gabion boxes, filled with boulders with least dimension of 200 mm, as per drawing, all complete as per directions of Engineer-in-charge.	cum	3350.85
16.100	Providing & making Gabion structure with Mechanically Woven Double Twisted Hexagonal Shaped Wire mesh Gabion Boxes as per IS 16014:2012,MORTH Clause 2500, of required size, Mesh Type 10x12(D=100 mm with tolerance of $\pm 2\%$), Zinic+10% Al alloy+PVC coated, Mesh wire diameter 2.7/3.7mm (ID/OD), mechanically edged/selvedged with partitions at every 1m interval and shall have minimum 10 numbers of openings per meter of mesh perpendicular to twist, tying with lacing wire of diameter 2.2/3.2mm(ID/OD), supplied @3% by weight of Gabion boxes, filled with boulders with least dimension of 200 mm, as per drawing, all complete as per directions of Engineer-in-charge.	cum	3829.20

SUB HEAD: 17.0

**HORTICULTURE AND
LANDSCAPING**

17.0 (Horticulture and Landscaping)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
17.1	Trenching in ordinary soil upto a depth of 60 cm including removal and stacking of serviceable materials and then disposing off by spreading and neatly leveling within a lead of 50 m and making up the trenched area to proper levels by filling with earth or earth mixed with sludge or/and manure before and after flooding trench with water (excluding cost of imported earth, sludge or manure)	cum	79.35
17.2	Supplying and stacking of good earth at site including royalty (earth measured in stacks will be reduced by 20% for payment)	cum	281.30
17.3	Supplying & stacking sludge at site including royalty (sludge measured in stakes will be reduced by 8 % for payment.	cum	NA
17.4	Supplying and stacking at site dump manure from approved source including carriage complete (manure measured in stacks will be reduced by 8% for payment)		
	17.4.1 Screened through sieve of I.S. designation 20 mm	cum	68.30
	17.4.2 Screened through sieve of I.S. designation 16 mm	cum	105.30
	17.4.3 Screened through sieve of I.S. designation 4.75 mm	cum	134.90
17.5	Rough dressing of the trenched ground including breaking clods.	100 Sqm	152.75
17.6	Uprooting weeds from the trenched area after 10 to 15 days of its flooding with water including disposal of uprooted vegetation	100 Sqm	497.45
17.7	Fine dressing of the ground	100 Sqm	374.40
17.8	Spreading of sludge, dump manure or/and good earth in required thickness as per directions of officer in-charge (cost of sludge, dump manure or/and good earth to be paid separately)	cum	53.55
17.9	Mixing earth and sludge or manure in proportion specified or directed by officer in charge.	cum	37.00
17.10	Grassing with selection no. 1 grass including watering & maintenance of the lawn for 30 days or more till the grass forms a thick lawn free from weeds & fit for mowing including supplying of good earth if needed (the good earth shall be paid separately.)		
	17.10.1 In rows 5 cm apart in either direction	100 Sqm	1798.30
	17.10.2 In rows 7.5 cm apart in either direction	100 Sqm	1176.80
	17.10.3 In rows 15 cm apart in either direction	100 Sqm	577.50
	17.10.4 with grass turf	100 Sqm	1354.40
17.11	Renovating lawns including weeding, cheeling the grass, forking the ground, top dressing with sludge or manure mixing the same with forked soil, watering and maintaining the lawn for 30 days or more till the grass forms a thick lawn free from weeds & fit for mowing & disposal of rubbish as directed, including supplying good earth if needed but excluding the cost of sludge or manure (the good earth shall be paid separately.)	100 Sqm	3486.55
17.12	Uprooting rank vegetation and weeds by digging the area to a depth of 60 cm removing all weeds and other growth with roots by forking repeatedly, breaking clods, rough dressing, flooding with water, uprooting fresh growths after 10 to 15 days and then fine dressing for planting new grass, including disposal of all rubbish with all leads and lifts	100 Sqm	6182.30
17.13	Preparation of beds for hedging and shrubbery by excavating 60 cm deep and trenching the excavated base to a further depth of 30 cm, refilling the excavated earth after breaking the clods and mixing with sludge or manure in the ration of 8:1 (8 parts of stacked volume of earth after reduction by 20% : 1 part of stacked volume of sludge or manure after reduction by 8 %), flooding with water, filling with the earth if		

17.0 (Horticulture and Landscaping)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	necessary, watering and finally fine dressing, leveling etc. including stacking & disposal of materials declared unserviceable and surplus earth by spreading and leveling as directed, within a lead of 50 mtr. and lift upto 1.5 mtr. complete (cost of sludge, manure or extra earth to be paid for separately)	cum	225.65
17.14	Digging holes in ordinary soil and refilling the same with the excavated earth mixed with manure or sludge in the ratio of 2:1 by volume (2 part of stacked volume of earth after reduction by 20% :1 part of stacked volume of manure after reduction by 8%) flooding with water, dressing including removal of rubbish & surplus earth, if any with all leads & lifts (cost of sludge, manure or extra good earth, if needed, to be paid for separately) 17.14.1 Holes 1.2 mtr dia & 1.2 mtr deep 17.14.2 Holes 90 cm dia & 90 cm deep 17.14.3 Holes 60 cm dia & 60 cm deep 17.14.4 Holes 45 cm dia & 45 cm deep	each each each each	933.50 394.80 119.30 50.10
17.15	Half brick circular tree guard bricks, internal diameter 1.25 mtr and height 1.2 mtr above ground and 0.20 mtr below ground bottom 2 courses laid dry and top three courses in cement mortar 1:6(1 cement: 6 fine sand) and the intermediate courses being in dry honey comb masonry as per design complete: 17.15.1 With Common burnt clay (non modular) bricks of class designation 5.0	each	NA
17.16	Providing and fixing M.S. flat iron tree guard 60 cm dia. and 2 m high above ground level formed of 4 nos. 25x6 mm, 2.25m long and 8 nos. 25x3 mm 2 m long vertical M.S. flats riveted to 3 nos.25x6 mm MS flat iron rings in two halves, fixed together at site with required 6 no. of 8 mm dia. and 30 mm long bolts including painting two coats with paint of approved brand and manufacture over a coat of primer. One name plate of 1 mm thick M.S. sheet of size 250x100 mm shall be welded to the tree guard near the middle height and lettered CPWD/PWD/any other approved name The tree guard shall be suitably fixed to the ground by embedding four legs of the tree guard in pits of suitable dia. and to a depth of 25 cm, refilling the pits with soil and ramming, complete in all respect as per satisfaction on direction of Officer-in-charge	each	6169.85
17.17	Making tree guard 53 cm dia & 1.3 m high as per design from empty coal tar drums supplied free by the department including providing and fixing two nos. MS sheet rings 50x0.5mm with rivets complete in all respects including painting inside and outside of tree guard with 17.17.1 A coat of coal tar 17.17.2 Two or more coats of ready mixed synthetic enamel paint of approved quality and shade over a priming coat	each each	437.15 728.75
17.18	Making tree guard 53 cm dia& 2.0 m high as per design from empty coal tar drums supplied free by the department including providing and fixing 4 legs 40 cm long of 30x3 mm MS flat riveted to tree guard & providing and fixing two nos. MS sheet rings 50x0.5mm with rivets complete in all respects including painting inside and outside of tree guard with 17.18.1 A coat of coal tar 17.18.2 Two or more coats of ready mixed synthetic enamel paint of approved quality & shade over a priming coat	each each	842.95 1292.50

17.0 (Horticulture and Landscaping)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
17.19	Edging with bricks laid dry length wise including excavation, refilling, consolidating with hand packing and spreading neatly surplus earth within a lead of 50 m: 17.19.1 Common burnt clay (non modular) bricks of class designation 7.5.	meter	59.60
17.20	Filling mixture of earth and sludge or manure in the desired proportion in trenches, flooding with water and leveling (cost of supplying earth and sludge or manure and mixing excluded)	cum	18.50
17.21	Excavation in dumped stones or malba including stacking of serviceable and unserviceable material separately and disposal of unserviceable material lead upto 50 m and lift upto 1.5 m, disposed material to be neatly dressed	cum	517.90
17.22	Excavation in bajri path including stacking of serviceable and unserviceable material separately and disposal of unserviceable material lead upto 50 m and lift upto 1.5 m, disposed material to be neatly dressed	cum	577.10
17.23	Excavation in water bound macadam road including stacking of serviceable and unserviceable material separately and disposal of unserviceable material lead upto 50 m and lift upto 1.5 m, disposed material to be neatly dressed	cum	710.30
17.24	Flooding the ground with water including making kiaries and dismantling the same	100 Sqm	245.80
17.25	Supplying and stacking of well decayed cow dung manure at site including royalty (cow dung manure measured in stacks will be reduced by 8% for payment)	cum	334.50
17.26	Providing and fixing M.S tree guard 45 cm square in plan, height 1.20 meter above ground level and 0.40 meter below ground level. The vertical members shall consist of four nos. angle iron of size 25x25x3 mm, 1.6 m long, one at each corner and 8 nos flat iron of size 25x3 mm, 1.2 m long. The vertical members shall be welded to 4 nos. 25x6 mm M.S flats placed horizontally around the vertical members of the cage. One name plate of 1 mm thick M.S sheet of size 250x100 mm shall be welded to the tree guard near the middle height and lettered CPWD /PWD/any other approved name. The tree guard shall be fixed to the ground by making suitable holes and by embedding four corners leg in the ground, including refilling the earth, compaction etc. complete. The tree guard shall be painted with two more coats of synthetic enamel paint of approved brand and or more coats of synthetic enamel paint of approved brand and manufacture over a coat of primer complete	each	3231.55
17.27	Providing and fixing M.S tree guard 50 cm square in plan, height 1.40 meter above ground level and 0.50 meter below ground level. The vertical members shall consist of four nos. angle iron of size 25x25x5 mm, 1.9 m long, one at each corner and 8 nos flat iron of size 25x5 mm, 1.4 m long. The vertical members shall be welded to 4 nos. 25x6 mm M.S flats placed horizontally around the vertical members of the cage. One name plate of 1 mm thick M.S sheet of size 250x100 mm shall be welded to the tree guard near the middle height and lettered CPWD/PWD/any other approved name. The tree guard shall be fixed to the ground by making suitable holes and by embedding four corners leg in the ground, including refilling the earth, compaction etc. complete. The tree guard shall be painted with two or more coats of synthetic enamel paint of approved brand and manufacture over a coat of primer complete in all respect.	each	4088.00

17.0 (Horticulture and Landscaping)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
17.28	Preparation of mounds of various size and shape by available excavated/supplied earth in layers not exceeding 20 cm in depth, breaking clods, watering of each layer dressing etc. lead upto 50 meter and lift upto 1.5 m complete as per direction of officer- in -charge	cum	463.05
17.29	Providing Circular Cement Concrete pots of specified size, cast with cement concrete of nominal mix. 1:1.5:3 (1cement: 1.5 coarse sand: 3graded stone aggregate 6 mm nominal size) reinforced with 7 nos. (3 nos horizontal and 4 nos vertical 'U' shape) M.s wires of 3.5 mm dia as per design, including required form work finishing with cement punning on exposed surface curing for specified period and stacking in required rows and height, all complete as per direction of officer-in-charge. 17.29.1 Top inside dia 35 cm, outer bottom dia 25 cm, total height 35 cm with wall thickness of 25.4 mm 17.29.2 Top inside dia 30 cm, outer bottom dia 20 cm, total height 30 cm with wall thickness of 25.4 mm	each each	280.25 205.65
17.30	Providing Square Cement Concrete pots of specified size, cast with cement concrete of nominal mix. 1:1.5:3 (1cement: 1.5 coarse sand: 3 graded stone aggregate 6 mm nominal size) reinforced with 7 nos. (3 nos horizontal and 4 nos vertical 'U' shape) M.s wires of 3.5 mm dia as per design, including required form work finishing with cement punning on exposed surface curing for specified period and stacking in required rows and height, all complete as per direction of officer-in-charge. 17.30.1 Top inner width 35 cm, outer bottom width 25 cm, total height 35 cm with wall thickness of 25.4 mm.	each	337.60

SUB HEAD: 18.0

SANITARY INSTALLATION

18.0 (Sanitary Installation)

18.0 (Sanitary Installation)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
18.1	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm sand cast Iron P or S trap, 10 liter low level white P.V.C. flushing cistern, including flush pipe (of approved make) 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.		
	18.1.1 DELETED		
	18.1.2 White vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests.	each	5493.25
	18.1.3 Stainless Steel AISI- 304 (18/8) Orissa pattern W.C. pan of size 585x480mm with flush pipe and integrated type foot rests	each	10122.55
18.2	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 liter low level white P.V.C. flushing 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:		
	18.2.1 W.C. pan with ISI marked white solid plastic seat and lid.	each	5632.40
	18.2.2 W.C. pan with ISI marked black solid plastic seat and lid	each	5538.75
18.3	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 liter low level white vitreous china flushing cistern and CP flush bend with fittings and C.I. brackets, 40mm 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:		
	18.3.1 W.C. pan with ISI marked white solid plastic seat and lid.	each	7713.70
	18.3.2 W.C. pan with ISI marked black solid plastic seat and lid.	each	7620.00
18.4	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350mm and 340x410x265 mm 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:		
	18.4.1 One urinal basin with 5 literwhite P.V.C automatic flushing cistern.	each	5342.35
	18.4.2 Range of two urinal basins with 5 literwhite P.V.C automatic flushing cistern.	each	8619.80
	18.4.3 Range of three urinal basins with 10 liter white P.V.C automatic flushing cistern.	each	11566.50
	18.4.4 Range of four urinal basins with 10 liter white P.V.C automatic flushing cistern..	each	16161.15
18.5	Providing and fixing white vitreous china flat back half stall urinal of size580x380x350mm with White P.V.C 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:		
	18.5.1 Single half stall urinal with 5 liter P.V.C automatic flushing cistern.	each	10079.55
	18.5.2 Range of two half stall urinals with 5 literP.V.C automatic flushing cistern.	each	15112.55
	18.5.3 Range of three half stall urinals with 10 liter P.V.C automatic		

18.0 (Sanitary Installation)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	flushing cistern.	each	18690.60
	18.5.4 Range of four half stall urinals with 10 liter P.V.C automatic flushing cistern.	each	22164.90
18.6	Providing and fixing one piece construction white vitreous china squatting plate with an integral longitudinal flushing pipe, white P.V.C 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 in C.P brass coupling complete, including painting of fittings and cutting and making good the walls and floors etc. wherever required:		
	18.6.1 Single squatting plate with 5 liter P.V.C. automatic flushing cistern.	each	8101.40
	18.6.2 Range of two squatting plates with 5 liter P.V.C. automatic flushing cistern.	each	12076.80
	18.6.3 Range of three squatting plates with 10 liter P.V.C. automatic flushing cistern.	each	15941.15
	18.6.4 Range of four squatting plates with 10 liter P.V.C. automatic flushing cistern.	each	19341.20
18.7	Providing and fixing wash basin with C.I. brackets, 15mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever required :		
	18.7.1 White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps.	each	4172.40
	18.7.2 White Vitreous China Wash basin size 630x450 mm with a single 15 mm C.P. brass pillar taps.	each	3561.90
	18.7.3 White Vitreous China Wash basin size 550x400 mm with a pair of 15 mm C.P. brass pillar taps.	each	3871.35
	18.7.4 White Vitreous China Flat back wash basin size 550x400 mm with single 15 mm C.P. brass pillar tap.	each	3260.85
	18.7.5 White Vitreous China Angle back wash basin size 600x480 mm with single 15 mm C.P. brass pillar tap.	each	3260.85
	18.7.6 White Vitreous China Angle back wash basin size 400x400 mm with single 15 mm C.P. brass pillar tap	each	3046.80
	18.7.7 White Vitreous China Flat back wash basin size 450x300 mm with single 15 mm C.P. brass pillar tap	each	3077.55
	18.7.8 White Vitreous China Surgeon type wash basin size 660x460 mm with a pair of 15 mm C.P. brass pillar taps with elbow including operated levers.	each	4493.50
	18.7.9 White Vitreous China Surgeon type wash basin size 660x460 mm with single 15 mm C.P. brass pillar taps with elbow operated levers ISI marked	each	3775.95
	18.7.10 Stainless steel AISI-304 (18/8) Round basin 405x355 mm with single 15mm C.P. brass pillar trap	each	4204.10
	18.7.11 Stainless steel AISI-304 (18/8) Wash basin 530x345 mm with single 15 mm C.P. brass pillar tap	each	4873.05
18.7A	Providing and fixing wash basin with C.I. brackets, 15 mm 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 15 mm CP Brass single hole basin mixer	each	4841.20
18.7B	Providing and fixing wash basin with C.I. brackets, 15 mm PTMT pillar cock, 32 mm PTMT waste coupling of standard pattern,		

18.0 (Sanitary Installation)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	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 15 mm PTMT pillar cock.	each	2909.35
18.8	Add for: 18.8.1 Providing 32 mm dia. C.P. brass trap.	each	466.05
18.9	Providing and fixing white vitreous china pedestal for wash basin completely recessed at the back for the reception of pipes and fittings.	each	1474.15
18.10	Providing and fixing kitchen sink with C.I. brackets, C.P. brass chain with rubber plug, 40 mm C.P. brass waste complete, including painting the fittings and brackets, cutting and making good the walls wherever required. 18.10.1 White glazed fire clay kitchen sink of size 600x450x250 mm	each	4591.85
18.11	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per I.S. 13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required : 18.11.1 Kitchen sink with drain board 18.11.1.1 510x1040mm bowl depth 250mm 18.11.1.2 510x1040mm bowl depth 225mm 18.11.1.3 510x1040mm bowl depth 200mm 18.11.1.4 510x1040mm bowl depth 178mm 18.11.2 Kitchen sink without drain board 18.11.2.1 610x510mm bowl depth 200mm 18.11.2.2 610x460mm bowl depth 200mm 18.11.2.2 470x420mm bowl depth 178mm	each each each each each each each	6166.90 5939.45 5671.85 5524.70 4380.50 3723.55 3308.80
18.12	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 40 mm C.P. brass trap with necessary C.P. brass unions complete, including painting of fittings and brackets, cutting and making good the walls wherever required : 18.12.1 Size 450x300x150 mm 18.12.2 Size 600x450x200 mm	each each	4855.40 6139.85
18.13	Providing and fixing draining board with C.I. brackets including painting of brackets, cutting and making good the walls wherever required. 18.13.1 White glazed fire clay draining board of size 600x450x25mm	each	1438.95
18.14	Providing and fixing white vitreous china water closet squatting pan (Indian type) 18.14.1 Long pattern W.C. pan of size 580 mm 18.14.2 Orissa pattern W.C. pan of size 580x440 mm	each each	1970.75 2345.35
18.15	Extra for using coloured W.C. pan instead of white W.C. pan 18.15.1 Orissa pattern W.C. pan 580x440 mm	each	849.60
18.16	Providing and fixing white vitreous china pedestal type (European type/wash down type) water closet pan.	each	2303.90
18.17	Extra for using coloured pedestal type W.C Pan (European type) with low level cistern of same colour instead of white vitreous china W.C. pan and cistern.	each	259.55
18.17A	Providing and fixing 8 mm 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 by Engineer - in - charge.	each	412.10
18.18	Providing and fixing a pair of white vitreous china foot rests of standard pattern for squatting pan water closet: 18.18.1 250x130x30 mm 18.18.2 250x125x25 mm	pair pair	NA 299.05
18.19	Providing and fixing P.V.C low level flushing cistern with manually		

18.0 (Sanitary Installation)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete: 18.19.1 10 liter capacity -White 18.19.2 10 liter capacity – coloured	each each	1163.85 1137.10
18.20	Providing and fixing controlled flush, low level cistern made of vitreous china with all fittings complete: 18.20.1 10 liter (full flush) capacity-white 18.20.2 10 liter (full flush) capacity-coloured.	each each	2291.20 2447.75
18.21	Providing and fixing solid plastic seat with lid for pedestal type W.C. pan complete: 18.21.1 White solid plastic seat with lid. 18.21.2 Black solid plastic seat with lid. 18.21.3 Coloured (other than black and white) solid plastic seat with lid.	each each each	673.60 579.95 646.85
18.22	Providing and fixing G.I. inlet connection for flush pipe connecting with W.C. pan.	each	129.10
18.22A	Providing and fixing CP Brass 32mm size Bottle Trap of approved quality & make and as per the direction of Engineer-in-charge.	each	869.65
18.22B	Providing and fixing CP Brass Single lever telephonic wall mixer of quality & make as approved by Engineer in charge. (a) 15 mm nominal dia	each	6805.80
18.23	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350 mm and 340x410x265mm sizes respectively.	each	1400.05
18.24	Providing and fixing white vitreous china squatting plate urinal with integral rim longitudinal flush pipe.	each	3807.75
18.25	Providing and fixing white vitreous china wash basin including making all connections but excluding the cost of fittings. 18.25.1 Flat back wash basin of size 630x450 mm. 18.25.2 Flat back wash basin of size 550x400 mm. 18.25.3 Angle back wash basin of size 600x480 mm. 18.25.4 Angle back wash basin of size 400x400 mm. 18.25.5 Flat back wash basin of size 450x300 mm. 18.25.6 Surgeon type wash basin of size 660x460 mm.	each each each each each each	1544.70 1243.70 1243.70 1029.60 1060.40 1651.75
18.26	Providing and fixing kitchen sink including making all connections excluding cost of fittings : 18.26.1 White glazed fire clay sink of size 600x450x250 mm.	each	3069.35
18.27	Providing and fixing white vitreous china laboratory sink including making all connections excluding cost of fittings 18.27.1 Size 450x300x150mm. 18.27.2 Size 600x450x200 mm.	each each	2516.75 3801.20
18.28	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C waste fittings complete: 18.28.1 Semi rigid pipe 18.28.1.1 32 mm dia 18.28.1.2 40 mm dia 18.28.2 Flexible pipe 18.28.2.1 32 mm dia 18.28.2.2 40 mm dia	each each each each each	137.40 150.80 128.05 150.80
18.29	Providing and fixing 100 mm sand cast iron grating for gully trap.	each	60.75
18.30	Providing and fixing in position 25 mm diameter mosquito proof coupling of approved municipal design.	each	51.60
18.31	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	each	1595.10

18.0 (Sanitary Installation)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
18.32	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 6 mm thick hard board backing 18.32.1 Circular shape 450 mm dia. 18.32.2 Rectangular shape 453x357 mm 18.32.3 Oval shape 450x350mm (outer dimensions) 18.32.4 Rectangular shape 1500x450 mm	each each each each	1381.25 1156.25 1235.75 2048.35
18.33	Providing and fixing 600x120x5mm glass shelf with edges round off supported on anodized aluminum angle frame with C.P. brass brackets and guard rail complete fixed with 40 mm long screws, rawl plugs, etc. complete	each	902.50
18.34	Providing and fixing toilet paper holder 18.34.1 C.P. brass 18.34.2 Vitreous china	each each	1011.75 674.60
18.35	Providing and fixing soil, waste and vent pipes : 18.35.1 100 mm dia. 18.35.1.1 Sand cast iron S and S pipe as per IS:1729 18.35.1.2 Centrifugally cast (spun) iron S and S pipe as per IS:3989 18.35.1.3 Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905 18.35.2 75 mm diameter. 18.35.2.1 Sand cast iron S and S pipe as per IS:1729 18.35.2.2 Centrifugally cast (spun) iron S and S pipe as per IS:3989 18.35.2.3 Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905	meter meter meter meter meter meter meter	1066.50 1063.95 1048.70 946.00 1032.10 858.15
18.36	Providing and filling the joints with spun yarn cement slurry and cement mortar 1:2 (1 cement : 2 fine sand) in S.C.I / C.I pipes 18.36.1 75 mm dia. pipe 18.36.2 100 mm dia. Pipe	each each	133.05 156.75
18.37	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 coarse sand : 4 graded stone aggregate 20 mm nominal size), including cost of cutting holes and making good the walls etc: 18.37.1 For 100 mm dia. pipe 18.37.2 For 75 mm dia. pipe	each each	302.15 300.85
18.38	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete: 18.38.1 100 mm dia. 18.38.1.1 Sand cast iron S and S as per IS:1729 18.38.1.2 Sand cast iron S and S as per IS:3989 18.38.1.3 Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905 18.38.2 75 mm dia. 18.38.2.1 Sand cast iron S and S as per IS:1729 18.38.2.2 Sand cast iron S and S as per IS:3989 18.38.2.3 Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905	each each each each each each each	589.75 613.85 567.00 460.20 464.25 450.85
18.39	Providing and fixing plain bend of required degree: 18.39.1 100 mm dia. 18.39.1.1 Sand cast iron S and S as per IS:1729 18.39.1.2 Sand cast iron S and S as per IS:3989 18.39.1.3 Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905	each each each	489.40 446.60 352.95

18.0 (Sanitary Installation)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	18.39.2 75 mm dia. 18.39.2.1 Sand cast iron S and S as per IS:1729 18.39.2.2 Sand cast iron S and S as per IS:3989 18.39.2.3 Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905	each each each	386.65 303.70 250.15
18.40	Providing and fixing heel rest sanitary bend: 18.40.1 100 mm dia. 18.40.1.1 Sand cast iron S and S as per IS:1729 18.40.1.2 Sand cast iron S and S as per IS:3989 18.40.2 75 mm dia. 18.40.2.1 Sand cast iron S and S as per IS:1729 18.40.2.2 Sand cast iron S and S as per IS:3989	 each each each each	 580.40 446.60 457.55 410.70
18.41	Providing and fixing double equal junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete. 18.41.1 100x100x100x100 mm. 18.41.1.1 Sand cast iron S and S as per IS:1729 18.41.1.2 Sand cast iron S and S as per IS:3989 18.41.2 75x75x75x75 mm. 18.41.2.1 Sand cast iron S and S as per IS:1729 18.41.2.2 Sand cast iron S and S as per IS:3989	 each each each each	 1454.95 921.15 1169.30 731.80
18.42	Providing and fixing double equal plain junction of required degree. 18.42.1 100x100x100x100 mm. 18.42.1.1 Sand cast iron S and S as per IS:1729 18.42.1.2 Sand cast iron S and S as per IS:3989 18.42.1.3 Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905 18.42.2 75x75x75x75 mm. 18.42.2.1 Sand cast iron S and S as per IS:1729 18.42.2.2 Sand cast iron S and S as per IS:3989 18.42.2.3 Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905	 each each each each each each	 1353.75 888.10 727.55 1089.05 664.90 404.00
18.43	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete. 18.43.1 100x100x100 mm. 18.43.1.1 Sand cast iron S and S as per IS:1729 18.43.1.2 Sand cast iron S and S as per IS:3989 18.43.2 75x75x75 mm. 18.43.2.1 Sand cast iron S and S as per IS:1729 18.43.2.2 Sand cast iron S and S as per IS:3989	 each each each each	 1090.15 747.65 939.20 584.65
18.44	Providing and fixing single equal plain junction of required degree. 18.44.1 100x100x100 mm. 18.44.1.1 Sand cast iron S and S as per IS:1729 18.44.1.2 Sand cast iron S and S as per IS:3989 18.44.1.3 Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905 18.44.2 75x75x75 mm. 18.44.2.1 Sand cast iron S and S as per IS:1729 18.44.2.2 Sand cast iron S and S as per IS:3989 18.44.2.3 Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905	 each each each each each each	 949.65 714.20 580.40 710.40 504.35 323.75
18.45	Providing and fixing double unequal junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts		

18.0 (Sanitary Installation)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	complete. 18.45.1 100x100x75x75 mm. 18.45.1.1 Sand cast iron S and S as per IS:1729 18.45.1.2 Sand cast iron S and S as per IS:3989	each each	1185.15 1282.80
18.46	Providing and fixing double unequal plain junction of required degree. 18.46.1 100x100x75x75 mm. 18.46.1.1 Sand cast iron S and S as per IS:1729 18.46.1.2 Sand cast iron S and S as per IS:3989 18.46.1.3 Hubless centrifugally cast (spun) iron epoxy coated inside & outside as per IS:15905	each each each	991.15 1115.55 580.40
18.47	Providing and fixing single unequal junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete 18.47.1 100x100x75 mm. 18.47.1.1 Sand cast iron S and S as per IS:1729 18.47.1.2 Sand cast iron S and S as per IS:3989	each each	956.35 948.35
18.48	Providing and fixing single unequal plain junction of required degree : 18.48.1 100x100x75 mm. 18.48.1.1 Sand cast iron S and S as per IS:1729 18.48.1.2 Sand cast iron S and S as per IS:3989 18.48.1.3 Hubless centrifugally cast (spun) iron epoxy coated inside & outside as per IS:15905	each each each	805.15 848.00 546.95
18.49	Providing and fixing double equal plain invert branch of required degree 18.49.1 100x100x100x100 mm. 18.49.1.1 Sand cast iron S and S as per IS:1729 18.49.1.2 Sand cast iron S and S as per IS:3989 18.49.1.3 Hubless centrifugally cast (spun) iron epoxy coated inside & outside as per IS:15905 18.49.2 75x75x75x75 mm. 18.49.2.1 Sand cast iron S and S as per IS:1729 18.49.2.2 Sand cast iron S and S as per IS:3989	each each each each each	781.10 767.70 881.45 604.70 638.15
18.50	Providing and fixing single equal plain invert branch of required degree : 18.50.1 100x100x100 mm. 18.50.1.1 Sand cast iron S and S as per IS:1729 18.50.1.2 Sand cast iron S and S as per IS:3989 18.50.1.3 Hubless centrifugally cast (spun) iron epoxy coated inside & outside as per IS:15905 18.50.2 75x75x75 mm. 18.50.2.1 Sand cast iron S and S as per IS:1729 18.50.2.2 Sand cast iron S and S as per IS:3989 18.50.2.3 Hubless centrifugally cast (spun) iron epoxy coated inside & outside as per IS:15905	each each each each each each	627.25 620.55 567.00 528.45 477.60 383.95
18.51	Providing and fixing double unequal invert branch of required degree : 18.51.1 100x100x75x75 mm. 18.51.1.1 Sand cast iron S and S as per IS:1729 18.51.1.2 Sand cast iron S and S as per IS:3989	each each	848.00 1021.90
18.52	Providing and fixing single unequal plain invert branch of required degree : 18.52.1 100x100x75 mm. 18.52.1.1 Sand cast iron S and S as per IS:1729 18.52.1.2 Sand cast iron S and S as per IS:3989 18.52.1.3 Hubless centrifugally cast (spun) iron epoxy coated inside & outside as per IS:15905	each each each	714.20 781.10 620.55
18.53	Providing and fixing sand cast iron S and S off sets as per IS:1729: 18.53.1 76 mm off sets.		

