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### 3.0 MORTAR

Code No	Description	Unit	Rate Rs.
3.1	Cement Mortar 1:1 (1 cement : 1 fine sand)	cum	5,927.55
3.2	Cement mortar 1:2 (1 cement : 2 fine sand).	cum	4,241.90
3.3	Cement mortar 1:3 (1 cement : 3 fine sand).	cum	3,399.70
3.4	Cement mortar 1:4 (1 cement : 4 fine sand).	cum	2,710.70
3.5	Cement mortar 1:5 (1 cement : 5 fine sand).	cum	2,339.70
3.6	Cement mortar 1:6 (1 cement : 6 fine sand).	cum	2,021.70
3.7	Cement mortar 1:2 (1 cement : 2 coarse sand).	cum	4,241.90
3.8	Cement mortar 1:3 (1 cement : 3 coarse sand).	cum	3,399.70
3.9	Cement mortar 1:4 (1 cement : 4 coarse sand).	cum	2,710.70
3.10	Cement mortar 1:5 (1 cement : 5 coarse sand).	cum	2,339.70
3.11	Cement mortar 1:6 (1 cement : 6 coarse sand).	cum	2,021.70
3.12	Cement mortar 1:2 (1 cement : 2 stone dust).	cum	4,108.90
3.13	Cement mortar 1:2 (1 cement : 2 marble dust).	cum	4,251.40
3.14	Cement mortar 1:5 (1 cement : 5 marble dust).	cum	2,350.40
3.15	White cement mortar 1:2 (1 white cement : 2 marble dust).	cum	8,807.40
3.16	White cement mortar 1:3 (1 white cement : 3 marble dust).	cum	6,827.40
3.17	White cement mortar 1:5 (1 white cement : 5 marble dust).	cum	4,427.40
3.18	Mud mortar	cum	193.05

## 4.0 CONCRETE WORK

Code No	Description	Unit	Rate Rs.
4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering - All work upto plinth level :		
4.1.1	1:1:2 (1 Cement : 1 coarse sand : 2 graded stone aggregate 20 mm nominal size) (As per design mix)	cum	4,062.20
4.1.2	1:1½:3 (1 Cement: 1½ coarse sand: 3 graded stone aggregate 20 mm nominal size).	cum	3,991.30
4.1.3	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	3,524.95
4.1.4	1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 40 mm nominal size).	cum	3,481.40
4.1.5	1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size).	cum	2,932.85
4.1.6	1:3:6 (1 Cement : 3 fine/ coarse sand : 6 graded stone aggregate 40 mm nominal size).	cum	2,888.35
4.1.8	1:4:8 (1 Cement : 4 fine/ coarse sand : 8 graded stone aggregate 40 mm nominal size).	cum	2,567.65
4.1.10	1:5:10 (1 cement : 5 fine/ coarse sand : 10 graded stone aggregate 40 mm nominal size)	cum	2,311.15
4.1.12	M10 concrete using 35% fly ash should be used as per IS:1489 (Part 1)	cum	2,546.50
4.1.13	M15 concrete using 35% fly ash should be used as per IS:1489 (Part 1)	cum	2,272.20
4.2	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets etc. upto two stories, excluding the cost of centring, shuttering and finishing :		
4.2.1	1:1:2 (1 cement : 1 coarse sand : 2 graded stone aggregate 20 mm nominal size) (As per design mix)	cum	4,341.70
4.2.2	1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size).	cum	4,270.80
4.2.3	1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	3,804.50
4.2.4	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 40	cum	3,760.90

Code No	Description	Unit	Rate Rs.
	mm nominal size).		
4.2.5	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size).	cum	3,212.35
4.2.6	1:3:6 (1 cement : 3 fine/ coarse sand : 6 graded stone aggregate 40 mm nominal size).	cum	3,167.85
4.4	Providing and laying cement concrete in kerbs, steps and the like at or near ground level excluding the cost of centring, shuttering and finishing.		
4.4.1	1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	3,524.95
4.5	Providing and fixing upto two stories 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 sand), cost of required centring, shuttering and finishing smooth with 6mm thick cement plaster 1:3 (1 Cement : 3 fine sand) on exposed surfaces complete.		
4.5.1	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size).	cum	5,527.55
4.5.2	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size).	cum	4,811.25
4.6	Providing and fixing at or near ground level precast cement concrete in kerbs, edgings etc. as per approved pattern and setting in position with cement mortar 1:3 (1 Cement : 3 coarse sand) including the cost of required centring, shuttering and finishing smooth with 6mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces complete.		
4.6.1	1:2:4 ( 1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size).	cum	4,636.50
4.7	Providing and fixing upto two stories precast cement concrete solid block including hoisting and setting in position with cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centring, shuttering and finishing smooth with 6mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces complete :		
4.7.1	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size).	cum	6,696.65
4.7.2	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size).	cum	6,104.55
4.10	Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone	sqm	169.30

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
	aggregate 12.5mm nominal size).		
4.11	Providing and laying damp-proof course 50mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size).	sqm	205.95
4.12	Extra for providing and mixing water proofing material in cement concrete work @ 1 kg per 50kg of cement.	per 50 kg cement	28.60
4.13	Applying a coat of residual petroleum bitumen of penetration 80/100 of approved quality using 1.7kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	sqm	88.85
4.14	Extra for concrete work in superstructure above two stories for every two stories or part thereof.	cum	163.35
4.15	Extra for laying concrete in or under water and/or liquid mud including cost of pumping or bailing out water and removing slush etc. complete.	cum/mtr	241.45
4.16	Extra for laying concrete in or under foul positions.	cum	101.15
4.17	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 by dry stone ballast 40mm nominal size well rammed and consolidated and grouted with fine sand including finishing the top smooth.	sqm	246.65

## 5.0 RCC WORK

Code No	Description	Unit	Rate Rs.
5.1	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centring, shuttering, finishing and reinforcement - All work upto plinth level :		
5.1.1	1:1:2 (1 cement : 1 coarse sand : 2 graded stone aggregate 20 mm nominal size). (As per design mix)	cum	4,202.80
5.1.2	1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size)	cum	4,131.90
5.1.3	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	3,665.55
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 etc. upto two stories excluding cost of centring, shuttering, finishing and reinforcement :		
5.2.1	1:1:2 (1 cement : 1 coarse sand : 2 graded stone aggregate 20 mm nominal size) (As per design mix)	cum	4,485.55
5.2.2	1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size)	cum	4,414.65
5.2.3	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	3,948.30
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 two stories excluding the cost of centring, shuttering, finishing and reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	3,984.35
5.3.2	(ii) M 25 Grade Concrete	cum	4,524.553
5.3.3	(iii) M-20 Grade concrete	cum	4,447.718
5.4	Providing and laying upto two stories reinforced cement concrete in kerbs, steps and the like excluding the cost of centring, shuttering, finishing and reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	3,745.15
5.5	Reinforced cement concrete work in arches, arch ribs, domes, vaults, shells, folded plate and roofs having slope more than 15° upto two stories excluding the cost of centring, shuttering, finishing and reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	3,723.95

Code No	Description	Unit	Rate Rs.
5.8	Reinforced cement concrete work in vertical and horizontal fins individually or forming box louvers, facias and eaves boards upto two stories excluding the cost of centring, shuttering, finishing and reinforcement with 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20mm nominal size).	cum	4,367.70
5.9	Centring and shuttering at all levels including strutting, propping etc. and removal of form for :		
5.9.1	Foundations, footings, bases of columns, etc. for mass concrete.	sqm	124.95
5.9.2	Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc.	sqm	230.50
5.9.3	Suspended floors, roofs, landings, balconies and access platform.	sqm	247.05
5.9.4	Shelves (Cast in situ)	sqm	247.05
5.9.5	Lintels, beams, plinth beams, girders, bressumers and cantilevers.	sqm	209.65
5.9.6	Columns, Pillars, Piers, Abutments, Posts and Struts.	sqm	282.60
5.9.7	Stairs, (excluding landings) except spiral-staircases.	sqm	248.20
5.9.8	Spiral staircases (including landing).	sqm	230.55
5.9.9	Arches, domes, vaults upto 6 m span	sqm	663.30
5.9.10	Extra for arches, domes, vaults exceeding 6 m span	sqm	224.90
5.9.11	Chimneys and shafts	sqm	229.45
5.9.13	Vertical and horizontal fins individually or forming box louvers band, facias and eaves boards.	sqm	373.05
5.9.14	Extra for shuttering in circular work (20% of respective centring and shuttering items).	sqm	20.00
5.9.15	Small lintels not exceeding 1.5m clear span, moulding as in cornices, window sills, string courses, bands, copings, bed plates, anchor blocks and the like.	sqm	124.95
5.9.16	Edges of slabs and breaks in floors and walls.		
5.9.16.1	Under 20 cm wide	metre	69.05
5.9.16.2	Above 20 cm wide	sqm	305.90
5.9.17	Cornices and mouldings	sqm	333.20
5.9.18	Small surfaces such as cantilever ends, brackets and ends of steps, caps and bases to pilasters and columns and the like.	sqm	297.30
5.9.19	Weather shade, Chajjas, corbels etc., including edges.	sqm	301.75
5.9.20	Suspended floors, roofs, landings, balconies and access platform.	sqm	317.90