18.0 (Sanitary Installation)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	18.53.1.1 With 75 mm dia. pipe	each	330.45
	18.53.1.2 With 100 mm dia. pipe	each	517.75
	18.53.2 114 mm off sets.		
	18.53.2.1 With 75 mm dia. pipe	each	460.00
	18.53.2.2 With 100 mm dia. pipe	each	567.00
	18.53.3 152 mm off sets.		
	18.53.3.1 With 75 mm dia. pipe	each	541.65
	18.53.3.2 With 100 mm dia. pipe	each	675.45
18.53A	Providing and fixing Hubless centrifugally cast iron offsets epoxy coated inside & outside as per IS:15905		
	18.53A.1 65 mm offsets		
	18.53A.1.1 With 100 mm dia pipe	each	517.75
	18.53A.1.2 With 75 mm dia pipe	each	430.80
18.54	Providing and fixing sand cast (spun) iron S and S off sets as per IS:3989:		
	18.54.1 75 mm off sets.		
	18.54.1.1 With 75 mm dia. pipe	each	343.80
	18.54.2 150 mm off sets.		
	18.54.2.1 With 75 mm dia. pipe	each	455.30
	18.53.2.2 With 100 mm dia. pipe	each	589.10
18.54A	Providing and fixing Hubless centrifugally cast iron offsets epoxy coated inside & outside as per IS:15905		
	18.54A.1 130 mm offsets		
	18.54A.1.1 With 100 mm dia	each	633.90
	18.54A.1.2 With 75 mm dia	each	450.85
18.55	Providing and fixing door piece, insertion rubber washer 3 mm thick, bolts and nuts complete :		
	18.55.1 100 mm.		
	18.55.1.1 Sand cast iron S and S as per IS:1729	each	727.55
	18.55.1.2 Sand cast iron S and S as per IS:3989	each	627.25
	18.55.2 75 mm.		
	18.55.2.1 Sand cast iron S and S as per IS:1729	each	444.15
	18.55.2.2 Sand cast iron S and S as per IS:3989	each	464.25
18.56	Providing and fixing terminal guard :		
	18.56.1 100 mm.		
	18.56.1.1 Sand cast iron S and S as per IS:1729	each	382.40
	18.56.1.2 Sand cast iron S and S as per IS:3989	each	446.60
	18.56.1.3 Hubless centrifugally cast (spun) iron epoxy coated inside & outside as per IS:15905	each	406.45
	18.56.2 75 mm.		
	18.56.2.1 Sand cast iron S and S as per IS:1729	each	305.00
	18.56.2.2 Sand cast iron S and S as per IS:3989	each	317.05
18.57	Providing and fixing collar :		
	18.57.1 100 mm.		
	18.57.1.1 Sand cast iron S and S as per IS:1729	each	406.45
	18.57.1.2 Sand cast iron S and S as per IS:3989	each	446.60
	18.57.2 75 mm.		
	18.57.2.1 Sand cast iron S and S as per IS:1729	each	276.90
	18.57.2.2 Sand cast iron S and S as per IS:3989	each	276.90
18.57A	Providing and fixing shielded coupling for Hubless centrifugally cast iron pipe		
	18.57A.1 100 mm dia		
	18.57A.1.1 SS 304 grade coupling with EPDM rubber gasket	each	413.15
	18.57A.2 75 mm dia		

18.0 (Sanitary Installation)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	18.57A.2.1 SS 304 grade coupling with EPDM rubber gasket	each	370.60
18.58	Providing lead caulked joints to sand cast iron / centrifugally cast (spun) iron pipes and fittings of diameter: 18.58.1 100 mm. 18.58.2 75 mm. 18.58.3 50 mm.	each each each	530.90 450.20 363.90
18.59	Providing and fixing M.S. stays and clamps for sand cast iron/ centrifugally cast (spun) iron pipes of diameter : 18.59.1 100 mm. 18.59.2 75 mm. 18.59.3 50 mm.	each each each	138.90 103.00 78.55
18.60	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 : 18.60.1 100 mm inlet and 100 mm outlet 18.60.1.1 Sand cast iron S and S as per IS:3989 18.60.1.2 Sand cast iron S and S as per IS:1729 18.60.1.3 Hubless centrifugally cast (spun) iron epoxy coated inside & outside as per IS:15905 18.60.2 100 mm inlet and 75 mm outlet 18.60.2.1 Sand cast iron S and S as per IS:3989 18.60.2.2 Sand cast iron S and S as per IS:1729 18.60.2.3 Hubless centrifugally cast (spun) iron epoxy coated inside & outside as per IS:15905 Note: Sand Cast Iron S and S pipes shall not be used except for minor works due to non availability of Centrifugally cast (Spun) Iron S and S pipes.	each each each each each each	1556.40 1362.40 767.70 1623.30 1255.40 560.35
18.61	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 coarse sand: 6 graded stone aggregate 12.5 mm nominal size) including necessary plaster and pointing in cement mortar 1:4 (1 cement :4 coarse sand): 18.61.1 100 mm dia. 18.61.2 75 mm dia. 18.61.3 50 mm dia.	meter meter meter	552.10 395.45 257.05
18.62	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	819.95
18.63	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	568.55
18.64	Re-painting 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	245.00
18.65	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 : 18.65.1 100 mm diameter pipe. 18.65.2 75 mm diameter pipe.	meter meter	69.90 53.30
18.66	Repainting sand cast iron/centrifugally cast iron (spun) iron, soil, waste, vent pipes and fittings with one coat of synthetic enamel paint of any		

18.0 (Sanitary Installation)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	colour such as chocolate, grey or buff etc: 18.66.1 100 mm diameter pipe. 18.66.2 75 mm diameter pipe.	meter meter	34.10 25.55
18.67	Repainting bath tub of size 1700x730x430mm with enamel paint.	each	677.05
18.68	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 and lid with C.P. brass hinges and rubber buffers, 10 liter low level flushing cistern with fitting and brackets, 40 mm flush bend, 20 mm overflow 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: 18.68.1 White vitreous china dual purpose WC pan with white solid plastic seat lid with white vitreous china flushing cistern and C.P. flush bend	each	11468.75
18.69	Providing and fixing PTMT Waste Coupling for wash basin and sink, of approved quality and colour: 18.69.1 Waste coupling 31mm of 79 mm length and 62 mm breadth weighing not less than 45gms. 18.69.2 Waste coupling 38mm of 83 mm length and 77 mm breadth weighing not less than 60gms.	each each	160.15 188.25
18.70	Providing and fixing PTMT Bottle Trap for Wash basin and sink: 18.70.1 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 25 mm minimum water seal, weighing not less than 260 gms. 18.70.2 Bottle trap 38 mm single piece moulded with height of 270 mm, effective length of tail pipe 260mm from the centre of the waste coupling 77 mm breadth with 25 mm minimum water seal, weighing not less than 263 gms.	each each	596.30 623.10
18.71	Providing and fixing PTMT liquid soap container 109 mm wide, 125 mm high and 112 mm distance from wall of standard shape with brackets of the same materials with snap fittings of approved quality and colour, weighing not less than 105 gms.	each	287.50
18.72	Providing and fixing PTMT towel ring trapezoidal shape 215 mm long, 200 mm wide with a minimum distance of 37 mm from wall face with concealed fittings arrangements of approved quality and colour, weighing not less than 88 gms.	each	248.45
18.73	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: 18.73.1 450 mm long towel rail with total length of 495 mm, 78 mm wide and effective height of 88 mm, weighing not less than 170 gms. 18.73.2 600 mm long towel rail with total length of 645 mm, 78 mm wide and effective height of 88 mm, weighing not less than 190 gms.	each each	731.25 803.50
18.74	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	835.65
18.75	Providing and fixing PTMT 15 mm Urinal spreader size 95x69x100 mm with ½" BSP thread and shapes, weighing not less than 60 gms	each	196.55
18.76	Providing and fixing PTMT urinal cock of approved quality and colour : 18.76.1 15 mm nominal bore, 80 mm long, 42mm high and 30 mm wide with BSP female threads weighing not less than 48 gms	each	180.80

18.0 (Sanitary Installation)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
18.77	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 50x5mm 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 with the help of 30mm x 1.6mm galvanized M.S. flats of specified shape and of total length 420mm and shall be fixed with M.S. nuts, bolts and washers of size 25x6mm, one bolt on each side of the pipe. 18.77.1 Total bracket length 580mm of approved shape and design (for single 100mm dia pipe) 18.77.2 Total bracket length 810mm of approved shape and design (for two 100mm dia pipes) 18.77.3 Total bracket length 1040mm of approved shape and design (for three 100 mm dia pipes)	each each each	293.00 368.45 443.80
18.78	Providing and fixing white vitreous china extended wall mounting water closet of size 780x370x690 mm of approved shape including providing and fixing white vitreous china cistern with dual flush fitting, of flushing capacity 3 liter/6 liter (adjustable to 4 liter/8 liters), including seat cover, and cistern fittings, nuts, bolts and gasket etc complete.	each	14487.20
18.79	Providing & fixing white vitreous china water less urinal of size 600 x 330 x 315 mm having antibacterial /germs free ceramic surface, fixed with cartridge having debris catcher and hygiene seal.	each	17165.05
18.80	Providing and fixing white vitreous china battery based infrared sensor operated urinal of approx. size 610 x 390 x 370 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 manufacturers specification and direction of Engineer-in-charge.	each	6929.85
18.81	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 flushing 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 directions of Engineer-in-Charge.	each	21554.20

SUB HEAD: 19.0
WATER SUPPLY

19.0 (Water Supply)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
19.1	<u>PE-AL-PE COMPOSITE PRESSURE PIPES AND FITTINGS</u> Providing and fixing Polyethylene- Aluminum- Polyethylene (PE-AL-PE) Composite Pressure Pipes conforming to IS: 15450, U.V. stabilized with carbon black having thermal stability for hot and cold water supply, capable to withstand temperature upto 80°C, including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. Elbows, tees, reducers, couplers and connectors etc. This includes testing of joints complete as per direction of the Engineer-in-charge:		
	19.1.1 Internal work-exposed on wall with clamps at 1.00 meter spacing		
	19.1.1.1 1216 (16mm OD) pipe	meter	289.30
	19.1.1.2 1620 (20mm OD) pipe	meter	322.40
	19.1.1.3 2025 (25mm OD) pipe	meter	425.10
	19.1.1.4 2532 (32mm OD) pipe	meter	518.80
	19.1.1.5 3240 (40mm OD) pipe	meter	749.95
	19.1.1.6 4050 (50mm OD) pipe	meter	889.10
	19.1.2 Internal work concealed with clamps at 1.00 meter spacing including cutting the chases and making good the wall etc.		
	19.1.2.1 1216 (16mm OD) pipe	meter	492.35
	19.1.2.2 1620 (20mm OD) pipe	meter	515.70
	19.1.2.3 2025 (25mm OD) pipe	meter	632.85
	19.1.2.4 2532 (32mm OD) pipe	meter	726.50
	19.1.3 External work including trenching and refilling etc. complete		
	19.1.3.1 1216 (16mm OD) pipe	meter	257.25
	19.1.3.2 1620 (20mm OD) pipe	meter	274.65
	19.1.3.3 2025 (25mm OD) pipe	meter	361.65
	19.1.3.4 2532 (32mm OD) pipe	meter	431.20
	19.1.3.5 3240 (40mm OD) pipe	meter	626.35
	19.1.3.6 4050 (50mm OD) pipe	meter	765.50
19.2	<u>PP-R PIPES AND FITTINGS</u> Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes conforming to IS: 15801, UV stabilized and anti-microbial fusion welded, having thermal stability for hot and cold water supply including all PP-R plain and brass threaded Polypropylene random fittings. This includes testing of joints complete as per direction of Engineer-in-charge.		
	19.2.1 Internal work-exposed on wall with clamps at 1.00 meter spacing		
	19.2.1.1 PN-16 pipe, 16mm OD(SDR-7.4)	meter	205.80
	19.2.1.2 PN-16 pipe , 20mm OD(SDR-7.4)	meter	240.65
	19.2.1.3 PN-16 pipe , 25mm OD(SDR-7.4)	meter	298.10
	19.2.1.4 PN-16 pipe , 32mm OD(SDR-7.4)	meter	377.50
	19.2.1.5 PN-16 pipe , 40mm OD(SDR-7.4)	meter	512.20
	19.2.1.6 PN-10 pipe , 50mm OD(SDR-11)	meter	650.70
	19.2.2 Internal work Concealed fixing the pipe with clamps at 1.00 meter spacing including cutting chases and making good the wall etc.		
	19.2.2.1 PN-16 pipe, 16mm OD(SDR-7.4)	meter	379.95
	19.2.2.2 PN-16 pipe , 20mm OD(SDR-7.4)	meter	405.70
	19.2.2.3 PN-16 pipe , 25mm OD(SDR-7.4)	meter	461.90
	19.2.2.4 PN-16 pipe , 32mm OD(SDR-7.4)	meter	519.75
	19.2.3 External work including trenching, refilling etc.		
	19.2.3.1 PN-16 pipe, 16mm OD (SDR-7.4)	meter	169.50

19.0 (Water Supply)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	19.2.3.2 PN-16 pipe , 20mm OD (SDR-7.4) 19.2.3.3 PN-16 pipe , 25mm OD (SDR-7.4) 19.2.3.4 PN-16 pipe , 32mm OD (SDR-7.4) 19.2.3.5 PN-16 pipe, 40mm OD (SDR-7.4) 19.2.3.6 PN-10 pipe , 50mm OD (SDR-11) 19.2.3.7 PN-10 pipe , 63mm OD (SDR-11) 19.2.3.8 PN-10 pipe , 75mm OD (SDR-11) 19.2.3.9 PN-10 pipe , 90mm OD (SDR-11) 19.2.3.10 PN-10 pipe , 110mm OD (SDR-11) 19.2.3.11 PN-10 pipe , 160mm OD (SDR-11)	meter meter meter meter meter meter meter meter meter meter meter	187.15 236.65 300.90 399.45 543.95 626.20 844.55 1193.35 1658.95 4488.30
19.2A	Providing and fixing PPR Unions 19.2A.1 PPR Union 20mm 19.2A.2 PPR Union 25mm 19.2A.3 PPR Union 32mm 19.2A.4 PPR Union 40mm 19.2A.5 PPR Union 50mm 19.2A.6 PPR Union 63mm 19.2A.7 PPR Union 75mm	each each each each each each each	286.35 353.25 406.80 500.45 754.65 941.95 1677.85
19.3	<u>CPVC PIPES AND FITTINGS</u> Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot and cold water supply, including all CPVC plain and brass threaded fittings. This includes jointing of pipes and fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer-in-charge. 19.3.1 Internal work-exposed on wall, including fixing the pipe with clamps at 1.00 meter spacing 19.3.1.1 15mm nominal outer dia pipes. 19.3.1.2 20mm nominal outer dia pipes. 19.3.1.3 25mm nominal outer dia pipes. 19.3.1.4 32mm nominal outer dia pipes. 19.3.1.5 40mm nominal outer dia pipes. 19.3.1.6 50mm nominal outer dia pipes. 19.3.2 Internal work Concealed fixing the pipe with clamps at 1.00 meter spacing including cutting chases and making good the wall etc. 19.3.2.1 15mm nominal outer dia pipes. 19.3.2.2 20mm nominal outer dia pipes. 19.3.2.3 25mm nominal outer dia pipes. 19.3.2.4 32mm nominal outer dia pipes. 19.3.3 External work including trenching, refilling etc. 19.3.3.1 15mm nominal outer dia pipes. 19.3.3.2 20mm nominal outer dia pipes. 19.3.3.3 25mm nominal outer dia pipes. 19.3.3.4 32mm nominal outer dia pipes. 19.3.3.5 40mm nominal outer dia pipes. 19.3.3.6 50mm nominal outer dia pipes. 19.3.3.7 62.50mm nominal outer dia pipes. 19.3.3.8 75mm nominal outer dia pipes. 19.3.3.9 100mm nominal outer dia pipes. 19.3.3.10 150mm nominal outer dia pipes.	meter meter meter meter meter meter meter meter meter meter meter meter meter meter meter meter meter meter meter meter	251.10 320.70 402.45 492.70 663.00 915.20 419.75 492.35 602.40 691.35 203.35 257.25 350.00 416.10 539.40 791.60 1552.75 1967.55 2779.90 5824.20
19.4	<u>G.I. PIPES AND FITTINGS</u> Providing and fixing G.I. pipes complete with G.I. fittings and clamps, including cutting and making good the walls etc.: 19.4.1 Internal work-Exposed on wall 19.4.1.1 15 mm dia. nominal bore	Rate per METER <u>A</u> <u>Light</u> 329.80	<u>B</u> <u>Medium</u> 360.55

19.0 (Water Supply)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	19.4.1.2 20 mm dia. nominal bore	400.45	431.20
	19.4.1.3 25 mm dia. nominal bore	498.95	529.70
	19.4.1.4 32 mm dia. nominal bore	603.85	634.65
	19.4.1.5 40 mm dia. nominal bore	706.95	768.50
	19.4.1.6 50 mm dia. nominal bore	874.40	1182.15
	19.4.2 Concealed pipe including painting with anti corrosive bitumastic paint, cutting chases and making good the wall:		
	19.4.2.1 15 mm dia. nominal bore	meter	498.30
	19.4.2.2 20 mm dia. nominal bore	meter	555.85
19.5	Laying and fitting of G.I. pipes (all classes) complete excluding cost of pipes, fittings and Earth work.		
	19.5.1 15 mm and 20 mm dia. G.I. pipes	meter	22.25
	19.5.2 25 mm and 32 mm dia. G.I. pipes	meter	33.70
	19.5.3 40 mm and 50 mm dia. G.I. pipes	meter	44.85
	19.5.4 65 mm and 80 mm dia. G.I. pipes	meter	80.30
	19.5.5 100 mm and 150 mm dia. G.I. pipes	meter	118.45
19.6	Providing and fixing G.I. pipes complete with G.I. fittings excluding trenching and refilling etc. (external work)	Rate per METER	
		A	B
		Light	Medium
	19.6.1 15 mm dia. nominal bore	179.20	206.50
	19.6.2 20 mm dia. nominal bore	227.90	255.20
	19.6.3 25 mm dia. nominal bore	311.95	339.25
	19.6.4 32 mm dia. nominal bore	384.00	411.30
	19.6.5 40 mm dia. nominal bore	434.65	489.25
	19.6.6 50 mm dia. nominal bore	532.80	805.70
	19.6.7 65 mm dia. nominal bore	745.10	1018.05
	19.6.8 80 mm dia. nominal bore	878.25	1151.20
	19.6.9 100 mm dia. nominal bore	1255.15	1434.00
	19.6.10 150 mm dia. nominal bore	NA	2256.90
19.7	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		
	19.7.1 25 to 40 mm nominal bore	each	730.25
	19.7.2 50 to 80 mm nominal bore	each	1387.25
19.8	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	640.60
19.9	Providing and fixing brass bib cock of approved quality.		
	19.9.1 15 mm nominal bore	each	334.70
	19.9.2 20 mm nominal bore	each	372.90
19.10	Providing and fixing brass stop cock of approved quality.		
	19.10.1 15 mm nominal bore	each	334.70
	19.8.10 20 mm nominal bore	each	379.60
19.11	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end)		
	19.11.1 25 mm nominal bore	each	691.70
	19.11.1A 20 mm nominal bore	each	513.40
	19.11.2 32 mm nominal bore	each	750.00
	19.11.3 40 mm nominal bore	each	834.60
	19.11.4 50 mm nominal bore	each	986.15
	19.11.5 65 mm nominal bore	each	1646.05
	19.11.6 80 mm nominal bore	each	2605.15
19.12	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete		

19.0 (Water Supply)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	19.12.1 15 mm nominal bore	each	453.50
	19.12.2 20 mm nominal bore	each	524.85
	19.12.3 25 mm nominal bore	each	569.45
19.13	Providing and fixing gun metal non-return valve of approved quality (screwed end)	Rate for each	
		Horizontal	Vertical
	19.13.1 25 mm nominal bore	593.80	640.60
	19.13.2 32 mm nominal bore	765.35	1140.00
	19.13.3 40 mm nominal bore	963.70	1298.20
	19.13.4 50 mm nominal bore	1503.65	1798.00
	19.13.5 65 mm nominal bore	2337.55	2832.60
	19.13.6 80 mm nominal bore	3479.55	3546.45
19.14	Providing and fixing brass ferrule with C.I. mouth cover including boring and tapping the main		
	19.14.1 15 mm nominal bore	each	348.85
	19.14.2 20 mm nominal bore	each	412.05
	19.14.3 25 mm nominal bore	each	527.90
19.15	Providing and fixing uplasticized PVC connection pipe with brass unions		
	19.15.1 30 cm length		
	19.15.1.1 15 mm nominal bore	each	107.75
	19.15.1.2 20 mm nominal bore	each	121.15
	19.15.2 45 cm length		
	19.15.2.1 15 mm nominal bore	each	118.80
	19.15.2.2 20 mm nominal bore	each	132.20
19.16	Providing and fixing C.P. brass shower rose with 15 or 20 mm inlet		
	19.16.1 100 mm diameter	each	544.40
	19.16.2 150 mm diameter	each	722.70
19.17	<u>C.I. / DUCTILE IRON PIPES AND SPECIALS</u>		
	Laying in position centrifugally cast (spun) iron S&S or flanged pipes (excluding cost of pipe)	quintal	270.10
19.18	Laying in position S&S or flanged C.I. special such as tees, bends, collars, tapers and caps etc. (excluding cost of specials)	quintal	511.55
19.19	Providing and laying S&S C.I. standard specials such as tees, bends, collars, tapers, caps etc (Heavy class)		
	19.19.1 Up to 300 mm dia.	quintal	5729.50
	19.19.2 Over 300 mm dia.	quintal	5863.30
19.20	Providing and laying flanged C.I. standard specials such as tees, bends, collars, tapers, caps etc., suitable for flanged jointing as per IS : 1538		
	19.20.1 Up to 300 mm dia.	quintal	8539.20
	19.20.2 Over 300 mm dia.	quintal	8806.75
19.21	Providing and laying S&S centrifugally cast (spun) iron pipes (Class LA) conforming to IS - 1536 :		
	19.21.1 100 mm dia. pipe	meter	1200.10
	19.21.2 125 mm dia. pipe	meter	1497.25
	19.21.3 150 mm dia. pipe	meter	1807.55
	19.21.4 200 mm dia. pipe	meter	3057.30
	19.21.5 250 mm dia. pipe	meter	3994.00
	19.21.6 300 mm dia. pipe	meter	5381.35
	19.21.7 350 mm dia. pipe	meter	6458.40
	19.21.8 400 mm dia. pipe	meter	8493.70
	19.21.9 450 mm dia. pipe	meter	10284.00
	19.21.10 500 mm dia. pipe	meter	11945.80
	19.21.11 600 mm dia. pipe	mete	16686.00
19.22	Providing lead caulked joints to spun iron or C.I. pipes and specials including testing of joints but excluding the cost of pig lead		

19.0 (Water Supply)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	19.22.1 100 mm dia. pipe	each	398.00
	19.22.2 125 mm dia. pipe	each	588.55
	19.22.3 150 mm dia. pipe	each	595.95
	19.22.4 200 mm dia. pipe	each	791.95
	19.22.5 250 mm dia. pipe	each	990.00
	19.22.6 300 mm dia. pipe	each	1192.40
	19.22.7 350 mm dia. pipe	each	1217.15
	19.22.8 400 mm dia. Pipe	each	1599.10
	19.22.9 450 mm dia. pipe	each	1793.45
	19.22.10 500 mm dia. pipe	each	1896.75
	19.22.11 600 mm dia. pipe	each	2568.55
19.23	Supplying pig lead at site of work.	quintal	26758.75
19.24	Providing flanged joints to double flanged C.I. / D.I pipes and specials including testing to joints.		
	19.24.1 80 mm dia. pipe	each	175.70
	19.24.2 100 mm dia. pipe	each	276.70
	19.24.3 125 mm dia. pipe	each	296.75
	19.24.4 150 mm dia. pipe	each	357.25
	19.24.5 200 mm dia. pipe	each	409.45
	19.24.6 250 mm dia. pipe	each	570.60
	19.24.7 300 mm dia. pipe	each	590.70
	19.24.8 350 mm dia. pipe	each	743.85
	19.24.9 400 mm dia. pipe	each	988.65
	19.24.10 450 mm dia. pipe	each	1196.65
	19.24.11 500 mm dia. pipe	each	1350.85
	19.24.12 600 mm dia. pipe	each	1573.55
19.25	<u>C.I. SLUICE VALVES, FIRE HYDRANTS AND FIXTURES</u> Providing and fixing C.I. sluice valves (with cap) complete with bolts, nuts, rubber insertions etc. (the tail pieces if required will be paid separately).		
	19.25.1 100 mm dia.		
	19.25.1.1 Class I	each	4057.95
	19.25.1.2 Class II	each	4453.85
	19.25.2 125 mm dia.		
	19.25.2.1 Class I	each	4373.50
	19.25.2.2 Class II	each	5358.10
	19.25.3 150 mm dia.		
	19.25.3.1 Class I	each	5968.85
	19.25.3.2 Class II	each	6642.55
	19.25.4 200 mm dia.		
	19.25.4.1 Class I	each	11608.75
	19.25.4.2 Class II	each	13496.45
	19.25.5 250 mm dia.		
	19.25.5.1 Class I	each	16752.05
	19.25.5.2 Class II	each	22386.30
	19.25.6 300 mm dia.		
	19.25.6.1 Class I	each	23159.45
	19.25.6.2 Class II	each	27485.30
19.26	Constructing masonry Chamber 30x30x50 cm inside, in brick work in cement mortar 1:4 (1cement :4 coarse sand) for stop cock, with C.I. surface box 100x100x75 mm (inside) with hinged cover fixed in cement concrete slab 1:1.5:3 mix (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size) including necessary excavation, foundation concrete 1:5:10 (1 cement :5 fine sand : 10 graded stone		

19.0 (Water Supply)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design. 19.26.1 With common burnt clay (non modular) bricks of class designation 7.5	each	1735.00
19.27	Constructing masonry Chamber of specified size, in brick work with common burnt clay (non modular) bricks of class designation 7.5 in cement mortar 1:4 (1cement :4 coarse sand) and R.C.C. top slab 1:1.5:3 mix (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size) including necessary 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) 12 mm thick finished with a floating coat of neat cement complete as per standard design. 19.27.1 For sluice valve, with C.I. surface box 100 mm top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid. 19.27.1.1 Chamber 60x60x75 cm 19.27.1.2 Chamber 90x90x100 cm 19.27.1.3 Chamber 120x120x100 cm 19.27.2 For fire hydrant, with C.I. surface box 350x350 mm top and 165 mm deep (inside) with chained lid. 19.27.2.1 Chamber 60x60x75 cm 19.27.3 For water meter complete with C.I. double flap surface box 400x200x200 mm (inside) with locking arrangements 19.27.3.1 Chamber 60x45x50 cm	each each each each each	10602.80 18498.20 25556.25 9771.55 9311.85
19.28	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. 19.28.1 15 mm diameter pipe. 19.28.2 20 mm diameter pipe. 19.28.3 25 mm diameter pipe. 19.28.4 32 mm diameter pipe. 19.28.5 40 mm diameter pipe. 19.28.6 50 mm diameter pipe.	meter meter meter meter meter meter	17.00 20.20 26.45 31.50 37.20 44.15
19.29	Repainting G.I. pipes and fittings with synthetic enamel white paint with one coat of approved quality. 19.29.1 15 mm diameter pipe. 19.29.2 20 mm diameter pipe. 19.29.3 25 mm diameter pipe. 19.29.4 32 mm diameter pipe. 19.29.5 40 mm diameter pipe. 19.29.6 50 mm diameter pipe.	meter meter meter meter meter meter	8.55 10.05 12.80 15.25 17.70 20.95
19.30	Painting G.I. Pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality. 19.30.1 15 mm diameter pipe. 19.30.2 20 mm diameter pipe. 19.30.3 25 mm diameter pipe. 19.30.4 32 mm diameter pipe. 19.30.5 40 mm diameter pipe. 19.30.6 50 mm diameter pipe. 19.30.7 65 mm diameter pipe. 19.30.8 80 mm diameter pipe.	meter meter meter meter meter meter meter meter	10.30 12.25 15.65 18.75 21.30 25.55 31.60 36.65
19.31	Providing and filling sand of coarser grade around the G.I. pipes in		

19.0 (Water Supply)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	external work.		
	19.31.1 15 mm diameter pipe.	meter	87.20
	19.31.2 20 mm diameter pipe.	meter	88.35
	19.31.3 25 mm diameter pipe.	meter	90.70
	19.31.4 32 mm diameter pipe.	meter	93.10
	19.31.5 40 mm diameter pipe.	meter	94.25
	19.31.6 50 mm diameter pipe.	meter	97.80
	19.31.7 65 mm diameter pipe.	meter	154.35
	19.31.8 80 mm diameter pipe.	meter	159.05
	19.31.9 100 mm diameter pipe.	meter	168.50
	19.31.10 150 mm diameter pipes.	meter	250.95
19.32	Boring with 100 mm diameter casing pipe for hand pump/tube well in all soil except ordinary hard rock requiring blasting including removing the casing pipe after the hand pipe / tube well is lowered and tested.		
	19.34.1 Upto 6 meters depth.	meter	545.00
	19.34.2 Beyond 6 meter and upto 12 meter depth	meter	644.55
	19.34.3 Beyond 12 meter and upto 18 meter depth	meter	747.20
19.33	Providing and placing in position filters of 40 mm diameter G.I. pipe with brass strainer of approved quality.	meter	810.70
19.34	Providing and fixing to filters and lowering to proper levels 40 mm G.I. pipe for tube well including cleaning and priming the tube well.	meter	540.20
19.35	Providing and placing in position hand pump of approved quality for 40 mm diameter G.I. pipe complete with all accessories.	each	1226.80
19.36	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (new work)		
	19.36.1 15 mm nominal bore	each	264.25
	19.36.2 20 mm nominal bore	each	288.30
	19.36.3 25 mm nominal bore	each	320.40
	19.36.4 32 mm nominal bore	each	380.65
	19.36.5 40 mm nominal bore	each	420.75
	19.36.6 50 mm nominal bore	each	611.25
	19.36.7 65 mm nominal bore	each	908.25
	19.36.8 80 mm nominal bore	each	1100.90
19.37	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.		
	19.37.1 15 mm nominal bore	each	664.25
	19.37.2 20 mm nominal bore	each	688.35
	19.37.3 25 mm nominal bore	each	720.45
	19.37.4 32 mm nominal bore	each	780.65
	19.37.5 40 mm nominal bore	each	820.80
	19.37.6 50 mm nominal bore	each	1156.70
	19.37.7 65 mm nominal bore	each	1453.75
	19.37.8 80 mm nominal bore	each	1646.40
19.38	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	per liter capacity	8.75
19.38A	Providing and fixing rectangular high density polyethylene water storage loft tank with cover, conforming to ISI: 12701, 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 i/c fittings & fixtures for tank shall be paid separately.	per liter capacity	8.75

19.0 (Water Supply)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
19.39	<u>C.P. BRASS FITTINGS</u> Providing and fixing 15 mm nominal bore C.P. brass bib cock of approved quality conforming to IS : 8931	each	583.25
19.40	Providing and fixing 15 mm nominal bore C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms.	each	712.60
19.41	Providing and fixing 15 mm nominal bore C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms	each	704.80
19.42	Providing and fixing 15 mm nominal bore C.P. stop cock (concealed) of standard design and of approved make conforming to IS : 8931	each	690.30
19.43	Providing and fixing 15 mm nominal bore C.P. brass angle valve for basin mixer and geyser points of approved make conforming to IS : 8931	each	582.35
19.43A	Providing and fixing C.P. Brass extension nipple (size 15mmx50mm) of approved make and quality as per direction of Engineer-in-charge.	each	69.85
19.44	Providing and fixing 15 mm nominal bore of standard back type C.P. brass close hole basin mixer pillar tap of approved quality and make, weighing not less than 1.970 kg.	each	2072.10
19.45	<u>P.T.M.T. FITTING :</u> Providing and fixing PTMT bib cock of approved quality and colour. 19.45.1 15 mm nominal bore, 86 mm long, weighing not less than 88 gms. 19.45.2 15 mm nominal bore 122 mm long, weighing not less than 99 gms. 19.45.3 15 mm nominal bore, 165 mm long, weighing not less than 110 gms. 19.45.4 15 mm nominal bore, 90 mm long, weighing not less than 93 gms	each each each each	196.90 262.45 310.00 211.60
19.46	Providing and fixing PTMT stop cock of approved quality and color. 19.46.1 15 mm nominal bore, 86 mm long, weighing not less than 88 gms. 19.46.2 20 mm nominal bore 89 mm long, weighing not less than 88 gms. 19.46.3 Concealed stop cock, 15 mm nominal bore, 108 mm long, weighing not less than 108 gms.	each each each	203.55 234.35 290.55
19.47	Providing and fixing PTMT pillar cock of approved quality and colour. 19.47.1 15 mm nominal bore, 107 mm long, weighing not less than 110 gms. 19.47.2 15 mm nominal bore 125 mm long foam flow, weighing not less than 120 gms.	each each	295.30 331.45
19.48	Providing and fixing PTMT, push cock of approved quality and colour. 19.48.1 15 mm nominal bore, 98 mm long, weighing not less than 75 gms. 19.48.2 12 mm nominal bore, 80 mm long, weighing not less than 46 gms.	each each	163.45 203.55
19.49	Providing and fixing PTMT grating of approved quality and colour. 19.49.1 Circular type 19.49.1.1 100 mm nominal dia. 19.49.1.2 125 mm nominal dia with 25mm waste hole 19.49.2 Rectangular type with open able circular lid. 19.49.2.1 150 mm nominal size square 100 mm diameter of the inner hinged round grating.	each each each	51.40 47.35 187.85