Code No	Description	Unit	Rate Rs.
	with water proof ply 12mm thick.		
5.9.21	Lintels, beams, plinth beams, girders, bressumers and cantilevers with water proof ply 12mm thick.	sqm	280.25
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. & 100 mm length.	each set	90.75
5.10.2	12 mm dia. & 150 mm length.	each set	104.05
5.10.3	20 mm dia. & 150 mm length.	each set	122.20
5.10.4	20 mm dia.& 225 mm length.	each set	140.35
5.11	Extra for additional height in centring, shuttering at any floor where ever required with adequate bracing, propping etc. including cost of de-shuttering and decentring at all levels, over a height of 3.5 m, for every additional height of 1 metre or part thereof (Plan area to be measured)		
5.11.1	Suspended floors, roofs, landing, beams and balconies (Plan area to be measured).	sqm	95.35
5.12	Providing, hoisting and fixing upto two stories precast reinforced cement concrete work in string courses, bands, copings, bed plates, anchor blocks, plain window sills and the like including the cost of required centring, shuttering, finishing smooth with 6 mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces complete but excluding cost of reinforcement with 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size).	cum	5,625.80
5.13	Providing, hoisting and fixing upto two stories precast reinforced cement concrete in small lintels not exceeding 1.5m clear span upto two stories including the cost of required centring, shuttering and finishing smooth with 6 mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces but excluding the cost of reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size).	cum	6,790.75
5.14	Providing, hoisting and fixing upto two stories 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 centring, shuttering and finishing smooth with 6 mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces complete but excluding the cost of reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	7,828.65
5.15	Providing, hoisting and fixing upto two stories precast reinforced	cum	5,830.35



Code No	Description	Unit	Rate Rs.
	cement concrete in lintels, beams and bressumers including setting in cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centring and shuttering and finishing smooth with 6 mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces but excluding the cost of reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).		
5.16	Providing, hoisting and fixing upto two stories precast reinforced cement concrete in shelves including setting in cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centring, shuttering and finishing with neat cement punning on exposed surfaces but excluding the cost of reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size).	cum	7,806.15
5.17	Providing, hoisting and fixing upto two stories 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 centring, shuttering and finishing smooth with 6mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces complete but excluding the cost of reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	7,976.05
5.18	Providing precast cement concrete Jali 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6mm nominal size) reinforced with 1.6 mm dia mild steel wire including centring and shuttering, roughening cleaning, fixing and finishing 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	sqm	477.65
5.18.2	40 mm thick	sqm	402.70
5.18.3	25 mm thick	sqm	378.50
5.19	Encasing rolled steel sections, in beams and columns, with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size) including centring and shuttering complete but excluding cost of reinforcement.	cum	5,707.20
5.20	Encasing rolled steel section in grillages with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size) including centring and shuttering but excluding cost of expanded metal and hangers.	cum	3,862.80
5.21	Extra for providing and fixing expanded metal mesh of size 20x60mm and strands 3.25mm wide 1.6mm thick weighing 3.64 kg. per sqm. for encasing of rolled steel sections in beams,	sqm	267.85

Code No	Description	Unit	Rate Rs.
	columns and grillages excluding cost of hangers.		
5.22	Reinforcement for R.C.C. work at all levels including straightening, cutting, bending, placing in position and binding all complete.		
5.22.1	Mild steel and Medium Tensile steel bars.	kg	51.50
5.22.2	Hard drawn steel wire	kg	51.80
5.22.3	Cold twisted bars	kg	55.60
5.22.4	Hot rolled deformed bars	kg	55.60
5.22.5	Hard drawn steel wire fabric	kg	55.05
5.22.6	Thermo-Mechanically Treated bars.	kg	55.60
5.23	Deduct for omitting in R.C.C. work smooth finishing of the exposed surface with 6mm thick cement mortar 1:3 (1 Cement : 3 fine sand)	sqm	82.95
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	62.35
5.25	Providing and fixing in position copper plate as per design for expansion joints.	kg	288.85
5.26	Providing and filling in position, blown bitumen in expansion joints.	100mtr/cmDepth/cmWidth	479.45
5.27	Providing and filling in position bitumen mix filler of Proportion 80 kg. of hot bitumen, 1 kg. of cement and 0.25 cubic metre of coarse sand for expansion joints.	100mtr/cmDepth/cmWidth	147.40
5.28	Providing and fixing in position 12mm thick bitumen impregnated fibre board conforming to IS:1838 including cost of primer, sealing compound in expansion joints.	cm/100m	508.50
5.29	Providing and fixing sheet covering over expansion joints with iron screws as per design to match the colour / shade of wall treatment.		
5.29.1	Non-asbestos fibre cement board 6 mm thick as per IS:14862.		
5.29.1.1	150mm wide.	metre	85.05
5.29.1.2	200mm wide.	metre	114.25
5.29.2	Aluminium fluted strips 3.15mm thick.		

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
5.29.2.1	150 mm wide.	metre	297.30
5.29.2.2	200 mm wide.	metre	395.90
5.30	Add or deduct for plaster drip course/ groove in plastered surface or moulding to R.C.C. projections.	mtr	20.05
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.	Cum/mtr.	241.45
5.32	Extra for laying reinforced cement concrete in or under foul positions.	cum	101.15

## 6.0 BRICK WORK

Code No	Description	Unit	Rate Rs.
6.1	Brick work with F.P.S. bricks of class designation 75 in foundation and plinth in:		
6.1.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	3,081.00
6.1.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	2,872.55
6.2	Brick work with modular bricks of class designation 75 in foundation and plinth in:		
6.2.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	3,266.10
6.2.2	Cement Mortar 1:6 (1 cement : 6 coarse sand).	cum	3,082.70
6.3	Brick work with machine moulded perforated bricks of class designation 125 conforming to IS: 2222 -1991 in superstructure above plinth level upto two stories in cement mortar 1:6 (1 cement : 6 coarse sand) :		
6.3.1	With F.P.S. bricks.	cum	4,033.90
6.3.2	With Modular bricks.	cum	3,807.80
6.4	Brick work with F.P.S. bricks of class designation 75 in superstructure above plinth level upto two stories in all shapes and sizes in :		
6.4.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	3,407.70
6.4.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	3,199.25
6.5	Extra for brick work in superstructure above two stories for each two stories or part thereof by mechanical means by lifting material using mobile crane .	cum	156.95
6.8	Brick work 7 cm thick with F.P.S. brick of class designation 75 in cement mortar 1:3 (1 cement : 3 coarse sand) in superstructure.	sqm	298.45
6.9	Brick work in plain arches in superstructure including centring and shuttering complete for span upto 6 metres with F.P.S. brick of class designation 75 in cement mortar 1:3 (1 cement : 3 coarse sand).	cum	5,154.30
6.10	Brick work in gauged arches in superstructure in cement mortar 1:3 (1 cement : 3 coarse sand) including centring and shuttering complete, for span upto 6 meters with F.P.S. brick of class designation 75.	cum	6,158.40
6.11	Extra for additional cost of centring for arches exceeding 6m span including all shuttering, bolting, wedging and removal (Area of the soffit to be measured).	sqm	224.90