19.0 (Water Supply)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
19.50	<u>AIR VALVE AND WATER METER (BULK TYPE)</u> Providing and fixing C.I. double acting air valve of approved quality with bolts, nuts, rubber insertions etc. complete (The tail pieces, tapers etc. if required will be paid separately). 19.50.1 50 mm dia. 19.50.2 80 mm dia. 19.50.3 100 mm dia.	each each each	5159.20 6242.90 8201.30
19.51	Providing and fixing enclosed type water meter (bulk type) conforming to IS : 2373 and tested by Municipal Board complete with bolts, nuts, rubber insertions etc. (The tail pieces if required will be paid separately) 19.51.1 80 mm dia. nominal bore 19.51.2 100 mm dia. nominal bore 19.51.3 150 mm dia. nominal bore 19.51.4 200 mm dia. nominal bore	each each each each	3632.70 5367.30 7829.00 8572.25
19.52	Providing and fixing C.I dirt box strainer for bulk type water meter with nuts, bolts, rubber insertions etc. Complete conforming to IS: 2373. 19.52.1 80mm dia 19.52.2 100mm dia 19.52.3 150mm dia 19.52.4 200mm dia	each each each each	4067.50 6574.10 8344.10 11682.95
19.53	Providing and fixing PTMT Ball cock of approved quality, colour and make complete with epoxy coated aluminium rod with L.P/H.P.H.D plastic balls. 19.53.1 15mm nominal bore, 105mm long, weighing not less than 138gms. 19.53.2 20mm nominal bore, 120mm long, weighing not less than 198gms. 19.53.3 25mm nominal bore, 152mm long, weighing not less than 440gms. 19.53.4 40mm nominal bore, 206mm long, weighing not less than 690 gms 19.53.5 50mm nominal bore, 242mm long, weighing not less than 1240gms.	each each each each each	343.80 496.75 871.80 1385.55 1997.00
19.54	Providing and fixing PTMT angle stop cock 15mm nominal bore, weighing not less than 85gms.	each	233.00
19.55	Providing and fixing PTMT swivelling shower, 15mm nominal bore, weighing not less than 40gms.	each	209.90
19.56	Providing and fixing PTMT soap dish holder having length of 138mm, breadth 102mm, height of 75mm with concealed fitting arrangements, weighing not less than 106gms.	each	230.00
19.57	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 19.57.1 Upto 300 mm dia. 19.57.2 Above 300 mm dia.	quintal quintal	7455.45 8806.75
19.58	Providing and laying S&S C.I. Standard specials suitable for mechanical jointing as per IS : 13382 19.58.1 Upto 300 mm dia. 19.58.2 Above 300 mm dia.	quintal quintal	11979.00 12617.20
19.59	Providing and laying D.I. Specials of Class K-12 suitable for push-on jointing as per IS : 9523 19.59.1 Upto 600 mm dia. 19.59.2 Above 600 mm dia.	quintal quintal	17102.00 23524.10

19.0 (Water Supply)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
19.60	Providing and laying D.I. Specials of Class K-12 suitable for mechanical jointing as per IS : 9523		
19.60.1	Upto 600 mm dia.	quintal	17971.65
19.60.2	Above 600 mm dia.	quintal	25597.90
19.61	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.		
19.61.1	100 mm dia pipes	each	94.80
19.61.2	150 mm dia pipes	each	150.35
19.61.3	200 mm dia pipes	each	221.90
19.61.4	250 mm dia pipes	each	270.65
19.61.5	300 mm dia pipes	each	346.20
19.61.6	350 mm dia pipes	each	367.60
19.61.7	400 mm dia pipes	each	564.20
19.61.8	450 mm dia pipes	each	653.10
19.61.9	500 mm dia pipes	each	697.55
19.61.10	600 mm dia pipes	each	936.55
19.61.11	650 mm dia pipes	each	1227.55
19.61.12	700 mm dia pipes	each	1347.95
19.61.13	800 mm dia pipes	each	1545.10
19.61.14	900 mm dia pipes	each	1913.50
19.61.15	1000 mm dia pipes	each	2223.80
19.62	Providing and laying Double Flanged (screwed / welded) Centrifugally (Spun) Cast Iron, Class B (IS : 1536)		
19.62.1	100 mm dia C.I. Double Flanged Pipe	meter	1825.65
19.62.2	150 mm dia C.I. Double Flanged Pipe	meter	2859.50
19.62.3	200 mm dia C.I. Double Flanged Pipe	meter	4504.05
19.62.4	250 mm dia C.I. Double Flanged Pipe	meter	5455.30
19.62.5	300 mm dia C.I. Double Flanged Pipe	meter	6973.40
19.62.6	350 mm dia C.I. Double Flanged Pipe	meter	8777.05
19.62.7	400 mm dia C.I. Double Flanged Pipe	meter	11345.35
19.62.8	450 mm dia C.I. Double Flanged Pipe	meter	14433.65
19.62.9	500 mm dia C.I. Double Flanged Pipe	meter	17912.30
19.62.10	600 mm dia C.I. Double Flanged Pipe	meter	24807.65
19.63	Providing and laying S&S Centrifugally Cast (Spun)/ Ductile Iron Pipes conforming to IS : 8329		
19.63.1	100 mm dia Ductile Iron Class K - 7 Pipes	meter	1379.55
19.63.2	150 mm dia Ductile Iron Class K - 7 Pipes	meter	1934.70
19.63.3	200 mm dia Ductile Iron Class K - 7 Pipes	meter	2222.00
19.63.4	250 mm dia Ductile Iron Class K - 7 Pipes	meter	2514.45
19.63.5	300 mm dia Ductile Iron Class K - 7 Pipes	meter	3141.10
19.63.6	350 mm dia Ductile Iron Class K - 7 Pipes	meter	3723.80
19.63.7	400 mm dia Ductile Iron Class K - 7 Pipes	meter	4459.45
19.63.8	450 mm dia Ductile Iron Class K - 7 Pipes	meter	5400.60
19.63.9	500 mm dia Ductile Iron Class K - 7 Pipes	meter	6107.95
19.63.10	600 mm dia Ductile Iron Class K - 7 Pipes	meter	7866.80
19.63.11	700 mm dia Ductile Iron Class K - 7 Pipes	meter	10277.15
19.63.12	800 mm dia Ductile Iron Class K - 7 Pipes	meter	12832.95
19.63.13	900 mm dia Ductile Iron Class K - 7 Pipes	meter	16551.25
19.63.14	1000 mm dia Ductile Iron Class K - 7 Pipes	meter	17397.10
19.63.15	100 mm dia Ductile Iron Class K - 9 Pipes	meter	1071.50
19.63.16	150mm dia Ductile Iron Class K - 9 Pipes	meter	1609.60
19.63.17	200 mm dia Ductile Iron Class K - 9 Pipes	meter	2980.90
19.63.18	250 mm dia Ductile Iron Class K - 9 Pipes	meter	4079.25
19.63.19	300 mm dia Ductile Iron Class K - 9 Pipes	meter	4645.45

19.0 (Water Supply)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	19.63.20 350 mm dia Ductile Iron Class K - 9 Pipes	meter	5299.50
	19.63.21 400 mm dia Ductile Iron Class K - 9 Pipes	meter	6009.20
	19.63.22 450 mm dia Ductile Iron Class K - 9 Pipes	meter	6989.40
	19.63.23 500 mm dia Ductile Iron Class K - 9 Pipes	meter	8738.60
	19.63.24 600 mm dia Ductile Iron Class K - 9 Pipes	meter	10570.40
	19.63.25 700 mm dia Ductile Iron Class K - 9 Pipes	meter	14635.90
	19.63.26 750 mm dia Ductile Iron Class K - 9 Pipes	meter	15840.85
	19.63.27 800 mm dia Ductile Iron Class K - 9 Pipes	meter	16040.80
	19.63.28 900 mm dia Ductile Iron Class K - 9 Pipes	meter	19465.15
	19.63.29 1000 mm dia Ductile Iron Class K - 9 Pipes	meter	21831.80
19.64	Providing and laying Double Flanged (Screwed/ Welded) Centrifugally (Spun) Ductile Iron Pipes of Class K-9 conforming to IS : 8329		
	19.64.1 100 mm dia Ductile Iron Double Flanged	meter	1530.60
	19.64.2 150 mm dia Ductile Iron Double Flanged	meter	2295.65
	19.64.3 200 mm dia Ductile Iron Double Flanged	meter	2895.60
	19.64.4 250 mm dia Ductile Iron Double Flanged	meter	4107.35
	19.64.5 300 mm dia Ductile Iron Double Flanged	meter	5277.15
	19.64.6 350 mm dia Ductile Iron Double Flanged	meter	6642.20
	19.64.7 400 mm dia Ductile Iron Double Flanged	meter	8520.00
	19.64.8 450 mm dia Ductile Iron Double Flanged	meter	8978.90
	19.64.9 500 mm dia Ductile Iron Double Flanged	meter	12682.00
	19.64.10 600 mm dia Ductile Iron Double Flanged	meter	16793.45
	19.64.11 700 mm dia Ductile Iron Double Flanged	meter	19914.90
19.65	Providing and fixing un plasticized P.V.C. connection pipe with PTMT nuts, collars and bush of approved quality and colour		
	19.65.1 15 mm nominal bore with 30 cm length.	each	91.70
	19.65.2 15 mm nominal bore with 45 cm length.	each	114.80
19.66	Providing and fixing PTMT extension nipple for water tank pipe, fittings of approved quality and colour		
	19.66.1 15 mm nominal bore, weighing not less than 32gms	each	56.80
	19.66.2 20 mm nominal bore, weighing not less than 40gms	each	70.15
	19.66.3 25 mm nominal bore, weighing not less than 62gms	each	103.60
19.67	Cutting holes up to 30x30 cm in walls including making good the same:		
	19.67.1 With common burnt clay (non modular) bricks	each	363.60
19.68	Cutting holes up to 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 coarse sand : 4 graded stone aggregate 20 mm nominal size), including finishing complete so as to make it leak proof.	each	369.00
19.69	Making chases up to 7.5x7.5 cm in walls including making good and finishing with matching surface after housing G.I. pipe etc.	meter	155.80
19.70	Making hole up to 20x20 cm and embedding pipes up to 150 mm diameter in masonry and filling with cement concrete 1:3:6 (1 cement : 3 coarse sand 6 graded stone aggregate 20 mm nominal size) including disposal of malba.	meter	171.10
19.71	Disinfecting C.I. water mains by flushing with water containing bleaching powder @ 0.5 gms per liter 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.		
	19.71.1 80 mm diameter C.I. pipe	100 meter	1380.65
	19.71.2 100 mm diameter C.I. pipe	100 meter	1820.75
	19.71.3 125 mm diameter C.I. pipe	100 meter	2279.85
	19.71.4 150 mm diameter C.I. pipe	100 meter	2738.40

19.0 (Water Supply)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	19.71.5 200 mm diameter C.I. pipe	100 meter	3660.05
	19.71.6 250 mm diameter C.I. pipe	100 meter	4609.70
	19.71.7 300 mm diameter C.I. pipe	100 meter	5130.20
	19.71.8 350 mm diameter C.I. pipe	100 meter	5666.70
	19.71.9 400 mm diameter C.I. pipe	100 meter	6231.50
	19.71.10 450 mm diameter C.I. pipe	100 meter	6803.45
	19.71.11 500 mm diameter C.I. pipe	100 meter	7406.55
	19.71.12 600 mm diameter C.I. pipe	100 meter	8628.05
19.72	Extra for every operation of disinfecting the C.I. main by flushing with water containing bleaching powder @ 0.5 gms per liter of water and cleaning the same with fresh water, including getting the samples of water tested in the municipal laboratory :		
	19.72.1 80 mm diameter C.I. pipe	100 meter	504.40
	19.72.2 100 mm diameter C.I. pipe	100 meter	620.30
	19.72.3 125 mm diameter C.I. pipe	100 meter	760.70
	19.72.4 150 mm diameter C.I. pipe	100 meter	887.90
	19.72.5 200 mm diameter C.I. pipe	100 meter	1369.35
	19.72.6 250 mm diameter C.I. pipe	100 meter	1567.25
	19.72.7 300 mm diameter C.I. pipe	100 meter	1752.45
	19.72.8 350 mm diameter C.I. pipe	100 meter	2053.45
	19.72.9 400 mm diameter C.I. pipe	100 meter	2357.50
	19.72.10 450 mm diameter C.I. pipe	100 meter	2670.20
	19.72.11 500 mm diameter C.I. pipe	100 meter	2985.30
	19.72.12 600 mm diameter C.I. pipe	100 meter	3626.90
19.73	Dismantling old C.I. pipes including excavation & refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead & making into blocks, including stacking of pipes at site lead up to 50 meter :		
	19.73.1 80 mm diameter C.I. pipe	meter	294.20
	19.73.2 100 mm diameter C.I. pipe	meter	306.70
	19.73.3 125 mm diameter C.I. pipe	meter	318.45
	19.73.4 150 mm diameter C.I. pipe	meter	330.65
	19.73.5 200 mm diameter C.I. pipe	meter	368.70
	19.73.6 250 mm diameter C.I. pipe	meter	405.75
	19.73.7 300 mm diameter C.I. pipe	meter	439.00
	19.73.8 350 mm diameter C.I. pipe	meter	470.60
	19.73.9 400 mm diameter C.I. pipe	meter	499.75
	19.73.10 450 mm diameter C.I. pipe	meter	529.60
	19.73.11 500 mm diameter C.I. pipe	meter	555.95
	19.73.12 600 mm diameter C.I. pipe	meter	602.45
19.74	Labour for cutting C.I. pipe with steel saw.		
	19.74.1 80 mm diameter C.I. pipe	Each cut	115.20
	19.74.2 100 mm diameter C.I. pipe	each cut	154.60
	19.74.3 125 mm diameter C.I. pipe	each cut	214.80
	19.74.4 150 mm diameter C.I. pipe	each cut	290.55
	19.74.5 200 mm diameter C.I. pipe	each cut	387.55
	19.74.6 250 mm diameter C.I. pipe	each cut	481.50
	19.74.7 300 mm diameter C.I. pipe	each cut	578.50
	19.74.8 350 mm diameter C.I. pipe	each cut	672.50
	19.74.9 400 mm diameter C.I. pipe	each cut	769.05
	19.74.10 450 mm diameter C.I. pipe	each cut	863.45
	19.74.11 500 mm diameter C.I. pipe	each cut	960.00
	19.74.12 600 mm diameter C.I. pipe	each cut	1144.85

19.0 (Water Supply)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
19.75	Providing and fixing 15 mm nominal bore chrome plated brass battery based infrared sensor operated pillar cock, having foam flow technology.	each	8054.60
19.76	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		
19.76.1	15.88 mm outer dia pipe	meter	346.80
19.76.2	22.22 mm outer dia pipe	meter	501.35
19.76.3	28.58 mm outer dia pipe	meter	586.10
19.76.4	34.00 mm outer dia pipe	meter	768.05
19.76.5	42.70 mm outer dia pipe	meter	783.20
19.76.6	48.60 mm outer dia pipe	meter	1022.00
19.77	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) i/c 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		
19.77.1	15.88 mm outer dia pipe	meter	501.70
19.77.2	22.22 mm outer dia pipe	meter	656.25
19.78	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		
19.78.1	For 15.88 mm outer dia pipe	each	80.30
19.78.2	For 22.22 mm outer dia pipe	each	93.65
19.78.3	For 28.58 mm outer dia pipe	each	128.80
19.78.4	For 34.00 mm outer dia pipe	each	180.60
19.78.5	For 42.70 mm outer dia pipe	each	214.05
19.78.6	For 48.60 mm outer dia pipe	each	240.85
19.79	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		
19.79.1	For 22.22 mmx15.88 mm outer dia pipe	each	145.15
19.79.2	For 28.58 mmx15.88 mm outer dia pipe	each	204.05
19.79.3	For 28.58 mmx22.22 mm outer dia pipe	each	216.10
19.79.4	For 34.00 mmx15.88 mm outer dia pipe	each	267.60
19.79.5	For 34.00 mmx22.22 mm outer dia pipe	each	280.95
19.79.6	For 34.00 mmx28.58 mm outer dia pipe	each	280.95
19.79.7	For 42.70 mmx15.88 mm outer dia pipe	each	501.75
19.79.8	For 42.70 mmx22.22 mm outer dia pipe	each	501.75
19.79.9	For 42.70 mmx28.58 mm outer dia pipe	each	521.80
19.79.10	For 42.70 mmx34.00 mm outer dia pipe	each	521.80
19.79.11	For 48.60 mmx15.88 mm outer dia pipe	each	568.60
19.79.12	For 48.60 mmx22.22 mm outer dia pipe	each	568.60
19.79.13	For 48.60 mmx28.58 mm outer dia pipe	each	568.60
19.79.14	For 48.60 mmx34.00 mm outer dia pipe	each	568.60
19.79.15	For 48.60 mmx42.70 mm outer dia pipe	each	568.60

19.0 (Water Supply)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
19.80	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. Slip Coupling/ Socket		
19.80.1	For 15.88 mm outer dia pipe	each	73.60
19.80.2	For 22.22 mm outer dia pipe	each	93.65
19.80.3	For 28.58 mm outer dia pipe	each	127.10
19.80.4	For 34.00 mm outer dia pipe	each	180.60
19.80.5	For 42.70 mm outer dia pipe	each	214.05
19.80.6	For 48.60 mm outer dia pipe	each	234.15
19.81	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°		
19.81.1	For 15.88 mm outer dia pipe	each	86.95
19.81.2	For 22.22 mm outer dia pipe	each	93.65
19.81.3	For 28.58 mm outer dia pipe	each	140.50
19.81.4	For 34.00 mm outer dia pipe	each	160.55
19.81.5	For 42.70 mm outer dia pipe	each	173.95
19.81.6	For 48.60 mm outer dia pipe	each	214.05
19.82	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 Elbow 90°		
19.82.1	For 22.22 mmx15.88 mm outer dia pipe	each	200.70
19.82.2	For 28.58 mmx15.88 mm outer dia pipe	each	280.95
19.82.3	For 28.58 mmx22.22 mm outer dia pipe	each	334.50
19.82.4	For 34.00 mmx22.22 mm outer dia pipe	each	394.70
19.82.5	For 34.00 mmx28.58 mm outer dia pipe	each	468.30
19.82.6	For 42.70 mmx34.00 mm outer dia pipe	each	521.80
19.83	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		
19.83.1	For 15.88 mm outer dia pipe	each	234.15
19.83.2	For 22.22 mm outer dia pipe	each	334.50
19.83.3	For 28.58 mm outer dia pipe	each	394.70
19.83.4	For 34.00 mm outer dia pipe	each	588.70
19.83.5	For 42.70 mm outer dia pipe	each	929.85
19.83.6	For 48.60 mm outer dia pipe	each	1224.20
19.84	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		
19.84.1	For 22.22 mmx15.88 mm outer dia pipe	each	247.50
19.84.2	For 28.58 mmx15.88 mm outer dia pipe	each	388.00
19.84.3	For 28.58 mmx22.22 mm outer dia pipe	each	388.00
19.84.4	For 34.00 mmx15.88 mm outer dia pipe	each	588.70
19.84.5	For 34.00 mmx22.22 mm outer dia pipe	each	588.70
19.84.6	For 34.00 mmx28.58 mm outer dia pipe	each	588.70

19.0 (Water Supply)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	19.84.7 For 42.70 mmx15.88 mm outer dia pipe	each	923.20
	19.84.8 For 42.70 mmx22.22 mm outer dia pipe	each	923.20
	19.84.9 For 42.70 mmx28.58 mm outer dia pipe	each	923.20
	19.84.10 For 42.70 mmx34.00 mm outer dia pipe	each	923.20
	19.84.11 For 48.60 mmx15.88 mm outer dia pipe	each	1197.45
	19.84.12 For 48.60 mmx22.22 mm outer dia pipe	each	1197.45
	19.84.13For 48.60 mmx28.58 mm outer dia pipe	each	1197.45
	19.84.14 For 48.60 mmx34.00 mm outer dia pipe	each	1197.45
	19.84.15For 48.60 mmx42.70 mm outer dia pipe	each	1197.45
19.85	<p>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.</p> <p>Male Thread Tee</p> <p>19.85.1 For 15.88 mm outer dia.x15 mm nominal dia threaded</p> <p>19.85.2 For 22.22 mm outer dia x15 mm nominal dia threaded</p> <p>19.85.3 For 22.22 mm outer dia x20 mm nominal dia threaded</p> <p>19.85.4 For 28.58 mm outer dia x15 mm nominal dia threaded</p> <p>19.85.5 For 28.58 mm outer dia x20 mm nominal dia threaded</p> <p>19.85.6 For 28.58 mm outer dia x25 mm nominal dia threaded</p> <p>19.85.7 For 34.00 mm outer dia x15 mm nominal dia threaded</p> <p>19.85.8 For 34.00 mm outer dia x20 mm nominal dia threaded</p> <p>19.85.9 For 34.00 mm outer dia x25 mm nominal dia threaded</p> <p>19.85.10 For 34.00 mm outer dia x32 mm nominal dia threaded</p> <p>19.85.11 For 42.70 mm outer dia x15 mm nominal dia threaded</p> <p>19.85.12 For 42.70 mm outer dia x20 mm nominal dia threaded</p> <p>19.85.13 For 42.70 mm outer dia x25 mm nominal dia threaded</p> <p>19.85.14 For 42.70 mm outer dia x32 mm nominal dia threaded</p> <p>19.85.15 For 42.70 mm outer dia x40 mm nominal dia threaded</p> <p>19.85.16 For 48.60 mm outer dia x15 mm nominal dia threaded</p> <p>19.85.17 For 48.60 mm outer dia x20 mm nominal dia threaded</p> <p>19.85.18 For 48.60 mm outer dia x25 mm nominal dia threaded</p> <p>19.85.19 For 48.60 mm outer dia x32 mm nominal dia threaded</p> <p>19.85.20 For 48.60 mm outer dia x40 mm nominal dia threaded</p> <p>19.85.21 For 48.60 mm outer dia x50 mm nominal dia threaded</p>		
19.86	<p>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.</p> <p>Female Thread Tee</p> <p>19.86.1 For 15.88 mm outer dia x15 mm nominal dia threaded</p> <p>19.86.2 For 22.22 mm outer dia x15 mm nominal dia threaded</p> <p>19.86.3 For 22.22 mm outer dia x20 mm nominal dia threaded</p> <p>19.86.4 For 28.58 mm outer dia x15 mm nominal dia threaded</p> <p>19.86.5 For 28.58 mm outer dia x20 mm nominal dia threaded</p> <p>19.86.6 For 28.58 mm outer dia x25 mm nominal dia threaded</p> <p>19.86.7 For 34.00 mm outer dia x15 mm nominal dia threaded</p> <p>19.86.8 For 34.00 mm outer dia x20 mm nominal dia threaded</p> <p>19.86.9 For 34.00 mm outer dia x25 mm nominal dia threaded</p> <p>19.86.10 For 34.00 mm outer dia x32 mm nominal dia threaded</p> <p>19.86.11 For 42.70 mm outer dia x15 mm nominal dia threaded</p> <p>19.86.12 For 42.70 mm outer dia x20 mm nominal dia threaded</p> <p>19.86.13 For 42.70 mm outer dia x25 mm nominal dia threaded</p> <p>19.86.14 For 42.70 mm outer dia x32 mm nominal dia threaded</p> <p>19.86.15 For 42.70 mm outer dia x40 mm nominal dia threaded</p>		

19.0 (Water Supply)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	19.86.16 For 48.60 mm outer dia x15 mm nominal dia threaded	each	1210.85
	19.86.17 For 48.60 mm outer dia x20 mm nominal dia threaded	each	1210.85
	19.86.18 For 48.60 mm outer dia x25 mm nominal dia threaded	each	1210.85
	19.86.19 For 48.60 mm outer dia x32 mm nominal dia threaded	each	1210.85
	19.86.20 For 48.60 mm outer dia x40 mm nominal dia threaded	each	1210.85
	19.86.21 For 48.60 mm outer dia x50 mm nominal dia threaded	each	1210.85
19.87	<p>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.</p> <p>Female Thread Connector/Adapter</p> <p>19.87.1 For 15.88 mm outer dia x15 mm nominal dia threaded</p> <p>19.87.2 For 22.22 mm outer dia x15 mm nominal dia threaded</p> <p>19.87.3 For 22.22 mm outer dia x20 mm nominal dia threaded</p> <p>19.87.4 For 28.58 mm outer dia x15 mm nominal dia threaded</p> <p>19.87.5 For 28.58 mm outer dia x20 mm nominal dia threaded</p> <p>19.87.6 For 28.58 mm outer dia x25 mm nominal dia threaded</p> <p>19.87.7 For 34.00 mm outer dia x25 mm nominal dia threaded</p> <p>19.87.8 For 34.00 mm outer dia x32 mm nominal dia threaded</p> <p>19.87.9 For 42.70 mm outer dia x32 mm nominal dia threaded</p> <p>19.87.10 For 42.70 mm outer dia x40 mm nominal dia threaded</p> <p>19.87.11 For 48.60 mm outer dia x40 mm nominal dia threaded</p> <p>19.87.12 For 48.60 mm outer dia x50 mm nominal dia threaded</p>	<p>each</p> <p>each</p> <p>each</p> <p>each</p> <p>each</p> <p>each</p> <p>each</p> <p>each</p> <p>each</p> <p>each</p> <p>each</p> <p>each</p>	<p>260.90</p> <p>307.75</p> <p>321.10</p> <p>370.60</p> <p>388.00</p> <p>474.95</p> <p>548.55</p> <p>722.50</p> <p>796.05</p> <p>929.85</p> <p>1130.55</p> <p>1304.50</p>
19.88	<p>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.</p> <p>Male Thread Connector/Adapter</p> <p>19.88.1 For 15.88 mm outer dia x15 mm nominal dia threaded</p> <p>19.88.2 For 22.22 mm outer dia x15 mm nominal dia threaded</p> <p>19.88.3 For 22.22 mm outer dia x20 mm nominal dia threaded</p> <p>19.88.4 For 28.58 mm outer dia x20 mm nominal dia threaded</p> <p>19.88.5 For 28.58 mm outer dia x25 mm nominal dia threaded</p> <p>19.88.6 For 34.00 mm outer dia x25 mm nominal dia threaded</p> <p>19.88.7 For 34.00 mm outer dia x32 mm nominal dia threaded</p> <p>19.88.8 For 42.70 mm outer dia x32 mm nominal dia threaded</p> <p>19.88.9 For 42.70 mm outer dia x40 mm nominal dia threaded</p> <p>19.88.10 For 48.60 mm outer dia x40 mm nominal dia threaded</p> <p>19.88.11 For 48.60 mm outer dia x50 mm nominal dia threaded</p>	<p>each</p> <p>each</p> <p>each</p> <p>each</p> <p>each</p> <p>each</p> <p>each</p> <p>each</p> <p>each</p> <p>each</p> <p>each</p>	<p>260.90</p> <p>307.75</p> <p>341.15</p> <p>434.85</p> <p>434.85</p> <p>635.50</p> <p>755.95</p> <p>868.30</p> <p>976.70</p> <p>1137.25</p> <p>1525.25</p>
19.89	<p>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.</p> <p>Valve Connector</p> <p>19.89.1 For 15.88 mm outer dia x15 mm nominal dia threaded</p> <p>19.89.2 For 22.22 mm outer dia x15 mm nominal dia threaded</p> <p>19.89.3 For 22.22 mm outer dia x20 mm nominal dia threaded</p> <p>19.89.4 For 28.58 mm outer dia x25 mm nominal dia threaded</p> <p>19.89.5 For 34.00 mm outer dia x32 mm nominal dia threaded</p> <p>19.89.6 For 42.70 mm outer dia x40 mm nominal dia threaded</p> <p>19.89.7 For 48.60 mm outer dia x50 mm nominal dia threaded</p>	<p>each</p> <p>each</p> <p>each</p> <p>each</p> <p>each</p> <p>each</p> <p>each</p>	<p>314.40</p> <p>374.60</p> <p>414.75</p> <p>568.60</p> <p>862.95</p> <p>1177.40</p> <p>1618.90</p>
19.90	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		

19.0 (Water Supply)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	dia as per direction of Engineer-in-charge. Female Threaded Elbow 90° 19.90.1 For 15.88 mm outer dia x15 mm nominal dia threaded 19.90.2 For 22.22 mm outer dia x15 mm nominal dia threaded 19.90.3 For 22.22 mm outer dia x20 mm nominal dia threaded 19.90.4 For 25.58 mm outer dia x25 mm nominal dia threaded 19.90.5 For 34.00 mm outer dia x32 mm nominal dia threaded 19.90.6 For 42.70 mm outer dia x32 mm nominal dia threaded 19.90.7 For 42.70 mm outer dia x40 mm nominal dia threaded 19.90.8 For 48.60 mm outer dia x40 mm nominal dia threaded 19.90.9 For 48.60 mm outer dia x50 mm nominal dia threaded	each each each each each each each each each	214.05 287.65 287.65 287.65 394.70 642.20 642.20 949.95 949.95
19.91	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° 19.91.1 For 15.88 mm outer dia x15 mm nominal dia threaded 19.91.2 For 22.22 mm outer dia x15 mm nominal dia threaded 19.91.3 For 22.22 mm outer dia x20 mm nominal dia threaded 19.91.4 For 28.58 mm outer dia x25 mm nominal dia threaded 19.91.5 For 34.00 mm outer dia x25 mm nominal dia threaded 19.91.6 For 34.00 mm outer dia x32 mm nominal dia threaded 19.91.7 For 42.70 mm outer dia x32 mm nominal dia threaded 19.91.8 For 42.70 mm outer dia x40 mm nominal dia threaded 19.91.9 For 48.60 mm outer dia x40 mm nominal dia threaded 19.91.10 For 48.60 mm outer dia x50 mm nominal dia threaded	each each each each each each each each each each	260.90 301.05 301.05 301.05 388.00 388.00 642.20 642.20 929.85 929.85
19.92	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 19.92.1 For 15.88 mm outer dia pipe 19.92.2 For 22.22 mm outer dia pipe 19.92.3 For 28.58 mm outer dia pipe 19.92.4 For 34.00 mm outer dia pipe 19.92.5 For 42.70 mm outer dia pipe 19.92.6 For 48.60 mm outer dia pipe	each each each each each each	64.20 93.65 120.40 234.15 334.50 434.85
19.93	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 19.93.1 For 15.88 mm outer dia pipe 19.93.2 For 22.22 mm outer dia pipe 19.93.3 For 28.58 mm outer dia pipe	each each each	294.35 388.00 555.25

SUB HEAD: 20.0
DRAINAGE

20.0 (Drainage)

Note: The rates given for all the items under sub-head 'Drainage' are applicable to work executed in soils above sub-soil water level. Extra allowance has to be made for work under sub-soil water level			
CODE NO.	DESCRIPTION	UNIT	RATE ₹
20.1	<u>(A) STONE WARE PIPES AND FITTINGS</u> 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 sand) including testing of joints etc. complete. 20.1.1 100 mm diameter 20.1.2 150 mm diameter 20.1.3 200 mm diameter 20.1.4 230 mm diameter 20.1.5 250 mm diameter 20.1.6 300 mm diameter	meter meter meter meter meter meter	395.50 681.25 860.90 1014.35 1166.40 1270.50
20.2	Providing and laying cement concrete 1:5:10 (1 cement: 5 coarse sand: 10 graded stone aggregate 40 mm nominal size) including bed concrete as per standard design. 20.2.1 All around S.W. pipe 20.2.1.1 100 mm diameter S.W. pipe 20.2.1.2 150 mm diameter S.W. pipe 20.2.1.3 200 mm diameter S.W. pipe 20.2.1.4 230 mm diameter S.W. pipe 20.2.1.5 250 mm diameter S.W. pipe 20.2.2 Upto haunches of S.W. pipe 20.2.2.1 100 mm diameter S.W. pipe 20.2.2.2 150 mm diameter S.W. pipe 20.2.2.3 200 mm diameter S.W. pipe 20.2.2.4 230 mm diameter S.W. pipe 20.2.2.5 250 mm diameter S.W. pipe 20.2.2.6 300 mm diameter S.W. pipe 20.2.2.7 DELETED 20.2.2.8 DELETED 20.2.2.9 DELETED	meter meter meter meter meter meter meter meter meter meter meter meter	714.30 873.60 1018.40 1114.90 1177.65 339.50 550.20 646.75 709.50 752.95 868.75
20.3	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 300x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design. 20.3.1 100 x 100 mm size P type 20.3.1.1 With common burnt clay F.P.S. (non modular) bricks of class designation 7.5 20.3.1.2 With Sewer bricks conforming to IS : 4885 20.3.2 150 x 100 mm size P type 20.3.2.1 With common burnt clay F.P.S. (non modular) bricks of class designation 7.5 20.3.2.2 With Sewer bricks conforming to IS : 4885 20.3.3 180 x 150 mm size P type 20.3.3.1 With common burnt clay F.P.S. (non modular) bricks of class designation 7.5 20.3.3.2 With Sewer bricks conforming to IS : 4885	each each each each each each	2516.45 2276.45 2645.80 2405.80 2620.60 2380.60
20.4	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 : 20.4.1 100 mm diameter 20.4.2 150 mm diameter 20.4.3 200 mm diameter 20.4.4 230 mm diameter	meter meter meter meter	62.90 69.55 74.00 76.20

20.0 (Drainage)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	20.4.5 250 mm diameter	meter	78.45
	20.4.6 300 mm diameter	meter	82.85
	20.4.7 350 mm diameter	meter	95.45
	20.4.8 400 mm diameter	meter	104.30
	20.4.9 450 mm diameter	meter	108.75
20.5	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 sand) including testing of joints etc. complete		
	20.5.1 100 mm dia. R.C.C. pipe	meter	422.25
	20.5.2 150 mm dia. R.C.C. pipe	meter	545.90
	20.5.3 250 mm dia. R.C.C. pipe	meter	746.20
	20.5.4 300 mm dia. R.C.C. pipe	meter	837.55
	20.5.5 450 mm dia. R.C.C. pipe	meter	1148.60
	20.5.6 500 mm dia. R.C.C. pipe	meter	1406.20
	20.5.7 600 mm dia. R.C.C. pipe	meter	1751.80
	20.5.8 700 mm dia. R.C.C. pipe	meter	2259.30
	20.5.9 800 mm dia. R.C.C. pipe	meter	2531.15
	20.5.10 900 mm dia. R.C.C. pipe	meter	2902.25
	20.5.11 1000 mm dia. R.C.C. pipe	meter	3591.70
	20.5.12 1100 mm dia. R.C.C. pipe	meter	3962.30
	20.5.13 1200 mm dia. R.C.C. pipe	meter	4363.15
20.6	Providing and laying non-pressure of specified class R.C.C. pipes including collars/spigot jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement: 2 fine sand) including testing of joints etc. complete.		
	20.6.1 Non-pressure NP-3 class (Medium duty) R.C.C. pipes		
	20.6.1.1 450 mm dia. R.C.C. pipe	meter	2008.80
	20.6.1.2 600 mm dia. R.C.C. pipe	meter	2415.80
	20.6.1.3 900 mm dia. R.C.C. pipe	meter	3951.65
	20.6.1.4 1000 mm dia. R.C.C. pipe (laying by manual/mechanical means)	meter	4653.30
	20.6.1.5 1200 mm dia. R.C.C. pipe (laying by manual/mechanical means)	meter	7317.45
	20.6.1.6 1800 mm dia. R.C.C. pipe (laying by manual/mechanical means)	meter	13228.45
	20.6.2 Non-pressure NP-4 class (Heavy duty) R.C.C. pipes		
	20.6.2.1 450 mm dia. R.C.C. pipe	meter	2475.70
	20.6.2.2 600 mm dia. R.C.C. pipe	meter	3178.40
	20.6.2.3 900 mm dia. R.C.C. pipe	meter	6081.65
	20.6.2.4 1000 mm dia. R.C.C. pipe (laying by manual/mechanical means)	meter	7556.60
	20.6.2.5 1200 mm dia. R.C.C. pipe (laying by manual/mechanical means)	meter	9059.45
	20.6.2.6 1800 mm dia. R.C.C. pipe (laying by manual/mechanical means)	meter	18526.70
20.7	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 coarsesand (zone- III) : 8 graded stone aggregate 40 mm nominal size),inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4graded stone aggregate 20 mm nominal size) finished with a floatingcoat of neat cement complete as per standard design :		

20.0 (Drainage)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	<p>20.7.1 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) :</p> <p>20.7.1.1 With common burnt clay F.P.S. (non modular) bricks of class designation 7.5</p> <p>20.7.1.2 With Sewer bricks conforming to IS : 4885</p> <p>20.7.2 Inside size 90x80 cm and 60 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) :</p> <p>20.7.2.1 With common burnt clay F.P.S. (non modular) bricks of class designation 7.5</p> <p>20.7.2.2 With Sewer bricks conforming to IS : 4885</p> <p>20.7.3 Inside size 120x90 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) :</p> <p>20.7.3.1 With common burnt clay F.P.S. (non modular) bricks of class designation 7.5</p> <p>20.7.3.2 With Sewer bricks conforming to IS : 4885</p> <p>20.7.4 Inside size 120x90 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) :</p> <p>20.7.4.1 With common burnt clay F.P.S. (non modular) bricks of class designation 7.5</p> <p>20.7.4.2 With Sewer bricks conforming to IS : 4885</p>	<p>each</p> <p>each</p> <p>each</p> <p>each</p> <p>each</p> <p>each</p>	<p>11533.50</p> <p>10905.80</p> <p>12904.20</p> <p>11999.60</p> <p>24889.15</p> <p>23172.25</p> <p>30562.65</p> <p>29085.70</p>
20.8	<p>Extra for depth for manholes</p> <p>20.8.1 Size 90x80 cm</p> <p>20.8.1.1 With common burnt clay F.P.S. (non modular) bricks of class designation 7.5</p> <p>20.8.1.2 With Sewer bricks conforming to IS : 4885</p> <p>20.8.2 Size 120x90 cm</p> <p>20.8.2.1 With common burnt clay F.P.S. (non modular) bricks of class designation 7.5</p> <p>20.8.2.2 With Sewer bricks conforming to IS : 4885</p>	<p>meter</p> <p>meter</p> <p>meter</p> <p>meter</p>	<p>9059.20</p> <p>7231.50</p> <p>10852.50</p> <p>8674.00</p>
20.9	<p>Constructing brick masonry circular type manhole 0.91 m internal dia at bottom and 0.56m dia at top in cement mortar 1:4 (1 cement : 4 coarse sand), inside cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size), and making necessary channel 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, all complete as per standard design :</p> <p>20.9.10 91 m deep with S.F.R.C. cover and frame (heavy duty, HD-20 grade designation) 560 mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182 kg., fixed in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded 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) :</p>		

20.0 (Drainage)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	20.9.1.1 With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	11844.15
	20.9.1.2 With Sewer bricks conforming to IS : 4885	each	10810.20
20.9A	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 :4coarse sand) inside cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement foundation concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) and making necessary channel 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, all complete as per standard design : 19.9A.1 1.68 m deep with SFRC Cover and frame (heavy duty HD- 20 grade designation) 560 mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182 kg. fixed in cement concrete 1:2:4 (1 cement : 2 coarse sand : 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) : 20.9A.1.1 With common burnt clay F.P.S. (non modular) bricks of class designation 7.5 20.9A.1.2 With Sewer bricks conforming to IS : 4885	each each	22968.20 20531.15
20.9B	Constructing brick masonry circular manhole 1.52 m internal dia atbottom and 0.56 m dia at top in cement mortar 1:4 (1 cement : 4 coarse sand) inside cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) and making necessary channel 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, all complete as per standard design : 19.9B.12.30 m deep with SFRC Cover and frame (heavy duty HD- 20 grade designation) 560 mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182 kg. fixed in cement concrete 1:2:4 (1 cement : 2 coarse sand : 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) : 20.9B.1.1 With common burnt clay F.P.S. (non modular) bricks of class designation 7.5 20.9B.1.2 With Sewer bricks conforming to IS : 4885	each each	50385.65 43480.85
20.10	Extra depth for circular type manholes 20.10.1 Manhole 0.91m internal dia (at bottom) beyond 0.91 m to 1.67 m 20.10.1.1 With common burnt clay F.P.S. (non modular) bricks of class designation 7.5 20.10.1.2 With Sewer bricks conforming to IS : 4885 20.10.2 Manhole 1.22 m internal dia (at bottom) beyond 1.68 m to 2.29 m 20.10.2.1 With common burnt clay F.P.S. (non modular) bricks of class designation 7.5 20.10.2.2 With Sewer bricks conforming to IS : 4885 20.10.3 Manhole 1.52 m internal dia (at bottom) beyond 2.30 m	meter meter meter meter	7753.30 6271.70 10079.00 8081.55

20.0 (Drainage)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	20.10.3.1 With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	meter	23812.85
	20.10.3.2 With Sewer bricks conforming to IS : 4885	meter	18647.55
20.11	Providing M.S. foot rests including fixing in manholes with 20x20x10cm cement concrete blocks 1:3:6 (1cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) as per standard design :		
	20.11.1 With 20x20 mm square bar	each	515.70
	20.11.2 With 20 mm diameter round bar	each	458.50
20.12	Providing orange colour safety foot rest of minimum 6mm thick plastic encapsulated as per IS : 10910 on 12mm dia steel bar conforming to IS : 1786 having minimum cross section as 23 mmx25 mm and over all minimum length 263mm and width as 165mm 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 coarse sand : 6 graded stone aggregate 20 mm nominal size) complete as per design.	each	483.60
20.13	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 sand : 6 graded stone aggregate 20 mm nominal size)		
	20.13.1 With 20x20 mm square bar	each	614.50
	20.13.2 With 20 mm diameter round bar	each	557.25
20.14	Supplying and fixing C.I. cover without frame for manholes:		
	20.14.1 455x610mm rectangular C.I. cover (light duty) the weight of the cover to be not less than 23 kg.	each	1640.80
	20.14.2 500 mm diameter C.I. cover (medium duty) the weight of the cover to be not less than 58 kg.	each	3366.75
	20.14.3 560 mm diameter C.I. cover (heavy duty) the weight of the cover to be not less than 108 kg	each	6912.25
20.15	Providing and fixing in position precast R.C.C. manhole cover and frame of required shape and approved quality.		
	20.15.1 LD - 2.5		
	20.15.1.1 Rectangular shape 600x450 internal dimensions	each	1312.35
	20.15.1.2 Square shape 450mm internal dimensions	each	1166.15
	20.15.1.3 Circular shape 450mm internal diameter	each	1166.15
	20.15.2 MD - 10		
	20.15.2.1 Square shape 450mm internal dimensions	each	1389.65
	20.15.2.2 Circular shape 500mm internal diameter	each	1176.55
	20.15.3 HD - 20		
	20.15.3.1 Circular shape 560mm internal diameter	each	1677.10
	20.15.4 EHD - 35		
	20.15.4.1 Circular shape 560mm internal dia.	each	2138.70
20.16	Supplying and fixing C.I. cover 300x300 mm without frame for gully trap (standard pattern) the weight of cover to be not less than 4.5kg.	each	684.50
20.17	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 coarse sand : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete		
	20.17.1 For pipes 100 to 250 mm diameter	each	658.20

20.0 (Drainage)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	20.17.2 For pipes 250 to 300 mm diameter	each	751.80
	20.17.3 For pipes 350 to 450 mm diameter	each	1084.05
20.18	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 sand : 10 graded stone aggregate 40 mm nominal size) with all centering and shuttering required, cutting holes in walls and making good with brick work in cement mortar 1:4 (1 cement : 4coarse sand) plastered with cement mortar 1:3 (1 cement :3 coarse sand)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 sand) joints between sand cast iron tee and S.W. pipe, making required channels complete as per standard design and specifications :		
	20.18.1 100 mm dia. sand cast iron drop connection	each	10221.05
	20.18.2 150 mm dia. sand cast iron drop connection	each	14268.50
20.19	Extra for depths beyond 60 cm of sand cast iron drop connection complete :		
	20.19.1 For 100 mm dia. sand cast iron drop connection	meter	2626.65
	20.19.2 For 150 mm dia. sand cast iron drop connection	meter	3957.65
20.20	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 as per directions of Engineer-in-Charge:		
	20.20.1 Rectangular manhole 90x80 cm and 45 cm deep	each	1807.30
	20.20.2 Rectangular manhole 120x90 cm and 90 cm deep	each	3177.30
	20.20.3 Rectangular arch type manhole 140x90 cm and 2.45 m deep	each	6010.80
	20.20.4 Circular manhole 122 cm diameter and 1.68m deep	each	3821.45
20.21	Extra for depth of manholes dismantled :		
	20.21.1 Rectangular manhole 90x80 cm and beyond 45 cm depth	meter	1449.95
	20.21.2 Rectangular manhole 120x90 cm and beyond 90 cm depth	meter	1727.05
	20.21.3 Rectangular arch type manhole 140x90 cm and beyond 2.45m depth (upto 4.25 m depth)	meter	1398.95
	20.21.4 Circular manhole 122 cm diameter and beyond 1.68m depth (upto 2.29 m depth)	meter	2856.10
20.22	Raising manhole cover and frame slab to required level including dismantling existing slab and making good the damage as required (Raising depth of manhole to be paid separately).		
	20.22.1 Rectangular manhole 90x80 cm with rectangular cover 600x450 mm of grade LD - 2.5	each	2489.90
	20.22.2 Rectangular manhole 120x90 cm with circularcover 500 mm dia of grade MD - 10	each	3919.65
	20.22.3 Rectangular manhole 120x90 cm with circularcover 560 mm dia of grade HD - 20	each	3649.15
	20.22.4 Circular manhole 140 cm dia with circular cover 600 mm dia of grade EHD - 35	each	313.60
20.23	Constructing brick masonry road gully chamber of specified size with common burnt clay(non modular) bricks of class designation 7.5 in cement mortar 1:4 (1 cement : 4coarse sand) including precast R.C.C. horizontal grating with frame complete as per standard design:		
	20.23.1 Chamber size 50x45x60 cm including precast R.C.C grating with frame 500x450 mm horizontal grating.	each	5679.60
	20.23.2 Chamber size 45x45x77.50 cm including precast R.C.C grating with frame 450x100 mm vertical grating.	each	6665.10

20.0 (Drainage)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	20.23.3 Chamber size 110x50x77.50cm including precast R.C.C grating with frame 500x450 mm horizontal and 450x100 mm vertical grating.	each	11219.80
20.24	Constructing brick masonry chamber for underground C.I. inspection chamber and bend with common burnt clay (non modular) bricks of class designation 7.5 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 ½ : 3 mix (1 cement : 1 ½ coarse sand : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:5:10 (1 cement: 5 fine sand: 10 graded stone aggregate 40mm 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 :		
	20.24.1 Inside dimensions 455x610 mm and 45 cm deep for single pipe line-	each	6341.45
	20.24.2 Inside dimensions 500x700 mm and 45 cm deep for single pipe line with one or two inlets	each	7381.40
	20.24.3 Inside dimensions 600x850 mm and 45 cm deep for single pipe line with three or more inlets.	each	8703.15
20.25	Extra for depth beyond 45 cm of brick masonry chamber with common burnt clay(non modular) bricks of class designation 7.5		
	20.25.1 For 455x610 mm size	meter	6303.90
	20.25.2 For 500x700 mm size	meter	6876.60
	20.25.3 For 600x850 mm size	meter	8007.30
20.26	Making soak pit 2.5 m diameter 3.0 meter deep with 45x45 cm dry brick honey comb shaft with common burnt clay (non modular) bricks of class designation 7.5 bricks and S.W. drain pipe 100 mm diameter, 1.8 m long complete as per standard design.	each	23815.80
20.27	Constructing soak pit 1.20x1.20x1.20m filled with brickbats including S.W. drain pipe 100 mm diameter and 1.20m long complete as per standard design.	each	2762.45
20.28	Providing and fixing S.W. intercepting trap in manholes with stiff mixture of cement mortar 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete:		
	20.28.1 100 mm dia	each	425.65
	20.28.2 150 mm dia	each	558.10

SUB HEAD: 21.0
PILE WORK

21.0 (Pile Work)

CODE NO.	DESCRIPTION	UNIT	RATE ₹		
21.1	Providing, driving and installing driven cast-in-situ reinforced cement concrete piles of specified grade concrete mix, 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)		<u>M-25</u>	<u>M-30</u>	<u>M-35</u>
21.1.1	400 mm dia piles	meter	2441.45	2453.85	2466.25
21.1.2	450 mm dia piles	meter	2969.65	2985.35	3001.10
21.1.3	500 mm dia piles	meter	3572.40	3591.70	3611.15
21.1.4	550 mm dia piles	meter	3876.80	3900.20	3923.75
21.1.5	750 mm dia piles	meter	6604.50	6648.00	6691.70
21.1.6	1000 mm dia piles	meter	10947.35	11024.65	11102.40
21.1.7	1200 mm dia piles	meter	14161.0	14273.00	14384.90
21.1.8	1500 mm dia piles	meter	19994.35	20168.35	20343.35
21.2	Boring, providing and installing bored cast-in-situ reinforced cement concrete pile of specified grade concrete mix, 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. all complete including removal of excavated earth with all lifts and leads (Length of pile for payment Shall be measured from top of shoe to the bottom of pile cap)		<u>M-25</u>	<u>M-30</u>	<u>M-35</u>
21.2.1	By percussion drilling using Direct mud circulation (DMC) or Bailer and chisel technique by tripod and mechanical Winch Machine all complete,				
21.2.1.1	450 mm dia piles	meter	1941.90	1957.55	1973.30
21.2.1.2	500 mm dia piles	meter	2275.50	2294.80	2314.25
21.2.1.3	600 mm dia piles	meter	3095.25	3123.10	3151.10
21.2.1.4	750 mm dia piles	meter	4693.95	4737.40	4781.10
21.2.2	By Crawler mounted, telescopic boom hydraulic pilling Rig all complete.				
21.2.2.1	600 mm dia piles	meter	4716.85	4578.10	4606.10
21.2.2.2	750 mm dia piles	meter	6504.60	6548.10	6591.80
21.2.2.3	1000 mm dia piles	meter	10902.85	10980.15	11057.90
21.2.2.4	1200 mm dia piles	meter	14325.90	14437.25	14549.15
21.2.2.5	1500 mm dia piles	meter	20623.20	20797.25	20972.20
	Note: Truck Mounted rotary/TMR/Tube well boring machine shall not be used				
21.3	Boring with hydraulic pilling rigs with power units, providing and installing cast-in-situ single under reamed pile of specified grade concrete mix 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 the length of the pile to be embedded in pile cap etc all complete (Length of pile for payment shall be measured upto the bottom of pile cap).				

21.0 (Pile Work)

CODE NO.	DESCRIPTION	UNIT	RATE ₹		
	21.3.1 300 mm dia piles	meter	<u>M-25</u>	<u>M-30</u>	<u>M-35</u>
	21.3.2 400 mm dia piles	meter	2660.75	2668.40	2676.10
	21.3.3 450 mm dia piles	meter	3221.85	3236.40	3251.05
	21.3.4 550 mm dia piles	meter	3555.15	3573.90	3592.80
		meter	3960.20	3983.80	4007.60
21.4	Extra over single under reamed for providing additional bulb in under reamed piles, under specified diameter. (Only the nos. of extra bulbs are to be paid).		<u>M-25</u>	<u>M-30</u>	<u>M-35</u>
	21.4.1 300 mm dia piles	meter	2062.70	2065.95	2069.25
	21.4.2 400 mm dia piles	meter	2316.40	2322.60	2328.85
	21.4.3 450 mm dia piles	meter	2469.45	2477.45	2485.45
	21.4.4 550 mm dia piles	meter	2686.75	2696.80	2706.90
21.5	Providing, driving (with vibrating pile driving hammer complete with power units and accessories) and installing driven pre-cast reinforced cement concrete piles of specified grade concrete mix, diameter and length below the pile cap, to carry safe working load not less than specified, with a central through preformed hole with M.S. black pipe of dia., 40 mm for grouting with cement sand grouting of mix 1:2 (1 cement : 2 coarse sand) 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).		<u>M-25</u>	<u>M-30</u>	<u>M-35</u>
	21.5.1 400 mm dia piles	meter	3112.30	3124.65	3137.05
	21.5.2 450 mm dia piles	meter	3568.10	3583.75	3599.50
	21.5.3 500 mm dia piles	meter	4074.95	4094.25	4113.70
	21.5.4 550 mm dia piles	meter	4636.20	4659.60	4683.10
	21.5.5 750 mm dia piles	meter	8806.60	8860.15	8914.05
	21.5.6 1000 mm dia piles	meter	12085.75	12163.05	12240.80
CODE NO.	DESCRIPTION	UNIT	RATE ₹		
21.6	Vertical load testing of piles in accordance with IS 2911 (Part IV) including installation of loading platform by Kentledge/Anchor pile method and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of Engineer-in-Charge.				
	21.6.1 Single pile upto 50 tonne safe capacity				
	21.6.1.1 Initial test (Test Load 2.5 times the safe capacity)	per test		159533.00	
	21.6.1.2 Routine test (Test Load 1.5 times the safe capacity)	per test		175486.60	
	21.6.2 Single pile above 50 tonne and upto 100 tonne safe capacity				
	21.6.2.1 Initial test (Test Load 2.5 times the safe capacity)	per test		241337.20	
	21.6.2.2 Routine test (Test Load 1.5 times the safe capacity)	per test		265470.90	
	21.6.3 Group of two or more piles upto 50 tonne safe capacity				
	21.6.3.1 Initial test (Test Load 2.5 times the safe capacity)	per test		267544.70	
	21.6.3.2 Routine test (Test Load 1.5 times the safe capacity)	per test		294299.45	

21.0 (Pile Work)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
21.7	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: 21.7.1 Single pile 21.7.1.1 Upto 50 tonne safe capacity pile 21.7.1.2 Above 50 tonne and upto 100 tonne safe capacity pile 21.7.2 Group of two or more piles 21.7.2.1 Upto 400tonnesafe capacity of group	 per test per test per test	 175486.60 265470.90 294299.45
21.8	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. 21.8.1 Upto 50 tonne capacity pile 21.8.2 Above 50 tonne and upto 100 tonne capacity pile	 per test per test	 73860.85 83382.95
21.9	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 computerized equipments and high skill trained personal for conducting the test and submission of results, all complete as per the direction of Engineer-in-charge. Note: - The inclusion of the above item in the schedule of work shall be judiciously decided by the technical sanctioning authority, keeping in view the quality control, type of soil strata & importance of the project.	 per test	 1032.20

SUB HEAD: 22.0

ALUMINIUM WORK

22.0 (Aluminum Work)

22.0 (Aluminum Work)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
22.1	<p>Providing and fixing aluminum 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, fixed with dash fastener of required dia. and size including necessary filling up of gaps at junctions i.e, at top, bottom and sides with required EPDM rubber / neoprene gasket felt etc. Aluminum sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminum snap beading for glazing / panelling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-Charge (glazing, panelling and dash fasteners to be paid for separately.)</p> <p>22.1.1 For fixed portion</p> <p>22.1.1.1 Anodized aluminum (Anodized transparent or dyed to required shade according to IS:1868, minimum anodic coating of grade AC 15)</p> <p>22.1.1.2 Powder coated aluminum (minimum thickness of powder coated 50 microns)</p> <p>22.1.1.3 Polyester powder coated aluminum (minimum thickness of polyester powder coated 50 microns)</p> <p>22.1.2 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.)</p> <p>22.1.2.1 Anodized aluminum (Anodized transparent or dyed to required shade according to IS:1868, minimum anodic coating of grade AC 15)</p> <p>22.1.2.2 Powder coated aluminum (minimum thickness of powder coated 50 microns)</p> <p>22.1.2.3 Polyester powder coated aluminum (minimum thickness of polyester powder coated 50 microns)</p>	<p>Kg</p> <p>Kg</p> <p>Kg</p> <p>Kg</p> <p>kg</p> <p>kg</p> <p>kg</p>	<p>481.95</p> <p>514.30</p> <p>522.70</p> <p>574.45</p> <p>607.40</p> <p>616.00</p>
22.2	<p>Providing and fixing 12mm 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 directions of engineer-in-charge.</p> <p>22.2.1 Pre-laminated particle board with decorative lamination on one side and balancing lamination on other side.</p> <p>22.2.2 Pre-laminated particle board with decorative lamination on both sides.</p>	<p>sqm</p> <p>sqm</p>	<p>947.40</p> <p>933.35</p>
22.3	<p>Providing and fixing glazing in aluminum door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge. (Cost of aluminum snap beading shall be paid in basic item.)</p> <p>22.3.1 With floating glass panes of 4.0 mm thickness (weight not less than 10.00 kg / sqm)</p> <p>22.3.2 With float glass panes of 5.0 mm thickness (weight not less than 12.50 kg / sqm)</p> <p>22.3.3 With float glass panes of 8 mm thickness (weight not less than 20.0 kg / sqm)</p>	<p>sqm</p> <p>sqm</p> <p>sqm</p>	<p>1061.95</p> <p>1201.80</p> <p>1584.45</p>
22.4	<p>Providing and fixing double action hydraulic floor spring of approved brand and manufacture IS : 6315 marked, 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</p>		

22.0 (Aluminum Work)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge. 22.4.1 With Stainless Steel cover plate minimum 1.25 mm thickness. 22.4.2 With brass cover plate minimum 1.25 mm thickness	each each	2407.05 2568.05
22.5	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 @ 450 mm centre to centre and fixing the frame work to G.I. level adjusting hangers 6 mm dia. with necessary cadmium plated machine screws all complete as per approved architectural drawings and direction of the Engineer-in-charge (level adjusting hangers, ceiling cleats and expansion hold fasteners to be paid for separately).	kg	731.45
22.6	Providing and fixing 6mm dia. G.I level adjusting hangers (upto 1200mm length) fixed to roof slabs by means of ceiling cleats made out of G.I flat 40x3mm size 60 mm long and stainless steel expandable dash fasteners 12.5 mm dia. 50 mm long complete as per direction of Engineer-in-charge	each	69.70
22.7	Providing and fixing machine moulded aluminum covering of approved pattern & design, made out of machine-cut aluminum sheet and machine holed for receiving dash fastener, over expansion joints on vertical surfaces/ ceilings floors, the fixing on plate in one row on one side of joint only shall be done with stainless steel dash fastener of 8 mm dia. and 75 mm long bolt including providing aluminum washers 2mm thick, 15mm dia. at a staggered pitch of 200 mm centre to centre including drilling holes in the receiving surface and providing expandable plastic sleeves in holes etc. complete. as per drawing and direction of Engineer-in-charge 22.7.1 Anodized aluminum sheet 2.5 mm thick (Anodized transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15) 22.7.2 Powder coated aluminum sheet 2.5 mm thick (minimum thickness of powder coating 50 micron)	kg kg	645.55 677.85
22.8	Filling the gap in between aluminum frame and adjacent RCC/Brick/Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete. 22.8.1 Upto 5mm depth and 5mm width	metre	97.15
22.9	Extra for applying additional anodic coating AC 25 instead of AC 15 to aluminum extruded sections. 22.11.1 For fixed portions 22.11.2 Shutters of doors, windows and ventilators	kg kg	13.40 13.40
22.10	Providing and fixing double glazed hermetically sealed glazing in aluminum windows, ventilators and partition etc. with 6mm thick clear float glass both side having 12mm air gap including providing EPDM gasket, perforated aluminum spacers, desiccants, silicon sealant (both primary and secondary sealant) etc. as per specifications, drawings and directions of Engineer-in-charge complete.	sqm	3947.50
22.11	Providing & 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		

22.0 (Aluminum Work)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	complete		
	22.11.1 205x19mm	each	290.90
	22.11.2 255x19mm	each	341.75
	22.11.3 355x19mm	each	301.60
	22.11.4 510x19mm	each	789.95
	22.11.5 710x19mm	each	1365.25
22.12	Providing and fixing aluminum tubular handle bar 32mm outer dia, 3.0mm thick & 2100mm long with SS screw etc. complete as per direction of Engineer-in-charge.		
	22.12.1 Anodized (AC 15)aluminum tubular handle bar	each	597.85
	22.12.2 Powder coated minimum thickness 50 micron aluminum tabular handle bar	each	648.10
	22.12.3 Polyester powder coated minimum thickness 50 micron aluminum tubular handle bar	each	661.25
22.13	Providing and fixing Brass 100mm mortice latch and lock with 6levers without pair of handles (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.	each	456.40
22.14	Providing and fixing Anodized aluminum (Anodized 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	408.35
22.15	Providing and fixing aluminum casement windows fastner of required length for aluminum windows with necessary screws etc. Complete		
	22.15.1 Anodized (AC 15) aluminum	each	75.80
	22.15.2 Powder coated minimum thickness 50 micron aluminum	each	75.80
	22.15.3 Polyester powder coated minimum thickness 50 microns aluminum	each	82.45
22.16	Providing and fixing aluminum round shape handle of outer dia 100mm with SS screws etc. Complete as per direction of Engineer-in-charge		
	22.16.1 Anodized (AC 15) aluminum	each	89.15
	22.16.2 Powder coated minimum thickness 50 micron aluminum	each	95.85
	22.16.3 Polyester powder coated minimum thickness 50 microns aluminum	each	95.85
22.17	Providing and fixing Anodized aluminum grill (Anodized transparent or dyed to required shade according to IS: 1868 minimum anodic coating of Grade AC 15) of approved design/pattern, with approved standard section and fixed to the existing windows 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 Anodized aluminum standard section around the opening, all complete as epr requirement and direction of Engineer-in-charge. (only weight of grill to be measured for payment)	kg	553.80
22.18	Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture, including providing and fixing top & bottom pivot & double action 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	4470.20
22.19	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 of Engineer		

22.0 (Aluminum Work)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	in-charge complete, complying to ASTM C920, DIN 18540- F & ISO11600		
	22.19.1 Upto 5 mm depth and 5 mm width	metre	128.85
	22.19.2 Upto 10 mm depth and 10 mm width	metre	175.20
	22.19.3 Upto 20 mm depth and 20 mm width	metre	318.30

SUB HEAD: 23.0

WATER PROOFING

23.0 (Water Proofing)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
23.1	<p>Providing and laying integral cement based treatment for water proofing on horizontal surface at all depth below ground level for underground structures as directed by Engineer-in-Charge and consisting of :</p> <p>i) 1st layer of 22 mm to 25 mm thick approved and specified rough stone slab over a 25 mm thick base of cement mortar 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound conforming to IS:2645 in the recommended proportion over the levelling course (levelling course to be paid separately). Joints sealed and grouted with cement slurry mixed with water proofing compound.</p> <p>ii) 2nd layer of 25mm thick cement mortar 1:3 (1 cement: 3 coarse sand) mixed with waterproofing compound in recommended proportions.</p> <p>iii) Finishing top with stone aggregate of 10 mm to 12 mm nominal size spreading @ 8 cu dm/sqm thoroughly embedded in the 2nd layer.</p> <p>23.1.1 Using rough kota stone.</p>	sqm	1692.10
23.2	<p>Providing and laying integral cement based treatment for water proofing on the vertical surface by fixing specified stone slab 22 mm to 25 mm thick with cement slurry mixed with water proofing compound conforming to IS:2645 in recommended proportions with a gap of 20 mm (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 mortar 1:3 (1 cement : 3 coarse sand) 20mm thick with neat cement punning mixed with water proofing compound in recommended proportion complete at all levels and as directed by Engineer-in-Charge:</p> <p>23.2.1 Using rough kota stone.</p>	sqm	2156.30
23.3	<p>Providing & laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen & the like consisting of:</p> <p>(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.</p> <p>(ii) IInd course of 20 mm cement plaster 1:3 (1 cement: 3 coarse sand) mixed with water proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface.</p> <p>(iii) IIIrd course of applying blown or residual bitumen applied hot at 1.7 kg. Per sqm of area.</p> <p>(iv) IVth course of 400 micron thick PVC sheet. (Overlaps at joints of PVC sheet should be 100 mm wide and pasted to each other with bitumen @ 1.7 kg/sqm).</p>	sqm	757.50
23.4	<p>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 before pouring concrete etc. complete.</p> <p>23.4.1 Serrated with central bulb (225 mm wide, 8- 11mm thick)</p> <p>23.4.2 Dumb bell with central bulb (180mm wide, 8mm thick)</p> <p>23.4.3 Kickers (320mm wide, 5mm thick)</p>	metre metre metre	283.25 229.75 229.75
23.5	<p>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 :</p> <p>(a) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253kg/ sqm. This layer will be allowed to air cure for 4 hours.</p> <p>(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.</p>		

23.0 (Water Proofing)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.	sqm	485.10
23.6	<p>Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying :</p> <p>(a) after surface preparation, first layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound@ 0.253 kg/sqm.</p> <p>(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.</p> <p>(c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg./sqm. and coarse sand @1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours.</p> <p>The entire treatment will be taken upto 30cm on parapet wall and tucked into groove in parapet all around.</p> <p>(d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately)</p> <p>For the purpose of measurement the entire treated surface will be measured.</p>	sqm	556.20
23.7	<p>Providing and laying integral cement based water proofing treatment including preparation of surfaces as required for treatment of roofs, balconies, terraces etc consisting of following operations.</p> <p>a) Applying a slurry coat of neat cement using 2.75kg/sqm of cement admixed with water proofing compound conforming to IS 2645 and approved by Engineer-in-charge over the RCC Slab including adjoining walls upto 300mm height including cleaning the surface before treatment.</p> <p>b) Laying brick bats with mortar using broken bricks/ Brick Bats 25mm to 115mm size with 50% of Cement mortar 1:5 (1 Cement : 5 coarse sand) admixed with water proofing compound conforming to IS 2645 and approved by Engineer-in-charge over 20mm thick layer of cement mortar of mix 1:5 (1 Cement : 5 coarse sand) admixed with water proofing compound conforming to IS 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300mm height including rounding of Junctions of walls and slabs)</p> <p>c) After two days of proper curing applying a second coat of cement slurry using 2.75kg/sqm of cement admixed with water proofing compound conforming to IS 2645 and approved by Engineer-in-charge.</p> <p>d) finishing the surface with 20mm thick joint less cement mortar of mix 1:4(1 cement: 4 coarse sand) admixed with water proofing compound conforming to IS 2645 and approved by Engineer-in-charge 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 300x300mm/sq 3mm deep.</p> <p>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 directed and specified by Engineer-in-charge.</p> <p>23.7.1 With average thickness of 120mm and minimum thickness at khurra as 65 mm</p>	sqm	1404.65
23.8	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 with bitumen felt over roofs consisting of first and third courses of blown bitumen 85/25 or 90/15 conforming to IS		