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
6.12	Half brick masonry with F.P.S. brick of class designation 75 in foundations and plinth in :		
6.12.1	Cement mortar 1:3 (1 cement : 3 coarse sand)	sqm	386.30
6.12.2	cement mortar 1:4 (1 cement : 4 coarse sand)	sqm	362.95
6.13	Half brick masonry with F.P.S. bricks of class designation 75 in superstructure above plinth level upto two stories.		
6.13.1	Cement mortar 1:3 (1 cement :3 coarse sand)	sqm	420.75
6.13.2	Cement mortar 1:4 (1 cement :4 coarse sand)	sqm	397.45
6.14	Extra for half brick masonry in superstructure, above two stories for every two stories or part thereof by mechanical means by lifting material using mobile crane.	sqm	13.90
6.15	Extra for providing and placing in position 2 Nos. 6mm dia. M.S. bars at every third course of half brick masonry (with F.P.S. bricks).	sqm	62.30
6.16	Tile brick masonry with tile bricks of class designation 100 in foundation and plinth in:		
6.16.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	4,995.45
6.16.2	Cement mortar 1:6 (1 cement : 6 coarse sand).	cum	4,662.00
6.17	Tile brick masonry with machine moulded tile bricks of class designation 125 conforming to IS : 2690 (Part I) - 1993 in foundation and plinth in cement mortar 1:6 (1 cement : 6 coarse sand).	cum	5,132.05
6.18	Tile brick masonry with machine moulded tile bricks of class designation 125 conforming to IS : 2690 (Part I) - 1993 in superstructure above plinth level upto two stories in Cement mortar 1:6 (1 cement : 6 coarse sand).	cum	5,476.90
6.19	Extra for tile brick masonry with tile bricks of class designation 100 in superstructure above two stories for every two stories or part thereof.	cum	163.35
6.20	Tile brick masonry with tile bricks of class designation 100 in plain arch work in superstructure in cement mortar 1:4 (1 cement : 4 coarse sand) including centring and shuttering complete.	cum	6,780.15
6.21	Tile brick masonry with tile bricks of class designation 100 in gauged arch work in superstructure in cement mortar 1:4 (1 cement : 4 coarse sand) including centring and shuttering complete.	cum	7,791.00
6.22	Tile brick masonry work 5 cm thick with tile bricks of class designation 100 in cement mortar 1:3 (1 cement : 3 coarse sand)	sqm	312.45

Code No	Description	Unit	Rate Rs.
	in superstructure.		
6.23	Honey-comb brick work 10/11.4 cm thick with bricks of class designation 75 in cement mortar 1:4 (1 cement : 4 coarse sand).	sqm	237.60
6.24	Extra for laying brick work in or under water and/or liquid mud including cost of pumping or bailing out water and removing slush etc. complete.	Cum/mtr.	241.45
6.25	Extra for laying brick work in or under foul position.	cum	101.15
6.26	Brick work with selected F.P.S. bricks of class designation 75 in exposed brick work including making horizontal and vertical grooves 10mm wide 12mm deep complete from ground level upto plinth level in cement mortar 1:6 (1 cement : 6 coarse sand)	cum	2,928.95
6.27	Brick work with modular bricks of class designation 75 in exposed brick work including making horizontal and vertical grooves 10mm wide 12mm deep complete from ground level upto plinth level in cement mortar 1:6 (1 cement : 6 coarse sand).	cum	3,102.50
6.28	Brick work with machine moulded modular bricks of class designation 125 in exposed brick work including making horizontal and vertical grooves 10mm wide 12mm deep complete from ground level upto plinth level in cement mortar 1:6 (1 cement : 6 coarse sand).	cum	2,807.85
6.29	Brick work with machine moulded F.P.S. bricks of class designation 125 in exposed brick work including making horizontal and vertical grooves 10 mm wide 12mm deep complete from ground level upto plinth level in cement mortar 1:6 (1 cement : 6 coarse sand)	cum	3,310.80
6.30	Brick work with machine moulded perforated F.P.S. bricks of class designation 125 conforming IS : 2222-1991 in exposed brick work including making horizontal and vertical grooves 10mm wide 12 mm deep complete from ground level upto plinth level in cement mortar 1:6 (1 cement : 6 coarse sand).	cum	3,609.65
6.31	Brick work with machine moulded perforated modular bricks of class designation 125 conforming to IS : 2222 -1991 in exposed brick work including making horizontal and vertical grooves 10 mm wide 12mm deep complete from ground level upto plinth level in cement mortar 1:6 (1 cement : 6 coarse sand).	cum	3,515.00
6.32	Brick work with clay flyash F.P.S. brick of class designation 75 in superstructure above plinth level upto two stories in :		
6.32.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	2,786.95
6.32.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	2,578.50