23.0 (Water Proofing)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	: 702 applied hot @ 1.45 kg/sqm of area for each course, second course of roofing felt type 3 grade-I (Hessian based self finished bitumen felt) and fourth & final course of stone grit 6mm & down size or pea-sized gravel spread at 6 cubic decimeters per square metre including preparation of surface but excluding grading complete with: 23.8.1 Bitumen felt (Hessian based) type 3grade I conforming to Is : 1322	sqm	443.85
23.9	Providing and laying six courses water proofing treatment with bitumen felt over roofs consisting of first, third and fifth course of blown bitumen applied hot at following application rates, second and fourth courses of specified roofing felt bitumen, and 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. 23.9.1 Blown type Bitumen85/25 or 90/15 conforming to IS : 702 applied hot @ 1.45, 1.20 and 1.45 Kg per square metre of area respectively, roofing felt type 3 grade I conforming to IS : 1322 (Hessian based self finished bitumen felt) conforming to IS : 1322 23.9.2 Blown or/and residual Bitumen applied hot @ 1.45, 1.20 and 1.70 Kg per square metre of area respectively, Roofing felt type 2 grade I conforming to IS : 7193 (fibre based self finished bitumen felt) 23.9.3 Blown or/and residual Bitumen applied hot @ 1.45, 1.20 and 1.70 Kg per square metre of area respectively, Roofing felt type 2 grade II conforming to IS : 7193 (glass fibre base self finished bitumen felt)	sqm sqm sqm	690.10 785.15 814.60
23.10	Supplying and applying bituminous solution primer on roof and or wall surface at 0.24 litre per sqm.	sqm	52.75
23.11	Deduct for omitting in water proofing treatment final course of spreading stone grit 6mm or down size or pea sized gravel : 23.11.1 At 6 cubic dm per sqm 23.11.2 At 8 cubic dm per sqm	sqm sqm	15.10 18.75
23.12	Grading roof for water proofing treatment with 23.12.1 Cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) 23.12.2 Cement mortar 1:3 (1cement : 3 Coarse sand) 23.12.3 Cement mortar 1:4 (1cement : 4 Coarse sand)	cum cum cum	6754.25 13316.70 12090.35
23.17	Providing and mixing integral crystalline admixture for water proofing treatment to RCC structures like basement raft, retaining walls, reservoir, 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 at 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 16bar hydrostatic pressure. The crystalline admixture shall be capable of self-healing of cracks up to a width of 0.50mm. 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.	kg	330.95
23.18	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		

23.0 (Water Proofing)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	coats of undiluted elastomeric waterproofing liquid (dry 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 the direction of Engineer-in-Charge.	sqm	468.05
23.19	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, reservoir, 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 0.50mm. 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. 23.19.1 For vertical surface two coats @ 0.70 kg per sqm 23.19.2 For horizontal surface one coat @ 1.10 kg per sqm.	sqm sqm	407.75 310.05
23.20	Providing & Applying polymer modified, flexible cementitious 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 cementitious waterproofing polymer(dilution with water in the ratio of 1:1) and two coats of cementitious 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 of Engineer-in-Charge.	sqm	520.95
23.21	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, parking structures and water tank base slab etc. sprinkled @0.60kg per sqm or higher 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 0.50mm. 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.	sqm	267.25
23.22	Providing & 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, complete as the direction of Engineer -in-Charge.	sqm	483.30

23.0 (Water Proofing)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
23.23	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 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.		
	23.23.1 For sealing cracks and faulty construction joints, routed out/making U-shape groove size 25x25mm and then primed the area with integral crystalline slurry @0.05kg/ running metre and while the surface is tacky filled the groove upto surface with crystalline mortar @1.50kg/ running metre. Once crystalline mortar is touch dry then finally applied two coats of integral crystalline slurry @0.05kg/running metre per coat.	metre	472.65
	23.23.2 For patching of tie rod holes, prepared tie rod hole surface and then primed the area with integral crystalline slurry @0.070kg/sqm and while the surface is tacky repair and then filled the tie rod holes with crystalline mortar@0.040kg per hole. The crystalline mortar should be tightly rodded into tie rod holes or packed tightly (For 25x25x25 mm tie rod hole, use 0.040kg to fill the hole)	each hole	20.85
23.24	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 walls, water storage tank and at the junctions of raft slab with the retaining walls etc.. After cleaning the surface, 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 of the Engineer-In-Charge. The product performance shall carry guarantee for 10 years against any leakage.	metre	554.10

SUB HEAD: 24.0

**RIVER & CANAL PROTECTION
WORK**

24.0 (River and Canal Protection Work)

24.0 (River and Canal Protection Work)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
24.1	Dry stone pitching, 225mm thick, including cost of stones and preparation of surface. 24.1.1 Quarry stone 24.1.2 Nallah stone	sqm sqm	478.55 335.60
24.2	Constructing vertical bunds with sloping faces, by boulder filling (dry, hand packed tightly); including cost of stones but excluding cost of wire-crates	cum	2732.70
24.3	Constructing muthu bunds, comprising boulders and wood bushes in alternate layers; including working in water situations.	cum	1622.25
24.4	Dry stone pitching (any thickness) excluding cost of stones. 24.4.1 On Horizontal 24.4.2 On Top copings of banks 24.4.3 On Slopes	cum cum cum	535.55 673.80 693.95
24.5	Hand-packing stones in wire-crates; excluding cost of crates and stones	cum	371.15
24.5A	Extra for every additional lift of 1.5 m or part there of beyond 1.5 m height for hand-packing of stones in wire-crates	cum	81.40
24.6	Dumping stone excluding cost of stones. 24.6.1 in Horizontal on level 24.6.2 on Slopes (Behind pitching)	cum cum	237.90 261.45
24.7	Grouting of riprap with dry aggregates, excluding cost of aggregates.	sqm	106.15
24.8	Grouting of stone pitching using M-10 nominal mix concrete (max. size of aggregates; 20mm nominal) @ 3.65 cum per 100 sq m on horizontal/side slopes; complete including curing.	sqm	199.30
24.9	Grouting of stone pitching using M-10 nominal mix concrete (max. size of aggregates; 20mm nominal) @ 6.00 cum per 100 sq m on horizontal/side slopes; complete including curing.	sqm	327.60
24.10	Making knitted wire crates of approved mesh-size; including weaving, binding sides and partitions, and binding top after filling; excluding cost of filling, stones and weaving materials	sqm	92.90
24.11	Opening out old wire crates those and re-binding after filling.	sqm	35.60
24.12	Tipping stone-filled wire crates in position; including equipment charges.	cum.	312.20
24.13	Filling empty cement bags with sand/ earth; including cost of sewing and strings; excluding cost of bags and earth / sand.	no.	7.80
24.14	Loading/Unloading sand/ earth filled bags in lorries; lead upto 50m.	no.	4.95
24.15	Loading sand / earth filled bags in boats; lead upto 50m.	no.	4.95
24.16	Unloading sand/earth filled bags from boats 24.16.1 Placing in dry 24.16.2 Placing in Water	no. no.	9.25 18.50
24.17	Silt clearance from canals. Inclusive of initial lead and lift (50m & 1.5m respectively) 24.17.1 Dry 24.17.2 Wet	cum cum	111.00 184.95
24.18	Shingle clearance from canals.	cum	148.00
24.19	Weed clearance 24.19.1 From lakes(using boats) 24.19.2 From canals(including extraction of roots)	sqm sqm	21.15 13.45

24.0 (River and Canal Protection Work)

SUB HEAD: 25.0
CANAL LINING

25.0 (Canal Lining)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
25.1	Lip-Cutting to desired profile for canal bed and sides, canal Including dressing, all allowances and leads		
25.1.1	Depth upto 3.0 m.	cum	472.15
25.1.2	Depth over 3.0 m. but upto 4.5 m	cum	492.00
25.1.3	Depth over 4.5 m. but upto 6.0 m	cum	514.45
25.1.4	Depth over 6.0 m. but upto 7.5 m	cum	534.55
25.2	Preparing and dressing beds of canals for lining.		
25.2.1	In ordinary soil	sqm	16.75
25.2.2	In soils admixed with upto 40% shingle / kankar / boulder	sqm	26.55
25.2.3	In soils admixed with more than 40% shingle / kankar / boulder	sqm	33.20
25.2.4	In mixed gravels/ conglomerate reaches	sqm	49.80
25.3	Preparing and dressing side slopes of canals for lining.		
25.3.1	In ordinary soils	sqm	27.45
25.3.2	In soils admixed with upto 40% shingle / kankar / boulder	sqm	33.20
25.3.3	In soils admixed with more than 40% shingle / kankar / boulder	sqm	44.25
25.3.4	In mixed gravels/ conglomerate reaches	sqm	56.90
25.4	Excavating conglomerate (for drains and bed-sleepers under the lining)	cum	1665.35
25.5	Making dry brick drains (behind lining), 75mm thick brick all around: only labour	metre	49.55
25.6	Providing and laying 10mm thick, 1 cement: 3 fine sand mortar slurry' on beds and side slopes (prior to laying In-situ concrete lining)	sqm	77.75
25.7	Providing and laying in-situ concrete lining using M-10 nominal mix concrete (max. size of aggregates: 20mm nominal).		
25.7.1	In beds	cum	5391.50
25.7.2	In side slopes, - upto a height of 3.5 m above bed	cum	5735.60
25.7.3	In side slopes, - at a height over 3.5 m but upto 5.5m above bed	cum	5527.55
25.7.4	In side slopes, at heights over 5.5 m but upto 7.5 m above bed	cum	5599.05
25.7A	Providing and laying in-situ concrete lining using M-20 nominal mix concrete (max. size of aggregates: 20mm nominal).		
25.7A.1	In beds	cum	6911.80
25.7A.2	In side slopes, - upto a height of 3.5 m above bed	cum	7255.90
25.7A.3	In side slopes, - at a height over 3.5 m but upto 5.5m above bed	cum	7047.90
25.7A.4	In side slopes, at heights over 5.5 m but upto 7.5 m above bed	cum	7119.40
25.8	Curing canal lining for 28 days.		
25.8.1	In beds	sqm	20.15
25.8.2	In side slopes	sqm	62.85
25.9	Flush pointing in 1 cement : 3 fine sand mortar		
25.9.1	In beds of canal linings.	sqm	178.00
25.9.2	In side slopes of canal linings.	sqm	182.15
25.10	Filling expansion joints (12mm wide) with special Impervious hot-pour	cum	96506.60
25.11	Extra over Item no, 25.7.1 towards allowance for form-work	cum	365.70
25.12	Extra over item no. 25.7.2 to 25.7.4 towards allowance for form-work	cum	410.65
25.13	Extra over item no. 25.7.2 to 25.7.4 towards allowance for scaffolding	sqm	4.75
25.14	Extra over item no. 25.7.1,25.7.2 to 25.7.4 towards allowance for providing templates In curved portion; area of curved portion to be	sqm	7.35

25.0 (Canal Lining)

	measured	sqm	
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SUB HEAD: 26.0 A

**SNOW CLEARANCE
BY MANUAL MEANS**

26.A (Snow Clearance by Manual Means)

26.A (Snow Clearance by Manual Means)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
26.1A	Clearing snow (with frost) from Roads, manually using picks and shovels; snow depth upto 150 mm	sqm	4.00
26.2A	Clearing Snow (without frost) from Roads, manually;		
	26.2A.1 Snow depth upto 150 mm	sqm	1.80
	26.2A.2 Snow depth over 150 mm but upto 250mm	sqm	2.30
	26.2A.3 Snow depth over 250 mm but upto 350mm	sqm	2.45
	26.2A.4 Snow depth over 350 mm but upto 450mm	sqm	2.85
	26.2A.5 Snow depth over 450 mm but upto 550mm	sqm	3.25
	26.2A.6 Snow depth over 550 mm but upto 650mm	sqm	3.40
	26.2A.7 Snow depth over 650 mm but upto 750mm	sqm	3.60
	26.2A.8 Snow depth over 750 mm but upto 850mm	sqm	3.80
	26.2A.9 Snow depth over 850 mm but upto 950mm	sqm	3.95
	26.2A.10 Snow depth over 950 mm but upto 1050mm	sqm	4.15
	26.2A.11 Snow depth over 1050 mm but upto 1150mm	sqm	4.35
	26.2A.12 Snow depth over 1150 mm but upto 1250mm	sqm	4.70
26.3A	Galla cutting in compressed snow		
	26.3A.1 150 mm deep and 4 m wide.	cum	11.85
	26.3A.2 1200 mm deep and 4 m wide.	cum	9.85

26.A (Snow Clearance by Manual Means)

SUB HEAD: 26.0 B

**SNOW CLEARANCE
BY MECHANICAL MEANS**

26.B (SNOW CLEARANCE BY MECHANICAL MEANS)

26.B (SNOW CLEARANCE BY MECHANICAL MEANS)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
26.1B*	Snow Clearance by Mechanical Means using Machines as specified or equivalent		
	26.1B.1 Dozer BD 80	cum	25.18
	26. 1B.2 Snow Plough 180 HP (Ashoka Leyland Stallion- 2009)	cum	1.32
	26. 1B.3 Snow Plough 4WD 170-180 BHP (Unimog)	cum	6.48
	26. 1B.4 Snow Plough 4WD 90 BHP (Trucks)	cum	5.63
	26. 1B.5 Snow Plough 4WD 60 BHP (Trucks)	cum	4.71
	26. 1B.6 Snow Plough 4WD 160 BHP (Trucks)	cum	5.68
	26. 1B.7 Snow cutter Rolba 1500	cum	1.63
	26. 1B.8 Snow cutter Rolba 3000	cum	1.36
	26. 1B.9 Snow Cat	cum	3.62
	26. 1B.10 Snow Blower 4WD 690 BHP 8500T/hr (Fresia Spa)	cum	4.44
	26. 1B.11 Snow Blower 4WD 420-430 BHP 3500T/hr (Supra 4001)	cum	5.24
	26. 1B.12 Snow Blower 4WD 570 BHP 5300T/hr (Supra 3000)	cum	5.23
	26. 1B.13 Snow Blower 4WD 420 BHP 3500T/hr (Rolba 1500)	cum	6.53

***Stands formulated and proposed by Mechanical Engineering Department Jammu vide office letter No.: CEM/J/Tech/5448-49 Dated: 23-11-2021 and Mechanical Engineering Department Kashmir vide office letter No.: MED/K/TS/4123-24 Dated: 11-12-2021 and as per the recommendations received from the administrative department vide Joint Director Planning PW Department letter No.; PWD-ACCT/316/2021-05 Dated: 13-12-2021**

26.B (SNOW CLEARANCE BY MECHANICAL MEANS)

SUB HEAD: 27.0
SLIP CLEARANCE

27.0 (Slip Clearance)

27.0 (Slip Clearance)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
27.1	27.1.1 In ordinary soils disposal lead upto 50 m and lift upto 1.5 m.	cum	154.15
	27.1.2 In soils; mixed with moorum/Kankar/shingle/boulders; disposal lead upto 50 m and lift upto 1.5 m.	cum	331.15
	27.1.3 In soils; mixed with Decomposed Rocks; by blasting or any other means	cum	411.40
	27.1.4 In medium hard rocks ; by blasting	cum	492.70
	27.1.5 In hard rocks; by blasting	cum	686.30

27.0 (Slip Clearance)

SUB HEAD: 28.0

**RAIN WATER HARVESTING &
TUBE WELLS**

28.0 (Rain Water Harvesting and Tube wells)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
28.1	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 and running charges of all equipment tools plants and machineries required for the job, all complete as per direction of Engineer-in-charge upto 90 m depth below ground level.		
28.1.1	All types of soil		
28.1.1.1	300 mm dia	metre	544.45
28.1.1.2	350 mm dia	metre	595.50
28.1.1.3	400 mm dia	metre	762.25
28.1.2	Rocky strata including boulders		
28.1.2.1	300 mm dia	metre	1310.10
28.1.2.2	350 mm dia	metre	1384.80
28.1.2.3	400 mm dia	metre	1641.80
28.2	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 and running charges of all equipment tools plants and machineries required for the job, all complete as per direction of Engineer-in-charge beyond 90 m & upto 150 m depth below ground level.		
28.2.1	All types of soil		
28.2.1.1	300 mm dia	metre	635.20
28.2.1.2	350 mm dia	metre	705.75
28.2.1.3	400 mm dia	metre	952.80
28.2.2	Rocky strata including boulders		
28.2.2.1	300 mm dia	metre	1443.40
28.2.2.2	350 mm dia	metre	1508.10
28.2.2.3	400 mm dia	metre	1927.35
28.3	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 and accessories etc all complete for all depths as per direction of Engineer-in-charge.		
28.3.1	100mm nominal size dia	metre	549.60
28.3.2	150 mm nominal size dia	metre	712.85
28.3.3	200mm nominal size dia	metre	1078.10
28.4	Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC medium well screen (RMS) pipe with ribs, conforming to IS: 12818, including hire and labour charges, fittings and accessories etc all complete for all depths as per direction of Engineer-in-charge.		
28.4.1	100mm nominal size dia	metre	576.35
28.4.2	150 mm nominal size dia	metre	743.60
28.4.3	200mm nominal size dia	metre	1131.70
28.5	Supplying, filling, spreading and leveling stone boulders of size range 5 cm to 20 cm, in recharge pit in the required thickness for all leads and lifts all complete as per direction of Engineer-in-charge.	cum	857.30
28.6	Supplying, filling, spreading and leveling gravels of size range 5 mm to 10 mm, in recharge pit over the existing layer of boulders, in the required thickness for all leads and lifts all complete as per direction of Engineer-in-charge.	cum	1031.20

28.0 (Rain Water Harvesting and Tube wells)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
28.7	Supplying, filling , spreading and leveling coarse sand of size range 1.5 mm to 2 mm, in recharge pit in required thickness over the gravel layer, for all leads and lifts all complete as per direction of Engineer-in-charge.	cum	1031.20
28.8	Gravel packing in tube well construction in accordance with IS: 4097, including providing gravel fine/medium/coarse in required grading and sizes as per actual requirement all complete as per direction of Engineer-in-charge.	cum	1068.20
28.9	Providing and fixing factory made precast RCC perforated drain covers, having concrete of strength not less than M-25, of size 1000x450x50 mm reinforced with 8 mm dia four nos longitudinal and 9nos 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 50mmx1.6mm complete all as per direction of Engineer-in-charge.	each	1220.85
28.10	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, fitting and accessories, all complete for all depths, as per direction of Engineer-in-charge. 28.10.1 100 mm nominal size dia having minimum wall thickness 5.00 mm 28.10.2 150 mm nominal size dia having minimum wall thickness 5.00 mm. 28.10.3 200 mm nominal size dia having minimum wall thickness 5.40 mm.	metre metre metre	1161.90 1661.65 2060.00
28.11	Supplying, assembling, lowering and fixing in vertical position in bore well, ERW (Electric Resistance Welded) FE 410 plain slotted (having slot of size 1.6/3.2 mm) mild steel threaded and socketed/plain bevel ended pipes (type A) of required dia, conforming to IS:8110,of reputed & approved make having wall thickness not less than 5.40mm, including painted with outside surface with two coats, of anticorrosive bitumestic paint of approved brand and manufacture including required hire & labour charges, fitting and accessories, all complete for all depths, as per direction of Engineer-in-charge. 28.11.1 100 nominal size dia 28.11.2 150 nominal size dia 28.11.3 200 nominal size dia	metre metre metre	1262.90 1796.35 2195.90
28.12	Development to tube well in accordance with IS: 2800(part 1) 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, i/c disinfection of tube well, all complete including required hire & labour charges of air compressor tools & accessories, etc. all, as per direction of Engineer-in-charge.	hour	872.75
28.13	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 bore well of : 28.13.1 100 mm dia	each	189.65

28.0 (Rain Water Harvesting and Tube wells)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	28.13.2 150 mm dia	each	210.75
	28.13.3 200 mm dia	each	280.95
28.14	Providing and fixing M.S clamp of required dia to the top of casing/ housing pipe of tube well as per IS:2800 (part 1), including necessary bolts & nuts of required size complete:		
	28.14.1 100 mm clamp	each	1968.10
	28.14.2 150 mm clamp	each	2079.05
	28.14.3 200 mm clamp	each	2361.70
28.15	Providing and fixing Bail plug/ Bottom plug of required dia to the bottom of pipe assembly of tube well as per IS: 2800 (part 1).		
	28.15.1 100 mm dia	each	230.80
	28.15.2 150 mm dia	each	284.30
	28.15.3 200 mm dia	each	311.05

28.0 (Rain Water Harvesting and Tube wells)

SUB HEAD: 29.0

**CONSERVATION OF
HERITAGE BUILDINGS**

29.0 (Conservation of Heritage Buildings)

29.0 (Conservation of Heritage Buildings)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
29.1	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 mtrs lead.	sqm	51.45
29.2	Providing and fixing double scaffolding system (cup lock type) on the exterior side of building/ structure, upto 25 mtrs 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 mtr.c/c, horizontal and vertical tubes joint with cup and lock system with M.s tube, M.S tubes Challis M.S clamps and stairs case system in the scaffolding for working platform etc. and maintaining it in a serviceable condition of execution of work of cleaning and/ or pointing and/or applying chemical and removing it their after the scaffolding system shall be stiffened with bracings, runners connecting with the building etc. where ever required. if feasible, for inspection of work at required location with essential safety features for the work men etc, complete as per directions and approval of Engineer-in-charge. Note: - 1) The elevational area of the scaffolding shall be measured for the payment purpose. 2) The payment will be made once only for execution all items of such works.	sqm	265.30
29.3	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 agents as approved by Archaeological survey of India/Engineer-in-charge, 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 and finally washing the surface with clean water with the help of pressure jet machine, windows door etc, by suitable covering so as to avoid any damage to the building/structure, all as per directions of Engineer-in-charge(the rate is inclusive of all materials and labours involved except scaffolding)	sqm	163.80
29.4	Providing and applying antifungal wash treatment using 3% solution of sodium pentachlorophenate, of reputed brand and manufacturer, on cleaned sand stone surface at desired locations as per directions of Engineer-in-charge (the rate is inclusive of all materials and labours involved except scaffolding)	sqm	60.20
29.5	Ruled/ Flush pointing on Red sand stone masonry surface with lime, surkhi and marble dust mortar in the ratio 1:1.5:1/2 one lime : 1.5 surkhi		

29.0 (Conservation of Heritage Buildings)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	(50% red and 50% light yellow surkhi):1/2 marble dust (the rate is inclusive of all materials and labours involved except scaffolding)	sqm	284.70
29.6	Ruled/flush pointing on white sand stone masonry surface with lime, surkhi and marble dust mortar in the ratio 1:1.5:1/2 one lime : 1.5 surkhi (50% red and 50% light yellow surkhi):1/2 marble dust (the rate is inclusive of all materials and labours involved except scaffolding)	sqm	284.70
29.7	Applying two or more coats of Ethyl silicate chemicals as approved by Archaeological survey of India/ Engineer-in-charge, 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 sun light by suitable means during application, all complete as per direction of the Engineer-in-charge (the rate is inclusive of all materials and labours involved except scaffolding)	sqm	279.10
29.8	Applying breathable, non-reactive antifungal and water repellant silane/ Siloxane chemical as approved by Archaeological survey of India/ Engineer-in-charge, of approved brand and manufacturer, diluted with solvent mineral turpentine oil in the ratio of 1:12 (1 part of approved Chemical :12 part of turpentine oil), on the existing sand stone masonry surface with two or more coats to given uniforms application of chemical on the surface all complete as per direction of Engineer-in-charge (the rate is inclusive of all materials and labours involved except scaffolding)	sqm	101.75

SUB HEAD: 30.0

**STRUCTURAL GLAZING &
ALUMINIUM COMPOSITE
PANEL**

30.0 (Structural Glazing & Aluminium Composite Panel)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
30.1	<p>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 by the Engineer-in-Charge. (The item includes 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).</p> <p>The weight of aluminium extruded section shall be taken for purpose of payment.</p>	kg	428.00
30.2	<p>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:</p> <p>(a) Structural analysis & design and preparation of shop drawings for the specified design loads conforming to IS 875 part III (the system must pass the proof test at 1.5 times design wind pressure without any failure), including functional design of the aluminum 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 equalization & drainage and protection against fire hazard including:</p> <p>(b) Fabricating and supplying serrated M.S. hot dip galvanized / 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 framework 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.</p> <p>(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.</p> <p>(d) Providing and fixing in position flashings of solid aluminium sheet 1mm thick and of sizes, shapes and profiles, as required as per the site conditions, to seal the gap between the building structure and all its interfaces with curtain glazing to make it watertight.</p> <p>(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 by Engineer-in-charge. The item also includes the cost of all mock ups at site, cost of</p>		

30.0 (Structural Glazing & Aluminium Composite Panel)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	<p>All samples of the 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 directed by the Engineer- in-Charge.</p> <p>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 subhead. 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. up to two decimal places.</p> <p>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 by any other accreditation body which operates in accordance with ISO /IEC 17011 and accredits labs as per ISO/ IEC 17025.</p> <p>1. Performance Laboratory Test for Air Leakage Test (-50pa to - 300pa) & (+50pa to +300pa) as per ASTM E-283-04 testing method for a range of testing limit 1 to 200 mVhr</p> <p>2. Static Water Penetration Test. (50pa to 1500p) as per ASTM E- 331-09 testing method for a range up to 2000 ml.</p> <p>3. Dynamic Water Penetration (50pa to 1500pa) as per AAMA 501.01-05 testing method for a range upto 2000 ml</p> <p>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</p> <p>5. Seismic Movement Test (upto 30 mm) as per AAMA 501.4- 09 testing method for Qualitative test, Tests to be conducted on site.</p> <p>6. Onsite Test for Water Leakage for a pressure range 50 kpa to 240 kpa (35psi) upto 2000 ml</p>	sqm	3568.50
30.3	<p>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, desiccants, 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 directed by the 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.30.2) 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</p>		

30.0 (Structural Glazing & Aluminium Composite Panel)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	<p>measured in sqm.</p> <p>(i) Coloured tinted float glass 6mm thick substrate with reflective soft coating on face # 2, + 12mm Airgap + 6mm 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/m² degree K etc. The properties of performance glass shall be decided by technical sanctioning authority as per the site requirement.</p>	sqm	3557.00
30.4	<p>Extra for openable side / top hung vision glass panels (IGUs) including providing and supplying at site all accessories and 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 directed by the Engineer -in- Charge.</p>	sqm	3466.80
30.5	<p>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 nonwoven 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 1.5 mm thick solid aluminum sheet backing using, 6 mm thick cement board including SS rivets, nuts, bolts, washers etc complete.</p>	sqm	2365.35
30.6	<p>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 directed by the 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*).</p> <p>(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/m² degree K etc. The properties of performance glass shall be decided by technical sanctioning authority as per the site requirement.</p>	sqm	2351.00
30.8	<p>Design supply & installation of suspended Spider Glazing system designed to withstand 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 12 mm 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</p>		

30.0 (Structural Glazing & Aluminium Composite Panel)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	using SS channel of 50x25x2mm using fastener & anchor bolts, non staining weather sealants of approved make, Teflon/ nylon bushes and separators to prevent bi-metallic 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 panel inside the SS channel shall be measured.	sqm	8724.05

SUB HEAD: 31.0

**NEW TECHNOLOGIES AND
MATERIALS**

31.0 (NEW TECHNOLOGIES AND MATERIALS)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
31.1	Providing & fixing in position Phenol bonded Bamboowood flooring with planks of sizes 14mm thick, 1800mm length (minimum) and 130 mm wide(minimum), 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	5289.40
31.2	Providing & fixing in position Phenol bonded Bamboowood in wall skirting with planks of sizes 14mm thick, 1900mm length (minimum) and 85mm 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 polyethylene foam sheets having 40kg/cum density over prepared surface. The bamboowood planks shall have minimum density of 1000Kg/cum & minimum Hardness 1000 Kgf. with Eco friendly UV coating, all complete as per direction of the Engineer in-charge.	sqm	5188.10
31.3	Providing & fixing in position Phenol bonded Bamboowood wallcladding at all height with planks of sizes 10mm thick, 1800mm length (minimum) and 130 mm 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 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 back layment 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	5622.30
31.4	Providing & fixing in position Phenol bonded Bamboowood paneled or panelled and glazed shutters for doors windows, clerestory windows with pre-molded 30mm thick planks, in approved colours, texture & finish. It shall have 10mm wide, 25mm deep groove to fit in panels. 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	5491.50
31.5	Providing & fixing in position Phenol bonded Bamboowood paneling of 10mm thick, in 25 to 40 mm thick panelled or panelled & glazed shutters for doors, windows, clerestory windows, in approved colour, texture & finish. The bamboowood 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 the Engineer in-charge. (area of opening for panel inserts excluding portion inside grooves or rebates to be measured)	Sqm	3636.65

31.0 (NEW TECHNOLOGIES AND MATERIALS)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
31.6	Providing & fixing in position 65 mm thick factory made door frame of Phenol bonded Bamboo wood (superior class, interior use), in approved colour, texture and finish. 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 mm size G.I screws all a complete as per direction of Engineer-in charge.	cudm	256.00
31.6A	Providing, erecting, laying and fixing in position in 3.5 to 4mm thick 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	5041.40
31.6B	Providing and fixing in position ridges of 3.5 to 4 mm thick 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	4146.35
31.6C	Providing and fixing at all height false ceiling of 4mm thick phenol bonded Bamboo Mat board (595x595mm) conforming to IS:13958-1994 including providing and fixing of frame work made of GI angle 25x25x0.4 mm thick all around suitably fixed to wall with the help of dash fastener and hanger frame (600x600 c/c) made GI slotted Tee having powder coating on bottom side (30x25x0.3 mm thick for main member & 25x25x0.3 mm for cross member) connected to ceiling with 2.64mm GI wire and anchor fastener at every junction and also including cost of making openings 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	3512.15
31.6D	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)		
	31.6D.1 3mm thickness	sqm	2363.30
	31.6D.2 4mm thickness	sqm	2686.40
	31.6D.3 6mm thickness	sqm	3192.15
	31.6D.4 9mm thickness	sqm	4021.20
	31.6D.5 12mm thickness	sqm	4620.90
31.6E	Providing and fixing at all height wall panelling with phenol bonded Bamboo Mat board conforming to IS: 13958-1994 including providing and fixing to frame work 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.		
	31.6E.1 9mm thickness	sqm	4348.80
	31.6E.2 12mm thickness	sqm	4948.70
31.7	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 > 350kPa listed as per ASTM D 1621, density of 34-36 kg/m³ 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 retardant property as per DIN 4102, Part 1 of class B2 and as per ASTM E84 class		

31.0 (NEW TECHNOLOGIES AND MATERIALS)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	A, fixed with suitable water based adhesive and fastener, complete in all respect as per the direction of Engineer- in-Charge	sqm	891.38
31.8	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 retardant 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	957.70
31.9	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 retardant 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	447.70
31.10	Providing and fixing factory made Kitchen Cabinet Shutter/Partition 20mm nominal thickness of approved shade, quality and make, made 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	4929.05
31.11	Providing and fixing concealed hinge of approved quality for 19-20mm thick door with stainless steel screws complete :	each	114.05
31.12	Supplying & laying of bi-axial extruded high modulus 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 respectively in the longitudinal and transverse direction, junction efficiency not less than 95% and with 38mm X 38mm mesh opening.	sqm	200.75
31.13	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	222.85
31.14	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	325.85

31.0 (NEW TECHNOLOGIES AND MATERIALS)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
31.15	Supplying & 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 38mm mesh opening.	sqm	450.995
31.16	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 thermo bonding 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, geo composite 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 complete as per directions of Engineer in charge.	sqm	804.20
31.17	Supplying & laying of drainage composite for use behind walls, between two different fills, alongside drains of road, below concrete lining of canals etc. having thermo bonding a draining core – HDPE geonet comprises of two sets of parallel over layed 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, geo composite 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	951.35
31.18	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 .		
31.18.1	Ultimate tensile strength- 100 kN/m	sqm	318.50
31.18.2	Ultimate tensile strength- 150 kN/m	sqm	333.25
31.18.3	Ultimate tensile strength- 200 kN/m	sqm	524.55
31.18.4	Ultimate tensile strength- 250 kN/m	sqm	539.25
31.18.5	Ultimate tensile strength- 300 kN/m	sqm	554.00
31.18.6	Ultimate tensile strength- 350 kN/m	sqm	568.70
31.18.7	Ultimate tensile strength- 400 kN/m	sqm	686.45
31.18.8	Ultimate tensile strength- 500 kN/m	sqm	760.05
31.18.9	Ultimate tensile strength- 600 kN/m	sqm	833.60
31.18.10	Ultimate tensile strength- 700 kN/m	sqm	980.80
31.18.11	Ultimate tensile strength- 800 kN/m	sqm	1091.15
31.18.12	Ultimate tensile strength- 900 kN/m	sqm	1275.15
31.18.13	Ultimate tensile strength- 1000 kN/m	sqm	1422.30

31.0 (NEW TECHNOLOGIES AND MATERIALS)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	31.18.14 Ultimate tensile strength- 1100 kN/m	sqm	1495.90
	31.18.15 Ultimate tensile strength- 1200 kN/m	sqm	1569.50
31.19	<p>Providing at all heights, levels & 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 5.5x65 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 Engineer-in-Charge. The rate shall be inclusive of all screws, seal, ridge, labour, scaffolding, machinery for fixing and approved sealant where required etc. but excluding the cost of purlins, rafters and trusses.</p> <p>31.19.1 0.71 mm thick, the profile detail width 1044/920 mm, cover width 1000/875 mm.</p> <p>31.19.2 0.91 mm thick, the profile detail width 1044/920 mm ,cover width 1000/875 mm.</p>	<p>sqm</p> <p>sqm</p>	<p>984.35</p> <p>1247.90</p>
31.20	<p>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 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 1200 mm and secondary intermediate cross-T of size 24x32 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 diafully threaded hanger rod upto 1000 mm length and L-shape level adjuster of size 85x25x25x2 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 450mm center to center and 40 mm long dry wall S.S screws. The work shall be carried out as per specifications, drawing and as per directions of the Engineer-in-Charge.</p> <p>31.20.1 With 15 mm thick tegular edged light weight calcium silicate false ceiling tiles.</p>	sqm	1840.80
31.21	<p>Providing and fixing false ceiling at all heights with integral densified calcium silicate reinforced with fibre and natural filler false ceilingtiles 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 suspended on interlocking metal powder coated T-Grid of hot dipped galvanised iron section of 0.40 mm thick on Silhouette profile, rotary stitched double webbed white with 6mm reveal profile (white/black),comprising of main-T runners of size 15x42mm of length 3000 mm, cross - T of size 15x42 mm of length 1200 mm and secondary intermediate cross- T of size 15x42 mm of length 600mm to form grid module of size 600 x 600 mm, suspended from ceiling using galvanised mild steelitems (galvanizing @ 80 grams per sqm) i.e. 50 mm long, 8 mm outer diameter M-6 dash fasteners, 6</p>		

31.0 (NEW TECHNOLOGIES AND MATERIALS)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	mm dia fully threaded hanger rod upto 1000 mm length and L-shape level adjuster of size 85x25x2mm. Galvanised iron perimeter wall angle of size 22x19x0.40 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 40mm long dry wall S.S screws. The work shall be carried out as per specifications, drawing and as per directions of the Engineer-in-Charge. 31.21.1 With 15 mm thick integral densified micro edge light weight calcium silicate false ceiling tiles	sqm	2259.00
31.22	Providing and fixing in position wall panelling at all heights with integral densified calcium silicate panels/tiles of size 595 x 595mm, 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, comprising of a frame made from especially fabricated galvanised mild steel sheet 0.50 mm thick pressed section (galvanizing @ 120 grams per sqm including both sides) i.e. vertical studs of size 48 x 34 x 36 mm are placed at 600mm center to center in a floor and ceiling channel section of size 50 x 32mm fixed to the floor and soffit at 600mm centers 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 center 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 1 mm between the panels. The joints between the panels are to be duly jointed and finished using recommended jointing calcium silicate based compound and fiber joint tape roll 50mm wide (90 metre) roll and two coats of primer suitable for panelling as per manufacturer's specification as per direction of Engineer-in-Charge all complete. 31.22.1 With 15 mm thick fully perforated square/butt edge lightweight calcium silicate panels/ tiles	sqm	2892.70
31.23	Providing and fixing 15 mm 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/mK 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	1400.65
31.24	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		

31.0 (NEW TECHNOLOGIES AND MATERIALS)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	(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.		
	31.24.1 With semi perforated 12 mm thick micro tegular edged GRG false ceiling tiles.	sqm	1849.10
	31.24.2 With fully perforated 12 mm thick micro tegular edged or 10 mm thick square edged GRG false ceiling tiles.	sqm	1989.55
31.25	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 > 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.		
	31.25.1 With 16 mm thick bevelled tegular mineral fibre false ceiling tile (NRC 0.55 to 0.6	sqm	2176.40
	31.25.2 With 20 mm thick bevelled tegular mineral fibre false ceiling tile (NRC 0.7)	sqm	2471.45
	31.25.3 With 16 mm thick bevelled tegular mineral fibre Antimicrobial false ceiling tile conforming to ISO 5 (class 100) specifications	sqm	2302.85
REPAIR AND REHABILITATION ITEMS			
31.26	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		
	31.26.1 75mm average thickness	sqm	308.40
	31.26.2 50mm average thickness	sqm	208.80
	31.26.3 25mm average thickness	sqm	103.95
31.27	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		

31.0 (NEW TECHNOLOGIES AND MATERIALS)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	water and allowing it to dry, all complete as per direction of Engineer-In-Charge. 31.27.1 Bars upto 12 mm diameter 31.27.2 Bars above 12 mm diameter	metre metre	6.60 13.25
31.28	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 Engineer-In-Charge. 13.28.1 Upto and including 12mm dia.	each	111.50
31.29	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. 31.29.1 SBR 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 31.29.2 Epoxy bonding adhesive having coverage 2.20 sqm/kg of approved make	sqm sqm	134.90 375.40
31.30	Providing, mixing and applying SBR polymer (of approved make) modified Cement mortar in proportion of 1:4 (1 cement: 4 graded coarse sand 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 crushing strength at the end of 28 days to be not less than 30 N/Sqmm2). 31.30.1 12 mm average thickness. 31.30.2 25 mm average thickness in 2 layers. 31.30.3 50 mm average thickness in 3 layers.	sqm sqm sqm	337.15 516.25 1032.55
31.31	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 10mm 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) 31.31.1 50mm thick in Grade M 25 with cement content not less than 330 kg per cum 31.31.2 75 mm thick in Grade M 25 with cement content not less than 330 kg per cum	sqm sqm	540.45 810.65
31.32	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		

31.0 (NEW TECHNOLOGIES AND MATERIALS)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	<p>strength [with ordinary Portland cement, coarse sand 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 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)</p> <p>31.32.1 50mm thick in Grade M 25 with cement content not less than 330 kg per cum</p> <p>31.32.2 75mm thick in Grade M 25 with cement content not less than 330 kg per cum</p> <p>31.32.3 100mm thick in Grade M 25 with cement content not less than 330 kg per cum</p>	<p>sqm</p> <p>sqm</p> <p>sqm</p>	<p>540.45</p> <p>810.65</p> <p>1080.90</p>
31.33	<p>Providing and injecting approved grout in proportion recommended by the manufacturer 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 directions of Engineer-in-Charge. (The payment shall be made on the basis of actual weight of approved grout injected.)</p> <p>31.33.1 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</p> <p>31.33.2 Stirrer mixed SBR Polymer (of approved make) modified Cement slurry made with Shrinkage Compensating Cement in concrete/RCC work.</p> <p>31.33.3 Epoxy injection grout in concrete/RCC work of approved make</p>	<p>kg</p> <p>kg</p> <p>kg</p>	<p>117.85</p> <p>122.10</p> <p>748.05</p>
31.34	<p>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.</p> <p>31.34.1 Wooven PVC cloth</p>	<p>sqm</p>	<p>46.40</p>
31.35	<p>Cleaning of exposed concrete surface of sticking material including loose and foreign material by sand blasting with coarse sand followed by and including cleaning with oil free air blast as per direction of Engineer in charge.</p>	<p>sqm</p>	<p>242.45</p>
31.36	<p>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</p> <p>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.</p> <p>31.36.1 25mm thick in Grade M 25 with cement content not less than 330 kg per cum</p>	<p>sqm</p>	<p>642.25</p>

31.0 (NEW TECHNOLOGIES AND MATERIALS)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	31.36.2 50mm thick in Grade M 25 with cement content not less than 330 kg per cum	sqm	1016.65
	31.36.3 75mm thick in Grade M 25 with cement content not less than 330 kg per cum	sqm	1452.60
31.37	Providing and inserting 12mm dia galvanized 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.	each	215.85
31.38	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	821.55
NEW TECHNOLOGY ITEMS			
31.39	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/ 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.	kg	372.90

31.0 (NEW TECHNOLOGIES AND MATERIALS)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
31.40	Providing and fixing of external wall system on Light gauge steel frame work with. Outer face having 6mm thick heavy duty fiber cement board fixed on 9mm thick heavy duty fiber cement board confirming to IS 14862:2000, category IV type A (High pressure steam cured) as per standard sizes fixed with self-drilling / tapping screws / fasteners @ 60cm c/c of approved make. A groove of 2 mm 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 of counter sunk rib head of 1.60mm to 4 mm thick of 8 to 10 gauge of length varying from 25 to 45 mm and internal face 12.5mm thick gypsum plaster board fixed on 8mm thick fiber cement board confirming to IS 14862:2000 of category III type B (High pressure steam cured) as per standard sizes fixed with self-drilling / tapping screws / fasteners @ 60cm c/c of approved make, proper tapping and jointing to be done using fiber mesh tape and epoxy and acrylic based jointing compound for seamless finish.(cost of frame work to be paid for separately).	sqm	2907.05
31.41	Providing and fixing internal wall panels on Light gauge steel framework with 12.5mm thick gypsum plaster board conforming IS 2095:2011 fixed on 8mm thick fiber cement board conforming to IS 14862:2000 of category III type B (High pressure steam cured) as per standard sizes fixed with self-drilling / tapping screws / fasteners @ 60cm c/c of approved make, Screws shall be of counter sunk rib head of 1.60mm to 4 mm thick of 8 to 10 gauge of length varying from 25 to 45 mm. Proper tapping and jointing to be done using fiber mesh tape and epoxy and acrylic based jointing compound for seamless finish.(cost of frame work to be paid for separately)	sqm	2207.35
31.42	Providing and fixing in all exterior face panels breathable vapour barrier underneath the cement fiber board as per National Building Code 2009 complete as per direction of Engineer-in-charge.	sqm	295.45
31.43	Supplying and installation of moisture resistant/fire resistant 6mm thick Heavy duty fiber cement board (High pressure steam cured) conforming to IS 14862:2000 of category III type B as per standard sizes fixed with self-drilling/taping screws. 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 45mm.	sqm	887.20
31.44	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 3 mm dia G.I. wire mesh with 50 mm 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 3 mm 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 20 kg/ per cum. Both the outer faces of the panel shall be finished by applying the layer of 50 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/m2) 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	4264.10
31.45	Providing and fixing in position, 230mm thick factory made Expanded Polystyrene Core (EPS Core) roof/floor panels made of 3 mm dia G.I. wire mesh with 50 mm pitch in both the directions and on both.		

31.0 (NEW TECHNOLOGIES AND MATERIALS)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	faces of panel, kept at 120-135 mm gap and connected by the zigzag 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 100 mm 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 coarse sand (not having more than 40% stone chips of size upto 6 mm)} with the help of shotcreting equipment etc at a pressure of not less than 1 bar (100Kn/m ²) 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 :1.5 coarse sand : 3 graded stone aggregate 20 mm 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 Engineer-in-charge	sqm	4506.35
31.46	Providing and fixing of customized aluminium formwork for monolithic construction RCC members with a repetitive usage of 100 times using grade 5052 aluminium of panel sheets of minimum 4 mm thick and grade 6061 (Type-6) aluminium for extruded sections. The form work includes of beam components i.e. beam side panel, prop head for soffit beam, beams soffit panel, beam soffit bulk head and deck components i.e. deck panel, deck prop, prop length, deck mid, soffit length, deck beam bar and wall components i.e. wall panel, rocker, kiker and internal soffit corner, external soffit corner, external corner, internal corner etc. The panels are held in position by a simple pin and wedge system that passes through holes in the outside rib of each panel. The tolerance of finished panels to be (-1 mm), and shall conform to IS 14687-1999. Pins and wedges to be made of high grade mild steel, all complete as per direction of Engineer-in- charge. (Cost of RCC work shall be paid separately)	sqm	209.95
31.47	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 fiber cement board confirming to IS 14862:2000 or Calcium silicate board confirming to EN 14306:2009 of 5mm thick each. Panel shall be laid on 6mm thick cement mortar (1 cement: 2 fine sand) mixed with chemical adhesive of 0.5kg per 50kg 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 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 of all the material is included except "C channel" which will be paid separately).		
	31.47.1 Non load bearing panels 50mm thick of required size	sqm	1193.90
	31.47.2 Non load bearing panels 60mm thick of required size	sqm	1355.45
	31.47.3 Non load bearing panels 75mm thick of required size	sqm	1643.45
	31.47.4 Non load bearing panels 90mm thick of required size	sqm	1966.55
	31.47.5 Non load bearing panels 100mm thick of required size	sqm	2310.75
31.48	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		

31.0 (NEW TECHNOLOGIES AND MATERIALS)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	<p>cement, pulverized flyash, quick lime, cotton pulp & 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 confirming to IS 14862:2000. These solid wall panels are installed using Galvanized iron steel tracks/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 steel screw/ fasteners. The panel shall be fixed vertically with tongue & groove joint with cement based polymer modified jointing compound. The exposed surface finished with fibre mesh/glass fibre tape with polymer based jointing compound having superior flexibility. 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 of all the material is included except "tracks/C channel" which will be paid separately).</p> <p>31.48.1 Non load bearing panels 50mm thick of required size (minimum 4mm thick fibre cement board)</p> <p>31.48.2 Non load bearing panels 75mm thick of required size (minimum 4mm thick fibre cement board)</p>	<p>sqm</p> <p>sqm</p>	<p>1362.80</p> <p>1580.55</p>
31.49	<p>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 ventilator opening as per the cutting drawing prepared by architects /design engineers 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.</p>	<p>sqm</p>	<p>1422.25</p>
31.50	<p>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 repellent 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 line /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 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</p>		

31.0 (NEW TECHNOLOGIES AND MATERIALS)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	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	sqm	240.05
31.51	Filling of empty cavities (as shown in the structural design drawing) with quarry dust mixed with 5% cement (by volume).After initial infill of 50mm 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	2115.15
31.52	Laying of GFRG panel as roof / floor slab panel and stair case 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. (c) 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	244.15
31.53	Supplying and fixing 10 Gauge weld mesh of size 100mm x100mm for floor/roof slab concrete screed over the micro beams as reinforcement. The weld mesh shall be fixed as per drawing.	sqm	255.70
31.54	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	319.40
31.55	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	90.25

31.0 (NEW TECHNOLOGIES AND MATERIALS)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
31.56	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	42.55
31.57	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	43.45
31.58	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 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.	sqm	140.90
31.59	In-filling / sealing of joint between RCC lintel cum sun shade and wall (on external side) in all floors by pushing in Grout RW/equivalent in paste form and coving 20 mm x 20 mm after applying a coat of Zycosil/equivalent & zycoprime/equivalent solution before cement plastering of top, bottom and sides of RCC sunshade.	metre	43.45
31.60	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	153.45
31.61	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	21.15
31.62	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. 31.62.1 Suspended floors, roofs, landings, balconies and access platform.	sqm	91.80
31.63	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	1810.90
31.64	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		

31.0 (NEW TECHNOLOGIES AND MATERIALS)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	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	2622.80
31.65	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 10cm 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 directions of Engineer-in-Charge.	sqm	3710.70
31.66	Providing and laying factory made Precast concrete solid blocks of 200mm thickness of grade M10 made of C&D waste from approved manufacturer in foundation and plinth in: 31.66.1 Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	6124.65
31.67	Providing and laying factory made Precast concrete solid blocks of 200mm thickness of grade M10 made of C&D waste from approved manufacturer in superstructure above plinth level up to floor V level 31.67.1 Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	8585.90
31.68	Providing and laying half block masonry with factory madePrecast concrete solid blocks of 100 mm thickness of grade M10 made of C&D waste from approved manufacturer in foundation and plinth in: 31.68.1 Cement mortar 1:4 (1 cement : 4 coarse sand)	sqm	752.00
31.69	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: 31.69.1 Cement mortar 1:4 (1 cement : 4 coarse sand)	sqm	970.55
31.70	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	692.60
PREFAB/PRECAST TECHNOLOGY			
31.71	Fabrication & Manufacturing of Prestressed Hollow Core slab(Hollow area 25 to 30%) of different thickness & modular width 1200 mm in Controlled Factory Environment with approved methodology informing to IS 10297- 1982 conforming to IS : 10297- 1982 by using long line casting method having arrangement of proper steel bed. Concreting		

31.0 (NEW TECHNOLOGIES AND MATERIALS)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
	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/Slip former, finishing, curing and also provision of steam curing. Cutting, making necessary cut out/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.		
31.71.1	Concrete Grade-M-40 (cement content 400 kg)		
31.71.1.1	100 mm thick hollow core slab	metre	1197.15
31.71.1.2	120 mm thick hollow core slab	metre	1398.20
31.71.1.3	150 mm thick hollow core slab	metre	1699.75
31.71.1.4	200 mm thick hollow core slab	metre	2069.85
31.71.1.5	250 mm thick hollow core slab	metre	2539.50
31.71.1.6	300 mm thick hollow core slab	metre	3008.75
31.71.1.7	350 mm thick hollow core slab	metre	3478.20
31.71.1.8	400 mm thick hollow core slab	metre	3947.65
31.71.2	Extra for using M-50 (Cement content 425 kg) instead of M40		
31.71.2.1	100 mm thick hollow core slab	metre	25.40
31.71.2.2	120 mm thick hollow core slab	metre	30.45
31.71.2.3	150 mm thick hollow core slab	metre	38.10
31.71.2.4	200 mm thick hollow core slab	metre	47.40
31.71.2.5	250 mm thick hollow core slab	metre	59.25
31.71.2.6	300 mm thick hollow core slab	metre	71.10
31.71.2.7	350 mm thick hollow core slab	metre	82.95
31.71.2.8	400 mm thick hollow core slab	metre	94.80
31.71.3	Extra for using M-60 (Cement content 440 kg) instead of M40		
31.71.3.1	100 mm thick hollow core slab	metre	40.60
31.71.3.2	120 mm thick hollow core slab	metre	48.70
31.71.3.3	150 mm thick hollow core slab	metre	60.95
31.71.3.4	200 mm thick hollow core slab	metre	75.80
31.71.3.5	250 mm thick hollow core slab	metre	94.80
31.71.3.6	300 mm thick hollow core slab	metre	113.75
31.71.3.7	350 mm thick hollow core slab	metre	132.65
31.71.3.8	400 mm thick hollow core slab	metre	151.65
31.72	Fabrication and manufacturing of solid precast concrete element with provisions of shear keys, connecting loops, dowel tubes and proper lifting accessories for walls, beams, slabs, stairs, column etc, of various thickness, shape and size of different concrete grades manufactured in controlled factory environment with approved methodology including moulds (Pallet system, Tilts form, table moulds, battery moulds, vertical moulds, beam moulds, column moulds, staircase moulds, Facade 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).		
31.72.1	Concrete grade M-35 (Cement content 370 kgs)	cum	19190.80
31.72.2	Extra for using M-40 (Cement content 400 kg) instead of M-35	cum	338.50
31.72.3	Extra for using M-50 (Cement content 425 kg) instead of M-35	cum	620.55
31.72.4	Extra for using M-60 (Cement content 440 kg) instead of M-35	cum	789.80

31.0 (NEW TECHNOLOGIES AND MATERIALS)

CODE NO.	DESCRIPTION	UNIT	RATE ₹
31.73	Providing & 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 & distressing operations as per approved make conforming to IS1343 & grade FY-1860 etc, complete as per drawings and direction of Engineer -in-charge.	Kg	148.90
31.74	Transportation of Precast Elements by flatbed Trailer (Double/ Triple axle 40ft Length with proper accessories like A frame etc) from factory, including the cost of loading , unloading & stacking at site with the help of required capacity cranes. 31.74.1 Lead within 15km 31.74.2 Add/Deduct over item 31.74.1 for every additional lead of 5 km	MT MT	507.20 121.50
31.75	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 & Alignment 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 up to fifth floor. 31.75.1 Prestressed hollow core Slab up to 200 mm thickness 31.75.2 Prestressed hollow core slab above 200 mm up to 400 mm thickness 31.75.3 Solid concrete wall elements	sqm sqm cum	171.20 289.65 1818.65
31.76	Providing & Applying weather proof sealant on outer joints of approved make confirming to IS & directed by Engineer-in-charge. 31.76.1 Sealant 25mmx10mm at joints	metre	155.40
31.77	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. 31.77.1 2 mm thick 31.77.2 5 mm thick 31.77.3 10 mm thick	each each each	23.55 30.20 43.60
31.78	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 directions of Engineer-in-charge. (The payment shall be made on the basis of actual weight of approved grout injected.) 31.78.1 Stirrer mixed cementitious grout (non shrink) of approved make in dowel tubes / Shear keys / Joints of precast members.	kg	113.35
31.79	Providing and fixing Scaffolding net of required width made of high density Polyethylene UV stabilized knitted on warp knitting machines having density 100gm/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	24.15

COEFFICIENTS FOR CEMENT CONSUMPTION

1.0 COEFFICIENT FOR CEMENT CONSUMPTION

1.0 COEFFICIENT FOR CEMENT CONSUMPTION

3.0 MORTARS

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
3.6	Cement Mortar 1 : 1 (1 cement: 1 fine sand)	cum	10.20
3.7	Cement Mortar 1 : 2 (1 cement: 2 fine sand)	cum	6.80
3.8	Cement Mortar 1 : 3 (1 cement: 3 fine sand)	cum	5.10
3.9	Cement Mortar 1 : 4 (1 cement: 4 fine sand)	cum	3.80
3.10	Cement Mortar 1 : 5 (1 cement: 5 fine sand)	cum	3.10
3.11	Cement Mortar 1 : 6 (1 cement: 6 fine sand)	cum	2.50
3.13	Cement Mortar 1 : 2 (1 cement: 2 coarse sand)	cum	6.80
3.14	Cement Mortar 1 : 3 (1 cement: 3 coarse sand)	cum	5.10
3.15	Cement Mortar 1 : 4 (1 cement: 4 coarse sand)	cum	3.80
3.16	Cement Mortar 1 : 5 (1 cement: 5 coarse sand)	cum	3.10
3.17	Cement Mortar 1 : 6 (1 cement: 6 coarse sand)	cum	2.50
3.19	Cement Mortar 1 : 2 (1 cement: 2 stone dust)	cum	6.80
3.20	Cement Mortar 1 : 2 (1 cement: 2 Marble dust)	cum	6.80
3.21	Cement Mortar 1 : 5 (1 cement: 5 Marble dust)	cum	3.10
3.22	White Cement Lime Mortar ¼:1:1:1 (¼ white cement : 1 lime putty : 1 stone dust : 1 marble dust)	cum	1.60*
3.23	White Cement Mortar 1:2 (1 white cement : 2 marble dust)	cum	6.80*
3.24	White Cement Mortar 1:3 (1 white cement : 3 marble dust)	cum	5.10*
3.25	White Cement Mortar 1:5 (1 white cement : 5 marble dust)	cum	3.10*
3.26	Cement Lime Mortar 1:1:3 (1cement : 1 lime putty: 3 fine sand)	cum	4.10
3.27	Cement Lime Mortar 1:1:6 (1cement : 1 lime putty: 6 fine sand)	cum	2.50
3.29	Cement Lime Mortar 1:1:6 (1cement : 1 lime putty: 6 coarse sand)	cum	2.50

*denotes the White Cement

1.0 COEFFICIENT FOR CEMENT CONSUMPTION

4.0 CEMENT CONCRETE

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
4.4	<u>CEMENT CONCRETE (CAST-IN-SITU)</u> P/L cement concrete- all work upto plinth level: 4.4.1 DELETED 4.4.2 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size) 4.4.3 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) 4.4.4 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 40 mm nominal size) 4.4.5 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) 4.4.6 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) 4.4.7 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size) 4.4.8 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size)	cum cum cum cum cum cum cum cum	4.00 3.20 3.20 2.20 2.20 1.70 1.30
4.5	P/L cement concrete in retaining walls, return walls, etc. 4.5.1 DELETED 4.5.2 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size) 4.5.3 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) 4.5.4 DELETED 4.5.5 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) 4.5.6 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) 4.5.7 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) 4.5.8 1:5:10 (1 cement : 5 coarse sand : 10 graded brick aggregate 40 mm nominal size)	cum cum cum cum cum cum cum	4.00 3.20 2.20 2.20 1.30 1.30
4.7	P/L cement concrete in kerbs, steps etc. 4.7.1 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size) 4.7.2 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum cum	4.0. 3.20
4.8	<u>CEMENT CONCRETE (PRECAST)</u> P/L precast cement concrete in string or lacing courses, etc. 4.8.1 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size) 4.8.2 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) 4.8.3 DELETED	cum cum	4.05 3.25
4.9	P/L precast cement concrete in kerbs,, edging etc 4.9.1 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size) 4.9.2 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum cum	4.05 3.25

1.0 COEFFICIENT FOR CEMENT CONSUMPTION

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
4.10	P/L precast cement concrete solid blocks. 4.10.1 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size) 4.10.2 1:2:4 (1 cement : 2 coarse sand : 4 graded crushed stone aggregate 20 mm nominal size) 4.10.2 1:3:6 (1 cement : 3 coarse sand : 6 graded crushed stone aggregate 20 mm nominal size) 4.10.3 DELETED 4.10.4 DELETED	cum cum cum	4.56 3.76 2.76
4.11	P/L precast cement concrete hollow blocks. 4.11.1 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size) 4.11.2 1:2:4 (1 cement : 2 coarse sand : 4 graded crushed stone aggregate 20 mm nominal size) 4.11.3 1:3:6 (1 cement : 3 coarse sand : 6 graded crushed stone aggregate 20 mm nominal size)	cum cum cum	2.899 2.099 1.693
4.16	Pre-casting & Placing in position 125 mm dia Bollards 600 mm high.	each	0.097
4.17	<u>DAMP PROOF COURSE</u> P/L D.P.C. 40 mm thick with cement concrete 1:2:4.	sqm	0.13
4.18	P/L D.P.C. 50 mm thick with cement concrete 1:2:4.	sqm	0.16
4.24	<u>MISCELLANEOUS</u> Making plinth protection 50mm thick of cement concrete 1:3:6.	sqm	0.11
4.26	P/L ready mixed plain cement concrete. (Fly Ash) 4.26.1 All works upto plinth level 4.26.1.1 M-15 grade plain cement concrete 4.26.1.2 M-10 grade plain cement concrete 4.26.2 All works above plinth level and upto floor five level 4.26.2.1 M-15 grade plain cement concrete 4.26.2.2 M-10 grade plain cement concrete	cum cum cum cum	2.40 2.20 2.40 2.20
4.27	P/L ready mixed plain cement concrete. 4.27.1 All works upto plinth level 4.27.1.1 M-15 grade plain cement concrete 4.27.1.2 M-10 grade plain cement concrete 4.27.2 All works above plinth level and upto floor five level 4.27.2.1 M-15 grade plain cement concrete 4.27.2.2 M-10 grade plain cement concrete	cum cum cum cum	2.40 2.20 2.40 2.20

1.0 COEFFICIENT FOR CEMENT CONSUMPTION

5.0 REINFORCED CEMENT CONCRETE

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
5.1	<u>CAST-IN-SITU</u> P/L R.C.C. upto plinth level		
5.1.1	DELETED		
5.1.2	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded crushed stone aggregate 20 mm nominal size)	cum	4.00
5.1.3	1:2:4 (1 cement : 2 coarse sand : 4 graded crushed stone aggregate 20 mm nominal size)	cum	3.20
5.2	R.C.C work in walls etc.		
5.2.1	DELETED		
5.2.2	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded crushed stone aggregate 20 mm nominal size)	cum	4.00
5.2.3	DELETED		
5.3	R.C.C work in beams etc.		
5.3.1	1:1½ :3 (1 cement :1½ coarse sand :3 graded crushed stone aggregate 20 mm nominal size)	cum	4.00
5.3.2	DELETED		
5.4	R.C.C work in kerbs, steps etc.		
5.4.1	1:1½ :3 (1 cement :1½ coarse sand :3 graded crushed stone aggregate 20 mm nominal size)	cum	4.00
5.4.2	DELETED		
5.5	R.C.C work in arches, domes, etc.		
5.5.1	1:1½ :3 (1 cement :1½ coarse sand :3 graded crushed stone aggregate 20 mm nominal size)	cum	4.00
5.5.2	DELETED		
5.6	R.C.C work in chimneys, shafts etc.		
5.6.1	1:1½ :3 (1 cement :1½ coarse sand :3 graded crushed stone aggregate 20 mm nominal size)	cum	4.00
5.6.2	DELETED		
5.7	R.C.C work in well-steining.		
5.7.1	1:1½ :3 (1 cement :1½ coarse sand :3 graded crushed stone aggregate 20 mm nominal size)	cum	4.00
5.7.2	DELETED		
5.8	R.C.C (1:1½:3) work in vertical and horizontal fins individually or forming box louvers, facias and eaves boards.	cum	4.00
5.12	<u>PRE-CAST R.C.C.</u> P/F R.C.C. work in string courses, bands, copings, bed plates, anchor blocks, plain window sills, etc.		
5.12.1	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded crushed stone aggregate 20 mm nominal size)	cum	4.05
5.12.2	DELETED		
5.13	P/F R.C.C. work in small lintels not exceeding 1.5 m clear span.		
5.13.1	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded crushed stone aggregate 20 mm nominal size)	cum	4.00
5.13.2	DELETED		
5.14	P/F R.C.C. work in mouldings as in cornices, windows sills etc.		
5.14.1	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded crushed stone aggregate 20 mm nominal size)	cum	4.00
5.14.2	DELETED		
5.15	P/F R.C.C. work in lintels, beams and bressumers etc.		
5.15.1	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded crushed stone aggregate 20 mm nominal size)	cum	4.00
5.15.2	DELETED		

1.0 COEFFICIENT FOR CEMENT CONSUMPTION

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
5.16	P/F R.C.C. work in shelves. 5.16.1 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded crushed stone aggregate 20 mm nominal size) 5.16.2 DELETED	cum	4.05
5.17	P/F R.C.C. work in vertical & horizontal fins individually or forming box louvers. 5.17.1 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded crushed stone aggregate 20 mm nominal size) 5.17.2 DELETED	cum	4.00
5.18	Fixing precast cement concrete Jali (1:2:4). 5.18.1 50 mm thick 5.18.2 40 mm thick 5.18.3 25 mm thick * Cement for fixing only	sqm sqm sqm	1.64* 1.64* 1.64*
5.19	<u>ENCASING ROLLED STEEL SECTIONS</u> Encasing rolled steel sections, in beams and columns, with cement concrete: 5.19.1 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded crushed stone aggregate 20 mm nominal size) 5.19.2 DELETED	cum	4.00
5.20	Encasing rolled steel sections, in grillage, with cement concrete: 5.20.1 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded crushed stone aggregate 20 mm nominal size) 5.20.2 DELETED	cum	4.00
5.23	<u>MISCELLANEOUS</u> Smooth finishing of the exposed surface of RCC work with 6mm thick cement mortar (1:3)	100 sqm	3.67
5.24	Rendering smooth the top of suspended floors, landings and staircases (treads and risers) with cement mortar (1:2)	100 sqm	4.17
5.27	Providing and filling in position bitumen mix filler.	Per cm depth per cm width per 100m	0.00032
5.33	<u>DESIGN MIX CONCRETE</u> DELETED		
5.34	P/L Design mix concrete (M-25)	cum	3.30*
5.35	Extra for providing richer mixes at all floor levels: 5.35.1 Providing M-30 grade concrete instead of M-25 grade BMC/RMC. 5.35.2 Providing M-35 grade concrete instead of M-25 grade BMC/RMC. 5.35.3 Providing M-40 grade concrete instead of M-25 grade BMC/RMC.	cum cum cum	0.10* 0.20* 0.30*
5.37	P/F precast R.C.C. in waffle units	cum	4.16*
5.38	P/L RMC manufactured in fully automatic batching plant M-25 grade R.C.C.	cum	3.30
5.39	P/L Design mix concrete (M-25) using Flyash	cum	3.30*
5.47	P/F factory made precast R.C.C. M-40 doors and windows 5.47.1 Door frame 125 mm x 60 mm 5.47.2 Door frame 100 mm x 60 mm 5.47.3 Door frame 85 mm x 60 mm	meter meter meter	0.049 0.044 0.041
5.48	Providing and laying R.C.C for construction of piers, abutments, portal frames, etc.	cum	4.80
5.49	Constructing cast insitu RCC diaphragm wall by providing	cum	4.14

***Actual weight for design mix will be worked out taking into consideration the cement requirement as per particular mix design**