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
6.33	Extra for exposed brick work/ clay flyash brick work in superstructure above two stories, for each two stories or part thereof.	cum	163.35
6.34	Brick work with modular fly ash lime bricks (FALG Bricks) conforming to IS:12894-2002, class designation 100 average compressive strength in super structure above plinth level upto two stories in :		
6.34.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	2,684.75
6.34.2	Cement mortar 1:6 (1 cement : 6 Coarse sand)	cum	2,501.35
6.35	Brick work with modular calcium silicate bricks machine moulded conforming to IS:4139-1989, class designation 100 average compressive strength in super structure above plinth level upto two stories in :		
6.35.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	3,445.50
6.35.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	3,262.10
6.36	Brick work with modular extruded brunt fly ash clay sewer bricks (Conforming to IS: 4885 - 1988) in foundation and plinth :		
6.36.1	Cement Mortar 1:4 ( 1 cement : 4 coarse sand)	cum	3,295.55
6.37	Brick work with modular extruded brunt fly ash clay sewer bricks (conforming to IS : 4885-1988) in arches in foundation and plinth in cement mortar 1:3 ( 1 cement : 3 fine sand).	cum	5,348.90
6.40	Providing and laying Gypsum panel partitions 100mm thick with water proof Gypsum panels of size 666x500x100mm, made of calcite phosphor Gypsum fixed with tongue and groove, jointed with bonding plaster as per manufacturers specifications in superstructure above plinth level upto two stories. Gypsum blocks will have a minimum compressive strength of 9.3 kg/cm <sup>2</sup>	sqm	851.05
6.41	Extra for Gypsum panel Partitions in superstructure above two stories for every two stories or part thereof.	sqm	18.75
6.42	Brick work with mechanised autoclaved flyash lime bricks conforming to IS: 12894 :2002 of class designation 100 in superstructure above plinth level upto two stories in.		
6.42.1	Cement mortar 1:4 (1 cement :4 coarse sand)	cum	2,722.35
6.42.2	Cement mortar 1:6 (1 cement :6 coarse sand).	cum	2,513.90
6.43	Extra for mechanised autoclave flyash lime bricks conforming to IS: 12894- 1990 of class designation 100 in superstructure above two stories for every two stories or part thereof.	cum	163.35

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
6.44	Brick edging 7cm wide 11.4cm deep to plinth protection with bricks of class designation 75 including grouting with cement mortar 1:4 (1 cement : 4 fine sand).	metre	23.20



## 7.0 STONE WORK

Code No	Description	Unit	Rate Rs.
7.1	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20mm nominal size) at plinth level with :		
7.1.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	2,230.55
7.1.2	Cement mortar 1:3 (1 cement : 3 coarse sand)	cum	2,780.495
7.1.3	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	2,505.378
7.2	Extra for random rubble masonry with hard stone in superstructure above plinth level and upto two stories, including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20mm nominal size) at window sills, ceiling level and the like.	cum	390.75
7.3	Extra for random rubble masonry with hard stone in superstructure above two stories for every two stories or part thereof	cum	217.80
7.4	Extra for random rubble masonry with hard stone in :		
7.4.1	Square or rectangular pillars	cum	255.30
7.4.2	Circular pillars.	cum	704.70
7.5	Extra for random rubble masonry with hard stone curved on plan for a mean radius not exceeding 6 m.	cum	257.75
7.6	Coursed rubble masonry (first sort) with hard stone in foundation and plinth with :		
7.6.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	2,601.25
7.7	Coursed rubble masonry (second sort) with hard stone in foundation & plinth with :		
7.7.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	2,423.40
7.8	Extra for coursed rubble masonry with hard stone (first or second sort) in superstructure above plinth level and upto two stories.	cum	356.95
7.9	Extra for coursed rubble masonry with hard stone (first or second sort) in superstructure above two stories for every two stories or part thereof.	cum	217.80
7.10	Extra for coursed rubble masonry with hard stone (first or second sort) in :		
7.10.1	Square or rectangular pillars	cum	285.80