1.0 COEFFICIENT FOR CEMENT CONSUMPTION

6.0 BRICK WORK

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
6.1	Brick work in foundation and plinth with non-modular bricks		
6.1.1	Cement lime mortar 1:1:6 (1 cement : 1 lime putty : 6 fine sand)	cum	0.625
6.1.2	Cement lime mortar 1:2:9 (1 cement : 2 lime putty : 9 fine sand)	cum	0.425
6.1.3	Cement lime mortar 1:1:6 (1 cement : 1 lime putty : 6 coarse sand)	cum	0.625
6.1.4	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	0.95
6.1.5	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	0.625
6.2	Brick work in foundation & plinth with modular bricks.		
6.2.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	0.836
6.2.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	0.55
6.3	Brick work with machine moulded perforated bricks.		
6.3.1	With non modular bricks.	cum	0.625
6.3.2	With modular bricks.	cum	0.55
6.10	Half brick masonry in cement mortar (1:3) for closing cavity 5 to 7.5cm wide in cavity wall.	100 m	3.86
6.11	Brick work 7 cm in cement mortar (1:3)	100 sqm	9.23
6.12& 6.13	Brick work in plain and gauged arches in cement mortar (1:3)	cum	1.28
6.15	<u>HALF BRICK MASONRY</u> Half brick masonry in foundations and plinth :		
6.15.1	Cement mortar 1:3 (1 cement : 3 coarse sand)	100 sqm	14.28
6.15.2	Cement mortar 1:4 (1 cement : 4 coarse sand)	100 sqm	10.64
6.19	Providing bricks band in cement mortar (1:4)	100 m	0.380
6.20	<u>BRICK TILE WORK</u> Tile brick masonry in foundation and plinth:		
6.20.2	Cement lime mortar 1:1:6 (1 cement : 1 lime putty : 6 fine sand)	cum	1.00
6.20.3	Cement lime mortar 1:1:6 (1 cement : 1 lime putty : 6 coarse sand)	cum	1.00
6.20.4	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	1.52
6.20.5	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	1.00
6.26 & 6.27	Tile brick masonry in plain and gauged arches in cement mortar (1:3)	cum	1.33
6.28	Tile brick masonry work 5cm thick in cement mortar 1:3	100 sqm	7.65
6.29	<u>HONEY COMB WORK</u> Honey-comb brick work 10/11.4 cm thick in cement mortar 1:4	100 sqm	6.56
6.30	<u>MOULDING AND CORNICES</u> Providing 10cm/7.0cm thick and 5cm/5.7cm projected string course in cement mortar 1:4	100 m	0.38
6.31	Moulding and cornices in cement mortar 1:4	100 m/ cm girth	0.0353
6.34	<u>Exposed Brick work</u> 6.34.1 From ground level upto plinth level		
6.34.1.1	With Non Modular bricks	cum	0.625
6.34.1.2	With Modular bricks	cum	0.55
6.34.2	Above plinth level and upto floor V level		
6.34.2.1	With Non Modular bricks	cum	0.625
6.34.2.2	With Modular bricks	cum	0.55
6.35	Brick work with common burnt clay machine moulded bricks in 1:6		
6.35.1	From ground level upto plinth level		
6.35.1.1	With Modular bricks	cum	0.55
6.35.1.2	With Non Modular bricks	cum	0.625
6.35.2	Above plinth level and upto floor V level		
6.35.2.1	With Modular bricks	cum	0.55
6.35.2.2	With Non Modular bricks	cum	0.625

1.0 COEFFICIENT FOR CEMENT CONSUMPTION

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
6.36	Brick work with common burnt clay machine moulded perforated bricks in 1:6		
6.36.1	From ground level upto plinth level		
6.36.1.1	With Modular bricks	cum	0.55
6.36.1.2	With Non Modular bricks	cum	0.625
6.36.2	Above plinth level and upto floor V level		
6.36.2.1	With Modular bricks	cum	0.55
6.36.2.2	With Non Modular bricks	cum	0.625
6.37	Brick work in clay fly ash (non-modular) bricks in superstructure		
6.37.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	0.95
6.37.2	Cement mortar 1:6(1cement : 6 coarse sand)	cum	0.625
6.38	Brick work with non modular fly ash lime bricks (FALG Brick) in:		
6.38.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	0.95
6.38.2	Cement mortar 1:6(1cement : 6 coarse sand)	cum	0.625
6.39	Brick work with modular Calcium silicate bricks machine moulded in:		
6.39.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	0.836
6.39.2	Cement mortar 1:6(1cement : 6 coarse sand)	cum	0.55
6.40	Brick work with modular extruded burnt fly ash clay sewer brick in cement mortar 1:4 (1 cement : 4 coarse sand)	cum	0.836
6.41	Brick work with modular extruded burnt fly ash clay sewer brick in cement mortar 1:3	cum	1.275
6.42	Autoclaved aerated cement blocks masonry with 100 mm thick AAC blocks in cement mortar 1:4	cum	0.57
6.45	Half brick masonry with non modular fly ash bricks		
6.45.1	Cement mortar 1:3 (1 cement : 3 coarse sand)	100 sqm	14.28
6.45.2	Cement mortar 1:4 (1 cement : 4 coarse sand)	100 sqm	10.64
6.47	Making plinth protection with common burnt clay bricks.	sqm	0.118
6.48	Brick edging 7cm wide in cement mortar 1:4	100 m	0.137
6.49	<u>CEMENT CONCRETE BRICK WORK</u> DELETED		
6.50	DELETED		
6.51	DELETED		
6.52	Providing and laying autoclaved aerated cement blocks masonry	cum	0.57

1.0 COEFFICIENT FOR CEMENT CONSUMPTION

7.0 STONE WORK

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
7.1& 7.2	<u>RANDOM RUBBLE MASONRY</u> Random Rubble masonry cement mortar (1:6)	cum	0.825
7.6	<u>COURSED RUBBLE MASONRY</u> Coursed Rubble Masonry with hard stone in cement mortar 1:6	cum	0.750
7.7	Coursed rubble masonry with hard stone (first or second sort) in cement mortar 1:6	cum	0.750
7.10	<u>ASHLAR MASONRY</u> Stone work in plain ashlar in cement mortar 1:6 including pointing with cement mortar 1:2	cum	0.54
7.11	Stone work plain ashlar in arches/domes super in cement mortar 1:3 including centering, shuttering and pointing with cement mortar 1:2.	cum	1.07
7.16	Stone work, sunk or moulded or sunk and moulded in cement mortar 1:6 including pointing with white cement mortar 1:2	cum	0.54
7.23	Providing and fixing stone dowels 10 x 5 x 2.50 cm in cement mortar 1:2.	each	0.007
7.25	Providing and fixing sloping chajja of stone 40mm thick and upto 80cm wide in cement mortar 1:4 including pointing in cement mortar 1:2	100 sqm	5.59
7.26	Providing and fixing horizontal chajja of stone 40mm thick and upto 80cm projection in cement mortar 1:4 including pointing in white cement mortar 1:2	100 sqm	4.94+ 0.03*
7.27	P/F 30 mm red sand stone sun shade with cement mortar 1:4 including finishing and curing complete.	100 sqm	2.19
7.28	Providing and fixing red sand stone brackets 55 x 22.5 x 45 cm	100 nos.	3.02
7.29	Stone work, plain in copings, cornices, string courses and plinth courses in cement mortar 1:6 including pointing with white cement mortar 1:2	cum	0.54
7.30	30 mm thick red sand stone in cement mortars 1:3 including finishing complete.	100 sqm	1.64
7.31	30 mm thick red sand stone shelves in cement concrete 1: 3 : 6 and curing complete.	100 sqm	0.55
7.32	30 mm thick red sand stone shelves (chisel dressed) with cement mortar 1:4	100 sqm	4.30
7.40	Stone tile work for wall lining with 12mm thick bed in cement mortar 1: 3	100 sqm	10.44+ 1.70*
7.44	<u>DEVRI STONE WORK</u> P/L chisel dressed Devri Stone in cement mortar 1: 6	sqm	0.074
7.46	P/L rough chisel dressed Devri Stone in cement mortar 1: 6	sqm	0.074

*White Cement

1.0 COEFFICIENT FOR CEMENT CONSUMPTION

8.0 MARBLE & GRANITE WORK

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
8.1	Marble work gang 16 mm thick for wall lining in cement mortar 1:3 including pointing with white cement mortar 1:2	100 sqm	8.16+ 1.63*
8.2	P/F 16 mm thick gang saw cut, mirror polished, premoulded and pre polished, machine cut for kitchen platforms, vanity counters etc laid over 20 mm thick base cement mortar 1:4	100 sqm	9.12
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.	100 m	1.27
8.7	P/F cramps in RCC/CC/brick masonry backing with cement mortar 1:2 8.7.1 Gunmetal cramps 8.7.2 Stainless steel cramps.	kg kg	0.0635 0.0701
8.9	Stone tile work for wall lining over 12mm thick bed of cement mortar 1:3 and cement slurry @ 3.3kg/sqm including pointing in white cement complete.	100 sqm	10.44+ 1.90*
8.11	P/F machine cut, mirror / edge polished	100 sqm	8.16+ 3.30*
8.13	Stone work (machine cut edges) for wall lining etc. (veneer work) in cement mortar (1:3) including pointing in white cement mortar (1:2).	100 sqm	9.18+ 1.56*
8.14	P/F stainless steel cramps in stone wall lining in cement mortar (1:2).	kg	0.07
8.16	P/F copper pins 7.5 cm long 6 mm diameter in stone wall lining in cement mortar (1:2).	each	0.007
8.17	Wall lining butch work with Dholpur stone 40mm thick in cement mortar (1:3) including ruled pointing in cement mortar (1: 2)	100 sqm	15.50+ 1.70*
8.18	Stone work (machine cut edges) for wall lining with grout of 12 mm thick in cement mortar (1:3) and jointed with Cement mortar (1:2).	100 sqm	13.744
8.21	P/F structural steel frame (for dry stone cladding) embedded in brick wall with cement concrete block (1:2:4)	100 kg	1.05
8.22	P/F 50x50x50 mm 2nd class teak wood plugs in cement mortar 1:3.	100 nos.	0.01
8.24	P/F 2nd class teak wood plain lining with wooden plugs	100 sqm	0.055
8.27	Providing and fixing plain panelling with skirting chair rails, and cornice	100 sqm	0.17
8.31	P/F 1st quality ceramic glazed wall tiles over 12 mm thick bed of cement Mortar (1:3) with grey cement slurry @ 3.3 kg/ sqm	sqm	0.1044

*White Cement

1.0 COEFFICIENT FOR CEMENT CONSUMPTION**9.0 WOOD & PVC WORK**

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
9.46	P/F curtain rods of 1.25 mm thick chromium plated brass plate, with wooden plugs, etc.	100 m	0.01
9.47	P/F nickel plated M.S. pipe curtain rods with nickel plated brackets	100 m	0.01
9.52	Providing 40x5 mm flat iron hold fast 40 cm long with cement concrete block 30x10x15 cm 1:3:6 mix	100 nos.	1.10

1.0 COEFFICIENT FOR CEMENT CONSUMPTION**10.0 STEEL WORK**

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
10.4	P/F 1mm thick M.S. sheet sliding-shutters with frame	100 sqm	0.35
10.5	P/F 1mm thick M.S. sheet door with frame	100 sqm	0.35
10.6	Supplying and fixing rolling shutters	100 sqm	0.35
10.10.1 & 10.11.1	Fixing standard steel glazed doors, windows etc.	100 kg	0.13
10.13.1	Providing and fixing T-iron frames for doors, windows and ventilators.	100 kg	0.11
10.15	Providing and fixing M.S tubular frames for doors, windows, ventilators and cupboard with 15x3 mm lugs 10cm long embedded in cement concrete blocks 15x10x10cm of C.C. 1:3:6 mix	100 kg	0.28
10.17 & 10.18	Providing and fixing clamps and steel rings	100 nos.	0.05

1.0 COEFFICIENT FOR CEMENT CONSUMPTION

11.0 FLOORING

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
11.1	Brick on edge		
	11.1.1 1:4 (1cement : 4 coarse sand)	sqm	0.185
	11.1.2 1:6 (1cement : 6 coarse sand)	sqm	0.1285
11.3	Cement concrete flooring 1:2:4		
	11.3.1 25mm thick with 12.5mm nominal size stone aggregate.	sqm	0.122
	11.3.2 40mm thick with 20mm nominal size stone aggregate.	sqm	0.17
	11.3.3 50 mm thick with 20mm nominal size stone aggregate.	sqm	0.202
11.6	52mm thick cement concrete flooring	sqm	0.231
11.7	62mm thick cement concrete flooring	sqm	0.263
11.8	Cement plaster skirting with cement mortar 1:3		
	11.8.1 18 mm thick	sqm	0.14
11.9	Red oxide plaster skirting		
	11.9.1 18 mm thick	sqm	0.1302
	11.9.2 21 mm thick	sqm	0.1444
11.10	Cement concrete pavement with C.C. 1:2:4	cum	3.20
11.12	<u>TERRAZO FLOORING</u> 40mm thick marble chips flooring with under layer 34 mm thick cement concrete 1:2:4		
	11.12.1 Dark shade pigment with ordinary cement.	sqm	0.1695
	11.12.2 Light shade pigment with white cement.	sqm	0.129+0.0405*
	11.12.3 Medium shade pigment with 50% white cement and 50% ordinary cement.	sqm	0.1492+0.0202*
	11.12.4 White cement without any pigment.	sqm	0.129+0.0202*
	11.12.5 Light shade pigment with ordinary cement.	sqm	0.1695
	11.12.6 Ordinary cement without any pigment.	sqm	0.1695
11.13	40mm thick marble chips flooring with under layer 31mm thick cement concrete 1:2:4		
	11.13.1 Dark shade pigment with ordinary cement.	sqm	0.1783
	11.13.2 Light shade pigment with white cement.	sqm	0.1205+0.0578*
	11.13.3 Medium shade pigment with 50% white cement and 50% ordinary cement.	sqm	0.1494+0.0289*
	11.13.4 White cement without any pigment.	sqm	0.1205+0.0578*
	11.13.5 Light shade pigment with ordinary cement.	sqm	0.1783
	11.13.6 Ordinary cement without any pigment.	sqm	0.1783
11.14	40mm thick marble chips flooring with under layer 28mm thick cement concrete 1:2:4		
	11.14.1 Dark shade pigment with ordinary cement.	sqm	0.1907
	11.14.2 Light shade pigment with white cement.	sqm	0.1097+0.081*
	11.14.3 Medium shade pigment with 50% white cement and 50% ordinary cement.	sqm	0.1502+0.0405*
	11.14.4 White cement without any pigment.	sqm	0.1097+0.081*
	11.14.5 Light shade pigment with ordinary cement.	sqm	0.1097
	11.14.6 Ordinary cement without any pigment.	sqm	0.1097
11.15	Marble chips skirting		
	11.15.1 18 mm thick with under layer 12 mm thick cement plaster 1:3 (1 cement : 3 coarse sand) -		
	11.15.1.1 Dark shade pigment with ordinary cement.	sqm	0.1292
	11.15.1.2 Light shade pigment with white cement.	sqm	0.0887+0.0405*
	11.15.1.3 Medium shade pigment with 50% white cement and 50% ordinary cement.	sqm	0.109+0.0203*
	11.15.1.4 White cement without any pigment.	sqm	0.109+0.0405*
	11.15.1.5 Light shade pigment with ordinary cement.	sqm	0.1292
	11.15.1.6 Ordinary cement without any pigment.	sqm	0.1292

1.0 COEFFICIENT FOR CEMENT CONSUMPTION

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
11.21	Special surface finishing to treads, risers etc.	sqm	0.022
11.22	Crazy marble stone flooring. 11.22.1 18 mm thick crazy marble stone white, black or as specified.	sqm	0.1200+0.0405*
11.23	<u>TILE FLOORING</u> Precast terrazzo tiles 22mm thick with in floors, and landing, on 20 mm thick bed of cement mortar 1:4 11.23.1 Light shade using white cement 11.23.2 Medium shade using 50% white cement and 50% ordinary cement. 11.23.3 Dark shade using ordinary cement. 11.23.4 Ordinary cement without any pigment.	sqm sqm sqm sqm	0.0895+0.044* 0.0917+0.0220* 0.0939 0.0939
11.25	Precast terrazzo tiles 22mm thick in skirting and risers of steps on 12 mm thick cement plaster 1:3 11.25.1 Light shade using white cement 11.25.2 Medium shade using 50% white cement and 50% ordinary cement. 11.25.3 Dark shade using ordinary cement. 11.25.4 Ordinary cement without any pigment.	sqm sqm sqm sqm	0.0734+0.066* 0.1064+0.033* 0.1394 0.1394
11.26	Precast terrazzo tiles 22mm thick on walls, on 12mm thick cement plaster 1:3 11.26.1 Light shade using white cement 11.26.2 Medium shade using 50% white cement and 50% ordinary cement 11.26.3 Dark shade using ordinary cement. 11.26.4 Ordinary cement without any pigment.	sqm sqm sqm sqm	0.0734+0.066* 0.1064+0.033* 0.1394 0.1394
11.28	Chequered terrazzo tiles 22mm thick in floors on 20 mm thick bed of cement mortar 1:4 11.28.1 Light shade using white cement 11.28.2 Medium shade using 50% white cement and 50% ordinary cement. 11.28.3 Dark shade using ordinary cement. 11.28.4 Ordinary cement without any pigment.	sqm sqm sqm sqm	0.0895+0.044* 0.0917+0.024* 0.0939 0.0939
11.29	Chequered precast cement concrete tiles 22mm thick in footpath on 20 mm thick bed of cement mortar 1:4 11.29.1 Light shade using white cement 11.29.2 Medium shade using 50% white cement and 50% ordinary cement. 11.29.3 Dark shade using ordinary cement. 11.29.4 Ordinary cement without any pigment.	sqm sqm sqm sqm	0.1291+0.066* 0.1621+0.033* 0.1951 0.1951
11.30	Chequered terrazzo tiles 30mm thick in stairs on 20 mm thick bed of cement mortar 1:4 11.30.1 Light shade using white cement 11.30.2 Medium shade using 50% white cement and 50% ordinary cement. 11.30.3 Dark shade using ordinary cement. 11.30.4 Ordinary cement without any pigment.	sqm sqm sqm sqm	0.1291+0.066* 0.1621+0.033* 0.1951 0.1951
11.31	Providing and fixing 10 mm thick acid and/or alkali resistant tiles 11.31.1 In flooring on a bed of 10mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand) 11.31.2 In dado/skirting on 12mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand)	sqm sqm	0.0786** 0.0862**
11.32	Tile work in skirting, risers of steps etc. with 8 mm thick marble tile	sqm	0.1044

1.0 COEFFICIENT FOR CEMENT CONSUMPTION

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
11.33	<u>MARBLE STONE FLOORING</u> Marble stone flooring with 16/18 mm thick marble stone over 20 mm thick base of cement mortar 1:4	sqm	0.13512
11.36	<u>KOTA STONE FLOORING</u> Kota stone slab flooring over 20mmthick bed of cement mortar 1:4	sqm	0.1491
11.37	Kota stone slab 20 mm thick in risers of steps, skirting, etc laid on 12 mm (average) thick cement mortar 1:3	sqm	0.1374
11.38	<u>SAND STONE FLOORING</u> 40mm thick fine dressed stone flooring over 20mm (average) thick base of cement mortar 1:5with joints finished flush.	sqm	0.0775
11.39	40mm thick fine dressed stone flooring over 20mm (average) thick base of cement mortar 1:5 i/c pointing with cement mortar 1:2	sqm	0.0931
11.40	40 mm thick rubbed stone flooring over 20mm (average) thick base of cement mortar 1:5 with joints 3mm thick, side buttered with cement mortar 1:2	sqm	0.0931
<u>CERAMIC GLAZED TILES</u>			
11.50	P/L Ceramic glazed floor tiles laid on 20 mm thick bed of cement mortar 1: 4	sqm	0.1242
11.51	P/L rectified Glazed Ceramic floor tiles laid on 20 mm thick cement mortar 1:4	sqm	0.1242
11.52	<u>VITRIFIED FLOOR TILES</u> P/L vitrified floor tiles laid on 20mm thick cement mortar 1:4	sqm	0.1242
11.56	P/L Vitrified tiles skirting in cement mortar 1:3	sqm	0.088
11.60	Crazy ceramic tile flooring	sqm	0.1046
11.63	P/L machine cut, mirror polished, Italian Marble stone flooring	sqm	0.085+0.05*
11.64	P/L machine cut, mirror polished Marble stone flooring....	sqm	0.085+0.05*
11.66	Providing and laying flamed finish Granite stone flooring....	100 sqm	13.50
11.68	Providing and laying Polished Granite stone flooring.....	100 sqm	13.50

*White Cement

** Acid alkali resistant cement

1.0 COEFFICIENT FOR CEMENT CONSUMPTION**12.0 ROOFING**

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
12.25	10cm thick mud phaska with flat bricks grouted with cement mortar 1:3	100 sqm	3.11
12.27	Providing and laying brick tiles over mumty roofs grouted with cement mortar 1:3	100 sqm	9.13
12.28	Providing and laying pressed clay tiles on roofs jointed with cement mortar 1:4	100 sqm	9.92
12.31	Providing gola 75x75 mm in cement concrete 1:2:4	meter	0.031
12.32	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4	each	0.06
12.33	Providing sand stone slab for roofing and laying them in cement mortar 1 : 4	100 sqm	0.74
12.55	Providing and fixing M.S. holder bat clamps in cement concrete blocks 10x10x10cm of 1:2:4 mix	each	0.005
12.67	P/F Heat Resistant Terrace Tiles on roof with cement mortar 1:4 (1 cement : 4 coarse sand) and filling joint with white cement marble mix	sqm	0.1367

1.0 COEFFICIENT FOR CEMENT CONSUMPTION

13.0 FINISHING

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
13.1	<u>Cement plaster (in fine sand)</u> 12mm Cement plaster of mix: 13.1.1 1 : 4 (1 cement : 4 fine sand) 13.1.2 1 : 6 (1 cement : 6 fine sand)	100 sqm 100 sqm	5.47 3.60
13.2	15mm Cement plaster on the rough side of single or half brick wall of mix: 13.2.1 1 : 4 (1 cement : 4 fine sand) 13.2.2 1 : 6 (1 cement : 6 fine sand)	100 sqm 100 sqm	6.54 4.30
13.3	20mm Cement plaster of mix: 13.3.1 1 : 4 (1 cement : 4 fine sand) 13.3.2 1 : 6 (1 cement : 6 fine sand)	100 sqm 100 sqm	8.51 5.60
13.4	<u>Cement plaster (in coarse sand)</u> 12mm Cement plaster of mix: 13.4.1 1 : 4 (1 cement : 4 coarse sand) 13.4.2 1 : 6 (1 cement : 6 coarse sand)	100 sqm 100 sqm	5.47 3.60
13.5	15mm Cement plaster 13.5.1 1 : 4 (1 cement : 4 coarse sand) 13.5.2 1 : 6 (1 cement : 6 coarse sand)	100 sqm 100 sqm	6.54 4.30
13.6	20 mm Cement plaster of mix: 13.6.1 1 : 4 (1 cement : 4 coarse sand) 13.6.2 1 : 6 (1 cement : 6 coarse sand)	100 sqm 100 sqm	8.51 5.60
13.7	<u>Cement plaster with a floating coat of neat cement</u> 12mm Cement plaster finished with a floating coat of neat cement of mix: 13.7.1 1 : 3 (1 cement : 3 fine sand) 13.7.2 1 : 4 (1 cement : 4 fine sand)	100 sqm 100 sqm	9.54 7.67
13.8	15 mm cement plaster on the rough side of single or half brick wall finished with a floating coat of neat cement of mix : 13.8.1 1 : 3 (1 cement : 3 fine sand) 13.8.2 1 : 4 (1 cement : 4 fine sand)	100 sqm 100 sqm	10.97 8.74
13.9	20 mm cement plaster finished with a floating coat of neat cement of mix : 13.9.1 1 : 3 (1 cement : 3 fine sand) 13.9.2 1 : 4 (1 cement : 4 fine sand)	100 sqm 100 sqm	13.62 10.51
13.10	Cement plaster 1 : 3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement 13.10.1 12 mm cement plaster 13.10.2 20 mm cement plaster	100 sqm 100 sqm	9.54 13.62
13.11	15 mm Cement plaster 1 : 3 finished with a floating coat of neat cement on the rough side of single or half brick wall	100 sqm	10.97
13.12	<u>Cement plaster in two coats</u> 18 mm Cement plaster in two coats under layer 12mm thick cement plaster 1 : 5 finished with a top layer 6mm thick cement plaster 1 : 6	100 sqm	6.26
13.13	18 mm Cement plaster in two coats under layer 12mm thick cement plaster 1 : 5 finished with a top layer 6mm thick cement plaster 1 : 3 finished rough with sponge	100 sqm	8.13
13.14	12mm Cement plaster 1 : 2 (1 cement : 2 Stone dust)	100 sqm	9.79
13.15	15mm Cement plaster 1 : 2 (1 cement : 2 Stone dust)	100 sqm	11.70
13.16	20mm Cement plaster 1 : 2 (1 cement : 2 Stone dust)	100 sqm	15.23
13.17	<u>6mm cement plaster</u> 6 mm cement plaster to ceiling of mix 1 : 3	100 sqm	3.67

1.0 COEFFICIENT FOR CEMENT CONSUMPTION

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
13.18	6 mm cement plaster 1 : 3 finished with a floating coat of neat cement	100 sqm	5.87
13.19	Neat cement punning	100 sqm	2.20
13.20	<u>Cement lime plaster</u> 12mm cement lime plaster of mix: 13.20.1 1 : 1 : 6 (1 cement : 1 lime putty : 6 fine sand) 13.20.2 1 : 2 : 9 (1 cement : 2 lime putty : 9 fine sand)	100 sqm 100 sqm	3.60 2.54
13.21	15mm cement lime plaster on rough side of single or half brick wall of mix 1 : 1 : 6	100 sqm	4.30
13.22	<u>Rough cast plaster</u> Rough cast plaster in two layers, under layer 12 mm cement plaster 1:4 and top layer 10 mm cement plaster 1:3	100 sqm	11.59
13.23	<u>Pebble dash plaster</u> Pebble dash plaster in two layers, under layer 12mm cement plaster 1:4 and top layer 10mm cement plaster with cement mortar 1:3	100 sqm	11.59
13.31	18mm thick artificial red stone plaster of 12mm under coat of cement plaster 1 : 4 with 6mm thick finishing coat of cement mortar 1 : 1 : 3	100 sqm	9.47
13.32	<u>Terrazzo plaster</u> 18mm plastering with terrazzo under layer 12mm thick cement plaster 1 : 3 and top layer 6mm thick in cement marble powder mix 3 : 1	100 sqm	11.64
13.33	Extra if white cement is used instead of ordinary cement in top layer of 18 mm thick plastering with terrazzo finish	100 sqm	7.34+4.30*
13.36	<u>Plain cement mortar bands</u> 12 mm thick plain cement mortar bands in cement mortar 1 : 4 (flush/sunk/raised/moulded band)	100 m 1 cm wide	0.053
13.37	18mm thick plain cement mortar band in cement mortar 1 : 4	100 m 1 cm wide	0.076
13.38	18 mm thick moulded cement mortar band in two coats under layer 12 mm thick with cement mortar 1 : 5 top layer 6mm thick with cement mortar 1 : 4	100 m 1 cm wide	0.07
13.39	<u>Pointing on brick work</u> Pointing on brick work with cement mortar 1 : 3 13.39.1 Flush/Ruled/Struck or weathered Pointing 13.39.2 Raised and cut Pointing	100 sqm 100 sqm	1.53 2.04
13.40	Pointing on brick work with cement mortar 1 : 4 13.40.1 Flush/Ruled/Struck or weathered Pointing	100 sqm	1.02
13.41	<u>Pointing on tile brick work</u> Pointing on tile brick work with cement mortar 1 : 3 13.41.1 Flush/Ruled/Struck or weathered Pointing	100 sqm	2.35
13.42	<u>Pointing on stone work</u> Pointing on stone work with cement mortar 1 : 3 13.42.1 Flush/Ruled Pointing 13.42.2 Raised and cut pointing	100 sqm 100 sqm	1.17 2.35
13.43	Raised & cut pointing on stone work in white cement mortar 1: 3	100 sqm	2.35*
13.44	Pointing on stone slab ceiling with cement mortar 1 : 2 13.44.1 Flush/Ruled Pointing	100 sqm	1.02
13.80	Washed stone grit plaster on exterior walls in two layers, under layer 12 mm cement plaster 1:4, top layer 15mm cement plaster 1: ½ : 2	100 sqm	17.472

Note: - cement consumption for pointing is same for modular & non modular bricks.