Code No	Description	Unit	Rate Rs.
7.10.2	Circular pillars.	cum	804.65
7.11	Extra for coursed rubble masonry with hard stone (first or second sort) curved on plan for a mean radius not exceeding 6 m.	cum	283.15
7.12	Stone work in plain ashlar 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 :		
7.12.1	One face dressed.		
7.12.1.1	Red sand stone	cum	17,834.00
7.12.1.2	White sand stone	cum	20,254.00
7.12.2	Both face dressed.		
7.12.2.1	Red sand stone.	cum	23,318.00
7.12.2.2	White sand stone	cum	25,738.00
7.23	Stone work (machine cut edges) for wall lining etc. (veneer work) backing filled with a grout of 12mm thick cement mortar 1:3 (1 cement : 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 : (To be secured to the backing by means of cramps which shall be paid for separately) :		
7.23.1	Red sand stone - exposed face fine dressed with rough backing.		
7.23.1.1	70 mm thick.	sqm	1,095.95
7.23.1.2	60 mm thick.	sqm	1,023.40
7.23.1.3	50 mm thick.	sqm	950.95
7.23.1.4	40 mm thick.	sqm	878.15
7.23.1.5	30 mm thick.	sqm	805.55
7.23.2	Red sand stone - Exposed face machine cut and table rubbed with rough backing.		
7.23.2.1	70 mm thick	sqm	1,095.95
7.23.2.2	60 mm thick	sqm	1,023.40
7.23.2.3	50 mm thick	sqm	950.95
7.23.2.4	40 mm thick	sqm	878.15
7.23.2.5	30 mm thick	sqm	805.55
7.23.3	White sand stone - exposed face fine dressed with rough backing		
7.23.3.1	70 mm thick.	sqm	1,265.35

Code No	Description	Unit	Rate Rs.
7.23.3.2	60 mm thick.	sqm	1,168.60
7.23.3.3	50 mm thick.	sqm	1,072.05
7.23.3.4	40 mm thick.	sqm	974.75
7.23.3.5	30 mm thick.	sqm	878.10
7.23.4	White sand stone - Exposed face machine cut and table rubbed with rough backing.		
7.23.4.1	70 mm thick.	sqm	1,265.35
7.23.4.2	60 mm thick.	sqm	1,168.60
7.23.4.3	50 mm thick.	sqm	1,072.05
7.23.4.4	40 mm thick.	sqm	1,003.80
7.23.4.5	30 mm thick.	sqm	878.10
7.24	Extra for stone work (veneer work) curved on plan with a mean radius not exceeding 6 m.	cum	1,086.00
7.25	Providing and fixing stainless steel cramps of required size and shape for anchoring stone wall lining to the backing or securing adjacent stones in stone wall lining in cement mortar 1:2 (1 cement : 2 coarse sand) including making the necessary chases in stone and holes in walls wherever required.	kg	507.75
7.26	Providing and fixing stone dowels 10x5x2.50 cm cut to double wedge shape as per design in cement mortar 1:2 (1 cement : 2 coarse sand) including making the necessary chases.	each	22.60
7.27	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	21.30
7.28	Providing and fixing sloping chajja of stone 40 mm thick and upto 80 cm wide beyond the wall as measured along the slope in cement mortar 1:4 (1 cement : 4 coarse sand) with 12mm diameter anchoring steel bar 45 cm long fixed in each stone and supported on and including with bricks cove of class designation 75 in 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:		
7.28.1	Red sand stone:		
7.28.1.1	With F.P.S Bricks	sqm	979.10
7.28.2	White sand stone:		
7.28.2.1	With F.P.S. bricks	sqm	1,078.90