*White Cement

1.0 COEFFICIENT FOR CEMENT CONSUMPTION

14.0 REPAIRS TO BUILDING

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
14.1	Repairs to plaster of thickness 12mm to 20 mm in patches with cement mortar 1:4	100 sqm	6.95
14.2	Fixing chowkhats in existing opening with holdfasts, in cement concrete 1:3:6		
	14.2.1 Door chowkhats	each	0.12
	14.2.2 Window chowkhats	each	0.06
	14.2.3 Clerestory window chowkhats	each	0.03
14.13	Providing and fixing 16 mm M.S. Fan clamps in existing R.C.C. slab.	each	0.016
14.14	Regrading terracing of mud phaska to proper slope	100 sqm	3.11
14.15	Replacing sand stone slabs in roofing, laid in cement mortar 1:4	100 sqm	0.78
14.16	Renewing wooden battens in roofs& making good the holes in walls	cum	0.36
14.17	Renewing wooden beams in roofs& making good the holes in walls	cum	0.13
14.21	Flush pointing with cement mortar 1:3 for flat tile bricks on top of mud phaska	100 sqm	0.76

1.0 COEFFICIENT FOR CEMENT CONSUMPTION

16.0 ROAD WORK

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
16.16	<u>FENCING</u> Supplying at site R.C.C. Standards post/ struts/rails/ pales of mix 1:1.5:3	cum	4.00
16.31	P/F boundary stone including finishing smooth with cement mortar 1:3	each	0.082
16.32	P/F precast R.C.C kilometer stone including finishing smooth in 1:3 cement mortar 16.32.1 35x111x25 cm size. 16.32.2 50x152.5x25 cm size. 16.32.3 35x93.5x18 cm size	each each each	0.37 0.698 0.23
16.50	<u>CONCRETE PAVEMENTS</u> Cement concrete 1:2:4 in pavements	cum	3.20
16.51	Providing and laying design mix cement concrete of M-30 grade, inroads/taxi tracks/ runways, using cement content as per design mix.	cum	3.40
16.57	Making bell mouth opening including providing cement concrete 1:3:6 and plastering with cement mortar 1:3	10 nos.	6.60
16.60	Providing and fixing precast lime fly ash concrete blocks in cement mortar 1:3	sqm	0.05
16.70	P/L kerb channel 30cm wide and 50mm thick of cement concrete 1:3:6	meter	0.11
16.73	Providing and fixing factory made RCC pavement slab of M-30 grade in footpath over a bed of 20 mm average thick cement mortar 1:5	100 sqm	7.75
16.75	Providing and laying factory made kerb stone of M-25 grade jointed with cement mortar 1:3	cum	0.05
16.79	Providing and laying C.C. pavement of mix M-25 with ready mixed concrete.	cum	3.30
16.84	Dry lean cement concrete sub base.	cum	1.50
16.89	Laying old kerb stones, jointed with cement mortar 1:3.	100 m	0.3723
16.90	P/L gang saw cut 18 mm and 30 mm thick, mirror polished.	sqm	0.09
16.91	P/L matt finished vitrified tile of size 16.91.1 100x100x16 mm 16.91.2 300x300x9.8 mm	sqm sqm	0.12 0.12
16.92	P/L tactile tile.	sqm	0.12
16.95	P/F 10x10x7.50 cm Granite stone block.	sqm	1.85
16.96	Providing and placing in position 100mm thick Precast RCC Covers on drains of footpath.	sqm	0.352

1.0 COEFFICIENT FOR CEMENT CONSUMPTION**17.0 HORTICULTURE AND LANDSCAPING**

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
17.29	Providing Circular Cement Concrete pots with cement concrete of nominal mix. 1:2:4.	100 nos.	4.00
17.30	Providing square Cement Concrete pots with cement concrete of nominal mix. 1:2:4.	100 nos.	2.30

1.0 COEFFICIENT FOR CEMENT CONSUMPTION

18.0 SANITARY INSTALLATION

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
18.1/ 18.2/ 18.3	Fixing Indian type W.C. pan	each	0.05
18.4	Fixing white vitreous china urinal basin: 18.4.1 One urinal basin with 5 liter white P.V.C automatic flushing cistern. 18.4.2 Range of two urinal basins with 5 liter white P.V.C automatic flushing cistern. 18.4.3 Range of three urinal basins with 10 liter white P.V.C automatic flushing cistern. 18.4.4 Range of four urinal basins with 10 liter white P.V.C automatic flushing cistern..	each each each each	0.025 0.04 0.067 0.095
18.5	Fixing white vitreous china flat back half stall urinal: 18.5.1 Single half stall urinal with 5 liter P.V.C automatic flushing cistern. 18.5.2 Range of two half stall urinals with 5 liter P.V.C automatic flushing cistern. 18.5.3 Range of three half stall urinals with 10 liter P.V.C automatic flushing cistern. 18.5.4 Range of four half stall urinals with 10 liter P.V.C automatic flushing cistern.	each each each each	0.051 0.102 0.153 0.203
18.6	Fixing one piece construction white vitreous china squatting plate: 18.6.1 Single squatting plate with 5 liter P.V.C. automatic flushing cistern. 18.6.2 Range of two squatting plates with 5 liter P.V.C. automatic flushing cistern. 18.6.3 Range of three squatting plates with 10 liter P.V.C. automatic flushing cistern. 18.6.4 Range of four squatting plates with 10 liter P.V.C. automatic flushing cistern.	each each each each	0.051 0.102 0.153 0.203
18.7	Fixing wash basin with C.I. brackets.	each	0.025
18.9	Fixing white vitreous china pedestal for wash basin.	each	0.016*
18.10/ 18.11/ 18.12	Fixing kitchen sink with C.I. brackets.	each	0.025
18.13	Fixing draining board with C.I. brackets	each	0.014
18.14	Fixing white vitreous china water closet squatting pan	each	0.025
18.18	Fixing a pair of white vitreous china foot rests.	each	0.025
18.23	Fixing white vitreous china flat urinal.	each	0.01
18.24	Fixing white vitreous china squatting plate urinal.	each	0.02
18.25	Fixing white vitreous china wash basin.	each	0.015
18.26/ 18.27	Fixing kitchen sink.	each	0.015
18.37	Providing and fixing M.S. holder-bat clamps.	each	0.005

1.0 COEFFICIENT FOR CEMENT CONSUMPTION

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
18.59	Providing and fixing M.S. stays and clamps.	each	0.005
18.60	Providing and fixing trap of self-cleansing design.	each	0.025
18.61	Cutting chases in brick masonry walls for sand cast iron / centrifugally cast (spun) iron pipes and making good the same with cement concrete 1:3:6.		
	18.61.1 100 mm dia.	100 m	5.40
	18.61.2 75 mm dia.	100 m	3.70
	18.61.3 50 mm dia.	100 m	1.87

*White Cement

1.0 COEFFICIENT FOR CEMENT CONSUMPTION

19.0 WATER SUPPLY

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
19.1.1/ 19.2.1/ 19.3.1/ 19.4.1	Providing and fixing G.I./PE-AL-PE/PP-R pipes Internal work-exposed on wall 15 mm dia nominal bore 20 mm dia nominal bore 25 mm dia nominal bore 32 mm dia nominal bore 40 mm dia nominal bore 50 mm dia nominal bore	100 m 100 m 100 m 100 m 100 m 100 m	0.05 0.06 0.07 0.075 0.08 0.08
19.1.2/ 19.2.2/ 19.3.2/ 19.4.2	Providing and fixing concealed pipes	100 m	0.88
19.26	Constructing masonry Chamber 30x30x50 cm, for stop cock.	each	0.26
19.27	Constructing masonry Chamber 19.27.1.1 60x60x75 cm For sluice valve 19.27.1.2 90x90x100 cm For sluice valve 19.27.1.3 120x120x100 cm For sluice valve 19.27.2.1 60x60x75 cm for fire hydrants 19.27.3.1 60x45x50 cm for water meter	each each each each each	1.44 2.48 3.50 1.30 1.34
19.67	Cutting holes up to 30x30 cm in walls including making good the same.	100 nos.	2.92
19.68	Cutting holes up to 15x15 cm in R.C.C. floors and roofs and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4.	100 nos.	0.70
19.69	Making chases up to 7.5x7.5 cm in walls including finishing.	100 m	0.88
19.70	Making hole up to 20x20 cm and embedding pipes up to 150 mm diameter in masonry and filling with cement concrete 1:3:6.	100 m	4.90

1.0 COEFFICIENT FOR CEMENT CONSUMPTION

20.0 DRAINAGE

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
20.1	Jointing glazed stoneware pipes with stiff mixture of cement mortar in the proportion of 1:1		
20.1.1	100 mm diameter	100 m	0.63
20.1.2	150 mm diameter	100 m	1.20
20.1.3	200 mm diameter	100 m	1.77
20.1.4	230 mm diameter	100 m	2.17
20.1.5	250 mm diameter	100 m	3.13
20.1.6	300 mm diameter	100 m	4.10
20.2	Laying cement concrete 1:5:10		
20.2.1 All around S.W. pipe			
20.2.1.1	100 mm diameter S.W. pipe	100 m	19.24
20.2.1.2	150 mm diameter S.W. pipe	100 m	23.53
20.2.1.3	200 mm diameter S.W. pipe	100 m	27.43
20.2.1.4	230 mm diameter S.W. pipe	100 m	30.03
20.2.1.5	250 mm diameter S.W. pipe	100 m	31.72
20.2.2 Upto haunches of S.W. pipe			
20.2.2.1	100 mm diameter S.W. pipe	100 m	9.14
20.2.2.2	150 mm diameter S.W. pipe	100 m	14.82
20.2.2.3	200 mm diameter S.W. pipe	100 m	17.42
20.2.2.4	230 mm diameter S.W. pipe	100 m	19.11
20.2.2.5	250 mm diameter S.W. pipe	100 m	20.28
20.2.2.6	300 mm diameter S.W. pipe	100 m	23.40
20.2.2.7	350 mm diameter S.W. pipe	100 m	26.65
20.2.2.8	400 mm diameter S.W. pipe	100 m	30.03
20.2.2.9	450 mm diameter S.W. pipe	100 m	33.15
20.3	Providing and fixing square- mouth S.W. gully trap		
20.3.1	With non-modular bricks		
20.3.1.1	100 x 100 mm size P type	each	0.27
20.3.1.2	150 x 100 mm size P type	each	0.26
20.3.1.3	180 x 150 mm size P type	each	0.25
20.5	P/L 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		
20.5.1	100 mm dia. R.C.C. pipe	100 m	0.50
20.5.2	150 mm dia. R.C.C. pipe	100 m	0.60
20.5.3	250 mm dia. R.C.C. pipe	100 m	0.90
20.5.4	300 mm dia. R.C.C. pipe	100 m	1.10
20.5.5	450 mm dia. R.C.C. pipe	100 m	2.40
20.5.6	500 mm dia. R.C.C. pipe	100 m	2.60
20.5.7	600 mm dia. R.C.C. pipe	100 m	3.20
20.5.8	700 mm dia. R.C.C. pipe	100 m	3.70
20.5.9	800 mm dia. R.C.C. pipe	100 m	4.20
20.5.10	900 mm dia. R.C.C. pipe	100 m	4.90
20.5.11	1000 mm dia. R.C.C. pipe	100 m	5.50
20.5.12	1100 mm dia. R.C.C. pipe	100 m	6.10
20.5.13	1200 mm dia. R.C.C. pipe	100 m	6.80
20.6	P/L non-pressure R.C.C. pipes		
20.6.1	Non-pressure NP-3 class (Medium duty) R.C.C. pipes		
20.6.1.1	450 mm dia. R.C.C. pipe	100 m	1.20
20.6.1.2	600 mm dia. R.C.C. pipe	100 m	1.60
20.6.1.3	900 mm dia. R.C.C. pipe	100 m	2.50
20.6.1.4	1000 mm dia. R.C.C. pipe	100 m	2.80

1.0 COEFFICIENT FOR CEMENT CONSUMPTION

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
	20.6.1.5 1200 mm dia. R.C.C. pipe	100 m	3.40
	20.6.1.6 1800 mm dia. R.C.C. pipe	100 m	4.90
	20.6.2 Non-pressure NP-4 class (Heavy duty) R.C.C. pipes		
	20.6.2.1 450 mm dia. R.C.C. pipe	100 m	1.20
	20.6.2.2 600 mm dia. R.C.C. pipe	100 m	1.60
	20.6.2.3 900 mm dia. R.C.C. pipe	100 m	2.50
	20.6.2.4 1000 mm dia. R.C.C. pipe	100 m	2.80
	20.6.2.5 1200 mm dia. R.C.C. pipe	100 m	3.40
	20.6.2.6 1800 mm dia. R.C.C. pipe	100 m	4.90
20.7	Constructing brick masonry manhole in cement mortar 1:4		
	20.7.1 Inside size 90x80 cm and 45 cm deep	each	2.92
	20.7.2 Inside size 90x80 cm and 60 cm deep	each	2.49
	20.7.3 Inside size 120x90 cm and 90 cm deep	each	4.73
	20.7.4 Inside size 120x90 cm and 90 cm deep	each	4.73
20.8	Extra for depth for manholes		
	20.8.1 With non-modular bricks		
	20.8.1.1 Size 90x80cm	meter	1.26
	20.8.1.2 Size 120x90 cm	meter	1.52
20.9	Constructing brick masonry circular type manhole in cement mortar 1:4		
	20.9.1 Manhole of size 0.91m internal dia at bottom and 0.91 m deep	each	2.75
	20.9.2 Manhole of size 1.22 m internal dia at bottom and 1.68 m deep	each	5.39
	20.9.3 Manhole of size 1.52 m internal dia at bottom and 2.30 m deep	each	10.86
20.10	Extra depth for circular type manholes		
	20.10.1 Manhole 0.91m internal dia (at bottom) beyond 0.91 m to 1.67 m	meter	1.40
	20.10.2 Manhole 1.22 m internal dia (at bottom) beyond 1.68 m to 2.29 m	meter	1.43
	20.10.3 Manhole 1.52 m internal dia (at bottom) beyond 2.30 m	meter	3.11
20.11	Providing M.S. foot rests including fixing in manholes with 20x20x10cm cement concrete blocks 1:3:6	100 nos.	0.88
20.12	Providing orange colour safety foot rest.	100 nos.	1.98
20.13	Replacement of M.S. foot rests in manholes with 20x20x10 cm cement concrete blocks 1:3:6 mix	100 nos.	0.88
20.15	Providing and fixing in position precast R.C.C. manhole cover and frame		
	20.15.1 LD - 2.5		
	20.15.1.1 Rectangular shape 600x450 internal dimensions	each	0.128
	20.15.1.2 Square shape 350mm internal dimensions	each	0.096
	20.15.1.3 Circular shape 450mm internal diameter	each	0.096
	20.15.2 MD - 10		
	20.15.2.1 Square shape 450mm internal dimensions	each	0.128
	20.15.2.2 Circular shape 500mm internal diameter	each	0.096
	20.15.3 HD - 20		
	20.15.3.1 Circular shape 560mm internal diameter	each	0.096
	20.15.4 EHD - 35		
	20.15.4.1 Circular shape 560mm internal dia.	each	0.096

1.0 COEFFICIENT FOR CEMENT CONSUMPTION

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
20.17	Making connection of drain or sewer line with existing manhole and making good the walls, floors with cement concrete 1:2:4 mix 20.17.1 For pipes 100 to 250 mm diameter 20.17.2 For pipes 250 to 300 mm diameter 20.17.3 For pipes 350 to 450 mm diameter	each each each	0.056 0.095 0.153
20.18	Providing sand cast iron drop connection externally for 60 cm drop from branch sewer line to main sewer manhole. 20.18.1 100 mm dia. sand cast iron drop connection 20.18.2 150 mm dia. sand cast iron drop connection	each each	0.34 0.46
20.19	Extra for depths beyond 60 cm of sand cast iron drop connection complete: 20.19.1 For 100 mm dia. sand cast iron drop connection 20.19.2 For 150 mm dia. sand cast iron drop connection	meter meter	0.21 0.26
20.23	Constructing brick masonry road gully chamber in cement mortar 1:4 20.23.1 Chamber size 50x45x60 cm 20.23.2 Chamber size 45x45x77.50 cm 20.23.3 Chamber size 110x50x77.50cm	each each each	0.93 0.82 1.66
20.24	Constructing brick masonry chamber for underground C.I. inspection chamber and bend in cement mortar 1:4 20.24.1 Inside dimensions 455x610 mm and 45 cm deep for single pipe line- 20.24.2 Inside dimensions 500x700 mm and 45 cm deep for single pipe line with one or two inlets 20.24.3 Inside dimensions 600x850 mm and 45 cm deep for single pipe line with three or more inlets.	each each each	0.90 1.02 1.27
20.25	Extra for depth beyond 45 cm of brick masonry chamber 20.25.1 For 455x610 mm size 20.25.2 For 500x700 mm size 20.25.3 For 600x850 mm size	meter meter meter	0.87 0.95 1.12
20.26	Making soak pit 2.5 m diameter 3.0 meter deep.	each	0.072
20.28	Providing and fixing S.W. intercepting trap in manholes with stiff mixture of cement mortar 1:1. 20.28.1 100 mm dia 20.28.2 150 mm dia	each each	0.013 0.019

1.0 COEFFICIENT FOR CEMENT CONSUMPTION

21.0 PILE WORK

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work		
			M-25	M-30	M-35
21.1	Providing, driving and installing driven cast-in-situ reinforced cement concrete piles				
21.1.1	400 mm dia piles	meter	0.414	0.427	0.44
21.1.2	450 mm dia piles	meter	0.525	0.541	0.557
21.1.3	500 mm dia piles	meter	0.648	0.666	0.686
21.1.4	550 mm dia piles	meter	0.784	0.808	0.831
21.1.5	750 mm dia piles	meter	1.456	1.501	1.544
21.1.6	1000 mm dia piles	meter	2.590	2.669	2.74
21.1.7	1200 mm dia piles	meter	3.729	3.842	3.955
21.1.8	1500 mm dia piles	meter	5.83	6.007	6.183
21.2	Boring, providing and installing bored cast-in-situ reinforced cement concrete pile.				
21.2.1	By tripod and mechanical Winch Machine.				
21.2.1.1	450 mm dia piles	meter	0.525	0.541	0.557
21.2.1.2	500 mm dia piles	meter	0.648	0.666	0.686
21.2.1.3	600 mm dia piles	meter	0.932	0.960	0.988
21.2.1.4	750 mm dia piles	meter	1.456	1.501	1.544
21.2.2	By Crawler mounted, telescopic boom hydraulic pilling Rig.				
21.2.2.1	600 mm dia piles	meter	0.932	0.960	0.988
21.2.2.2	750 mm dia piles	meter	1.456	1.501	1.544
21.2.2.3	1000 mm dia piles	meter	2.590	2.669	2.74
21.2.2.4	1200 mm dia piles	meter	3.729	3.842	3.955
21.2.2.5	1500 mm dia piles	meter	5.830	6.007	6.183
21.3	Boring, providing and installing cast-in-situ single under reamed piles.				
21.3.1	300 mm dia piles	meter	0.257	0.265	0.272
21.3.2	400 mm dia piles	meter	0.488	0.503	0.517
21.3.3	450 mm dia piles	meter	0.629	0.648	0.667
21.3.4	550 mm dia piles	meter	0.792	0.816	0.84
21.4	Extra for providing additional bulb in under reamed piles.				
21.4.1	300 mm dia piles	each	0.109	0.112	0.115
21.4.2	400 mm dia piles	each	0.208	0.214	0.220
21.4.3	450 mm dia piles	each	0.267	0.275	0.284
21.4.4	550 mm dia piles	each	0.336	0.347	0.357
21.5	Providing, driving and installing driven pre-cast reinforced cement concrete piles.				
21.5.1	400 mm dia piles	meter	0.414	0.427	0.44
21.5.2	450 mm dia piles	meter	0.525	0.541	0.557
21.5.3	500 mm dia piles	meter	0.648	0.666	0.686
21.5.4	550 mm dia piles	meter	0.784	0.808	0.831
21.5.5	750 mm dia piles	meter	1.795	1.849	1.904
21.5.6	1000 mm dia piles	meter	2.590	2.669	2.74

1.0 COEFFICIENT FOR CEMENT CONSUMPTION

23.0 WATER PROOFING

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
23.1	P/L integral cement based treatment for water proofing on horizontal surface. 23.1.1 Using rough kota stone.	sqm	0.342
23.2	P/L integral cement based treatment for water proofing on the vertical surface 23.2.1 Using rough kota stone.	sqm	0.443
23.3	P/L 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 (ii) IInd course of 20 mm cement plaster 1:3 (iii) IIIrd course of applying blown or residual bitumen applied hot at 1.7 kg. Per sqm of area. (iv) IVth course of 400 micron thick PVC sheet.	sqm	0.158
23.5	P/Lwater proofing treatment in sunken portion of WCs, bathroom etc.	sqm	0.0123
23.6	P/Lwater proofing treatment on roofs.	sqm	0.0195
23.7	P/L integral cement based water proofing treatment on roofs, balconies, terraces etc. 23.7.1 With average thickness of 120mm and minimum thickness at khurra as 65 mm	sqm	0.387
23.12	Grading roof for water proofing treatment with 23.12.1 Cement concrete 1:2:4 23.12.2 Cement mortar 1:3. 23.12.3 Cement mortar 1:4.	cum cum cum	3.20 5.10 3.80

1.0 COEFFICIENT FOR CEMENT CONSUMPTION**24.0 RIVER AND CANAL PROTECTION WORK**

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
24.8& 24.9	Grouting of stone pitching.	cum	2.20

1.0 COEFFICIENT FOR CEMENT CONSUMPTION

31.0 NEW TECHNOLOGIES & MATERIALS

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
31.29.1	SBR Polymer (@10% of cement weight) modified cementitious bond coat @ 2.2 kg cement per sqm	100 sqm	2.20
31.30	Providing, mixing and applying SBR polymer (of approved make) modified Cement mortar in proportion of 1:4 (1 cement: 4 graded coarse sand with polymer minimum 2% by wt. of cement used)		
31.30.1	12 mm average thickness.	100 sqm	5.47
31.30.2	25 mm average thickness in 2 layers.	100 sqm	11.40
31.30.3	50 mm average thickness in 3 layers.	100 sqm	22.80
31.31	Providing, mixing and applying SBR polymer (of approved make @minimum 2% by wt. of cement used) modified plain/reinforced cement concrete for structural members.		
31.31.1	50mm thick in Grade M 25 with cement content not less than 330 kg per cum	100 sqm	16.50
31.31.2	75mm thick in Grade M 25 with cement content not less than 330 kg per cum	100 sqm	24.75
31.32	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.		
31.32.1	50mm thick in Grade M 25 with cement content not less than 330 kg per cum	100 sqm	16.50
31.32.2	75mm thick in Grade M 25 with cement content not less than 330 kg per cum	100 sqm	24.75
31.32.3	100mm thick in Grade M 25 with cement content not less than 330 kg per cum	100 sqm	33.00
31.33	Providing and injecting approved grout in proportion recommended by the manufacturer into cracks/honey-comb area of concrete/ masonry by suitable gun/pump.		
31.33.1	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	100 kg	1.00
31.33.2	Stirrer mixed SBR Polymer (of approved make) modified Cement slurry made with Shrinkage Compensating Cement in concrete/RCC work.	100 kg	1.00
31.36	Shotcreting R.C.C. columns, beams and slabs etc. in layers wit approved design mix concrete		
31.36.1	25mm thick in Grade M 25 with cement content not less than 330 kg per cum	100 sqm	10.31
31.36.2	50mm thick in Grade M 25 with cement content not less than 330 kg per cum	100 sqm	20.63
31.36.3	75mm thick in Grade M 25 with cement content not less than 330 kg per cum	100 sqm	30.94
31.44	Providing and fixing in position, 200 mm thick factory made Expanded Polystyrene Core (EPS Core) wall panels.	100 sqm	51.00
31.45	Providing and fixing in position, 230mm thick factory made Expanded Polystyrene Core (EPS Core) roof/floor panels made of 3 mm dia G.I. wire mesh with 50 mm pitch in both the directions and on both.	100 sqm	58.60
31.51	Filling of empty cavities (as shown in the structural design drawing) with quarry dust mixed with 5% cement (by volume).	cum	0.72

1.0 COEFFICIENT FOR CEMENT CONSUMPTION

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
31.56	Filling of joints between RCC plinth beam / floor slab and wall panel of external walls, toilet / bath room / wet areas walls.	100 m	0.03125
31.57	Water proofing treatment of Vertical joints (of external side and internal side) between door frame, window & ventilator frames.	100 m	0.03125
31.59	In-filling / sealing of joint between RCC lintel cum sunshade and wall	100 m	0.03125
31.64	Providing and fixing in position, 130 mm thick factory made Expanded Polystyrene Core (EPS Core) wall panels.	sqm	0.357
31.66	Providing and laying factory made Precast concrete solid blocks in foundation and plinth in:	cum	0.2825
31.67	Providing and laying factory made Precast concrete solid above plinth level up to floor V level	cum	0.2825
31.68	Providing and laying half block masonry with factory made Precast concrete solid blocks in foundation and plinth	100 sqm	2.6904
31.69	Providing and laying half block masonry with factory made Precast concrete solid blocks above plinth level up to floor V level	100 sqm	2.6904
31.71	Fabrication & Manufacturing of Prestressed Hollow Core slab 31.71.1 Concrete Grade-M-40 (cement content 400 kg) 31.71.1.1 100 mm thick hollow core slab 31.71.1.2 120 mm thick hollow core slab 31.71.1.3 150 mm thick hollow core slab 31.71.1.4 200 mm thick hollow core slab 31.71.1.5 250 mm thick hollow core slab 31.71.1.6 300 mm thick hollow core slab 31.71.1.7 350 mm thick hollow core slab 31.71.1.8 400 mm thick hollow core slab 31.71.2 Extra for using M-50 (Cement content 425 kg) instead of M40 31.71.2.1 100 mm thick hollow core slab 31.71.2.2 120 mm thick hollow core slab 31.71.2.3 150 mm thick hollow core slab 31.71.2.4 200 mm thick hollow core slab 31.71.2.5 250 mm thick hollow core slab 31.71.2.6 300 mm thick hollow core slab 31.71.2.7 350 mm thick hollow core slab 31.71.2.8 400 mm thick hollow core slab 31.71.3 Extra for using M-60 (Cement content 440 kg) instead of M40 31.71.3.1 100 mm thick hollow core slab 31.71.3.2 120 mm thick hollow core slab 31.71.3.3 150 mm thick hollow core slab 31.71.3.4 200 mm thick hollow core slab 31.71.3.5 250 mm thick hollow core slab 31.71.3.6 300 mm thick hollow core slab 31.71.3.7 350 mm thick hollow core slab 31.71.3.8 400 mm thick hollow core slab	 metre metre metre metre metre metre metre metre metre metre metre metre metre metre metre metre metre metre metre metre metre metre metre metre metre metre metre metre metre metre metre metre metre metre metre metre metre metre metre metre	 0.36 0.432 0.54 0.672 0.84 1.008 1.176 1.344 0.0225 0.027 0.03375 0.042 0.0525 0.063 0.0735 0.084 0.036 0.0432 0.054 0.0672 0.084 0.1008 0.1176 0.1344

1.0 COEFFICIENT FOR CEMENT CONSUMPTION

CODE NO.	DESCRIPTION	UNIT	Quantity of cement in quintals per unit quantity of work
31.72	Fabrication and manufacturing of solid precast concrete element for walls, beams, slabs, stairs, column		
31.72.1	Concrete grade M-35 (Cement content 370 kgs)	cum	3.70
31.72.2	Extra for using M-40 (Cement content 400 kg) instead of M-35	cum	0.30
		cum	0.55
31.72.3	Extra for using M-50 (Cement content 425 kg) instead of M-35	cum	0.70
31.72.4	Extra for using M-60 (Cement content 440 kg) instead of M-35		

COEFFICIENTS FOR BITUMEN CONSUMPTION

2.0 COEFFICIENTS FOR BITUMEN CONSUMPTION

2.0 COEFFICIENTS FOR BITUMEN CONSUMPTION

14.0 REPAIRS TO BUILDINGS

CODE NO.	DESCRIPTION	UNIT	Quantity of Bitumen in quintals per unit quantity of work
14.85	P/L in situ seven course water proofing treatment with APP		
	14.85.1 Modified Polymeric membrane 1.5 mm thick of 2.25 Kg/ sqm	sqm	0.036
	14.85.2 Modified Polymeric membrane 2.0 mm thick of 3.0 Kg/ sqm	sqm	0.036
14.86	Providing and laying in situ five course water proofing treatment with APP (2.0mm thick @ 3.00 Kg/sqm)	sqm	0.024
14.87	Providing and laying APP		
	14.87.1 With glass fibre matt		
	14.87.1.1 2mm (for corrugated roof sheets)	sqm	0.0035
	14.87.1.2 3mm (for corrugated roof sheets)	sqm	0.0035
	14.87.2 3 mm thick water proofing membrane. Tear strength in longitudinal and transverse direction as 300/250N.	sqm	0.0035

2.0 COEFFICIENTS FOR BITUMEN CONSUMPTION

16.0 ROAD WORK

CODE NO.	DESCRIPTION	UNIT	Quantity of Bitumen in quintals per unit quantity of work
16.33	<u>SURFACE DRESSING</u> Surface dressing on new surface with paving bitumen of grade VG – 10.	sqm	0.0225
16.34	Surface dressing on new surface in two coats with bitumen of grade VG – 10.	sqm	0.029
16.35	Surface dressing on old surface with hot bitumen of grade VG-10.	sqm	0.0195
16.36	Surface dressing one coat on new surface. 16.36.1 Using bitumen emulsion.	sqm	0.0195
16.37	Surface dressing one coat on old surface. 16.37.1 Using bitumen emulsion.	sqm	0.0122
16.38	<u>PRE MIX CARPET</u> Providing and applying tack coat with bitumen of grade – VG-10. 16.38.1 On W.B.M. @ 0.75 Kg/sqm. 16.44.2 On bitumen surface @ 0.50 Kg/sqm.	sqm sqm	0.0075 0.0050
16.39	Providing and applying tack coat using bitumen emulsion. 13.39.1 With rapid setting bitumen emulsion 16.39.1.1 On W.B.M. /W.M.M. @ 0.4 Kg/sqm. 16.39.1.2 On bituminous surface @ 0.25 Kg/sqm. 13.39.2 With medium setting bitumen emulsion 16.39.2.1 On W.B.M. /W.M.M. @ 0.4 Kg/sqm. 16.39.2.2 On bituminous surface @ 0.25 Kg/sqm.	sqm sqm sqm sqm	0.0040 0.0025 0.0040 0.0025
16.40	2 cm premix carpet surfacing with paving Asphalt VG-10/VG-30/ Modified Bitumen CRMB 55	sqm	0.0144
16.41	2.5 cm premix carpet surfacing with paving Asphalt VG-10 /VG-30 / Modified Bitumen CRMB 55	sqm	0.018
16.42	2 cm premix carpet surfacing with bitumen emulsion.	sqm	0.0255*
16.43	2.5 cm premix carpet surfacing with bitumen emulsion.	sqm	0.0313*
16.44	Providing and laying Bitumen Penetration Macadam. 16.44.1 For 50 mm compacted thickness with paving asphalt grade VG-10 @ 50 kg/10sqm 16.44.2 For 75 mm compacted thickness with paving asphalt grade VG-10 @ 68 kg/10sqm	sqm sqm	0.05 0.068
16.45	<u>MASTIC AND BITUMASTIC BEARING COARSE</u> Providing and laying bitumen mastic wearing course 16.45.1 25mm thick 16.45.2 40mm thick	sqm sqm	0.0588 0.0941
16.46	2.5 cm thick bitumastic sheet with hot bitumen, paving Asphalt VG-10 /VG-30 / Modified Bitumen CRMB 55	sqm	0.0303
16.47	4 cm thick bitumastic sheet with hot bitumen, paving Asphalt VG-10 /VG-30 / Modified Bitumen CRMB 55	sqm	0.0479
16.48	<u>SEAL COAT</u> P/L seal coat using 128 kg of bitumen of grade VG-10.	sqm	0.0077
16.49	P/L seal coat using 98 kg of bitumen of grade VG-10.	sqm	0.0098
16.62	P/L Dense Bituminous Macadam: 16.62.1 50 to 100 mm average compacted thickness with bitumen of grade VG-30 @5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of		

2.0 COEFFICIENTS FOR BITUMEN CONSUMPTION

CODE NO.	DESCRIPTION	UNIT	Quantity of Bitumen in quintals per unit quantity of work
	Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity. 16.62.2 50 to 100 mm average compacted thickness with bitumen of grade VG-30 @5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate) prepared in Drum Type Hot Mix Plant of 60-90 TPH capacity.	cum cum	1.1538 1.1538
16.63	P/L bituminous macadam: 16.63.1 50 to 100 mm average compacted thickness with bitumen of grade VG-30 @ 3.5% (percentage by weight of total mix) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity. 16.63.2 50 to 100 mm average compacted thickness with bitumen of grade VG-30 @ 3.5% (percentage by weight of total mix) prepared in Drum Type Hot Mix Plant of 60-90 TPH capacity.	cum cum	0.7683 0.7683
16.64	Providing and laying semi- dense Bituminous concrete: 16.64.1 25 mm compacted thickness with bitumen of grade VG- 30 @5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity. 16.64.2 25 mm compacted thickness with bitumen of grade VG- 30 @ 5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate) prepared in Drum Type Hot Mix Plant of 60-90 TPH capacity.	100 sqm 100 sqm	2.8846 2.8846
16.65	P/L Bituminous concrete: 16.65.1 40/50 mm compacted thickness with bitumen of grade VG-30@5.5% (percentage by weight of total mix) and lime filler @3% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity. 16.65.2 40/50 mm compacted thickness with bitumen of grade VG-30@5.5% (percentage by weight of total mix) and lime filler @3% (percentage by weight of Aggregate) and waste plastic additive @8% (percentage by weight of bitumen) prepared in Batch Type Hot Mix Plant of 100- 120 TPH capacity. 16.65.3 40/50 mm compacted thickness with bitumen of grade PMB-40 @5.5% (percentage by weight of total mix) and lime filler @3% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity. 16.65.4 40/50 mm compacted thickness with bitumen of grade CRMB-60 @5.5% (percentage by weight of total mix) and lime filler @3% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity. 16.65.5 40/50 mm compacted thickness with bitumen of grade VG-30@5.5% (percentage by weight of total mix) and lime filler @3% (percentage by weight of Aggregate) prepared in drum Type Hot Mix Plant of 60-90 TPH capacity.	cum cum cum cum cum	1.296 1.296 1.296 1.296 1.296

2.0 COEFFICIENTS FOR BITUMEN CONSUMPTION

CODE NO.	DESCRIPTION	UNIT	Quantity of Bitumen in quintals per unit quantity of work
	16.65.6 40/50 mm compacted thickness with bitumen of grade VG-30@5.5% (percentage by weight of total mix) and lime filler @3% (percentage by weight of Aggregate) and waste plastic additive @8% (percentage by weight of bitumen) prepared in drum Type Hot Mix Plant of 60-90 TPH capacity.	cum	1.296
	16.65.7 40/50 mm compacted thickness with bitumen of grade PMB-40 @5.5% (percentage by weight of total mix) and lime filler @3% (percentage by weight of Aggregate) prepared in drum Type Hot Mix Plant of 60-90 TPH capacity.	cum	1.296
	16.65.8 40/50 mm compacted thickness with bitumen of grade CRMB-60 @5.5% (percentage by weight of total mix) and lime filler @3% (percentage by weight of Aggregate) prepared in Drum Type Hot Mix Plant of 60-90 TPH capacity.	cum	1.296

*Including tack coat

2.0 COEFFICIENTS FOR BITUMEN CONSUMPTION
23.0 WATER PROOFING

CODE NO.	DESCRIPTION	UNIT	Quantity of Bitumen in quintals per unit quantity of work
23.3	P/L water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen and the like.	sqm	0.017
23.6	P/L water proofing treatment on roofs with cement slurry & fibre glass cloth	sqm	0.0097
23.8	Providing and laying four courses water proofing treatment with bitumen felt over roofs: 23.8.1 Bitumen felt (Hessian based) type 3grade I	sqm	0.029
23.9	P/L six courses water proofing treatment with bitumen felt over roofs applied hot for first, third and fifth course 23.9.1 Blown type Bitumen 85/25 or 90/15 conforming to IS : 702 applied hot @ 1.45, 1.20 and 1.45 Kg per square metre 23.9.2 Blown or/and residual Bitumen applied hot @ 1.45, 1.20 and 1.70 Kg per square metre 23.9.3 Blown or/and residual Bitumen applied hot @ 1.45, 1.20 and 1.70 Kg per square metre	sqm sqm sqm	0.041 0.0435 0.0435