Code No	Description	Unit	Rate Rs.
7.29	Providing and fixing horizontal chajja of stone 40 mm thick and upto 80 cm 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: :		
7.29.1	Red sand stone	sqm	637.90
7.29.2	White sand stone	sqm	725.00
7.30	30mm 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 complete.	sqm	712.50
7.31	Providing and fixing red sand stone brackets 55x22.5x45cm sunk and moulded including providing and fixing with 4 Nos. gun metal cramp 25x6mm 30 cm long and dowel bars 7.5 cm long 6 mm dia as per design.	each	2,022.65
7.32	Stone work, plain in copings, cornices, string courses and plinth courses, upto 75 mm thick in Cement mortar 1:6 (1 cement : 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.		
7.32.1	Red sand stone	cum	24,561.00
7.32.2	White sand stone	cum	26,981.00
7.33	Providing and fixing stone jali 40mm thick throughout in cement mortar 1:3 (1 cement : 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, jali slab without any chamfers etc.		
7.33.1	Red sand stone	sqm	6,507.05
7.33.2	White sand stone	sqm	6,586.90
7.34	Extra for laying stone work in or under water and/or liquid mud including cost of pumping or bailing out water and removing slush etc. complete.	cum/ mtr depth	241.45
7.35	Extra for laying stone work in or under foul position.	cum	101.15
7.36	Wall lining butch work upto 10m height with red/ white sand stone 40 mm thick rough facing on the exposed surface with stone strips of minimum length 300 mm and required width including embedding every tenth layer and bottom most layer in masonry or concrete after making necessary chases of size 75x75mm and by providing layer of 75mm thick strips i/c 12mm thick bed of cement mortar 1:3 (1 Cement : 3 coarse sand) i/c ruled pointing in cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of	sqm	1,173.30

Code No	Description	Unit	Rate Rs.
	pigment to match the shade of stone complete as per direction of Engineer-in-charge.		
7.37	Stone work ( machine cut edges) for wall lining upto 10 m height etc. (Veneer work) backing filled with a grout of 12mm 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 by means of cramps which shall be paid for separately)		
7.37.1	Kota stone slabs exposed face dressed and rubbed.		
7.37.1.1	25 mm thick.	sqm	1,059.25
7.38	Stone tile work for wall lining upto 10 m height with special adhesive 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.		
7.38.1	8mm thick (mirror polished and machine cut edge)		
7.38.1.1	Granite stone of any colour and shade.	sqm	1,248.90
7.38.1.2	Raj Nagar plain white marble/ Udaipur green marble/ Zebra black marble.	sqm	1,093.85
7.39	Extra for 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 there of.	sqm	46.20
7.40	Providing and fixing dry cladding upto 10 metre heights with 30mm thick gang saw cut stone with (machine cut edges) of uniform colour and size upto 1mx1m, fixed to structural steel frame work and/ or with the help of cramps, pins etc. and sealing the joints with approved weather sealant as per Architectural drawing and direction of Engineer-in-charge. (The steel frame work, stainless steel cramps and pins etc. shall be paid for separately.)		
7.40.1	Red sand stone.	sqm	1,566.35
7.40.2	White sand stone	sqm	1,627.75
7.41	Providing and fixing structural steel frame (for dry cladding with 30 mm 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 supported in 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 aggregate 20mm nominal size) of size	kg	88.95

Code No	Description	Unit	Rate Rs.
	300x230x300mm including cost of necessary centring and shuttering and with approved expansion hold fasteners on CC/RCC surface including drilling necessary holes. Approved cramps/ pins etc. shall be welded to the frame work to support stone cladding the steel work will be given a priming coat of "ZINC" primer as approved by Engineer-in-charge and painted with two or more coats of epoxy paint (Shop drawings shall be submitted by the contractor to the Engineer-in-charge for approval before execution). The frame work shall be fixed in true horizontal & vertical lines/planes. (Only structural steel frame work shall be measured for the purpose of payment, stainless steel cramps shall be paid for separately and nothing extra shall be paid.)		
7.42	Providing and fixing adjustable stainless steel cramps of approved quality and of required shape and size adjustable with stainless steel nuts bolts and washer (total weight not less than 260 gms) for dry stone cladding fixed on frame work at suitable location including making necessary recesses in stone slab, drilling required holes etc complete as per direction of the Engineer-in-charge.	each	304.8
7.43	Providing and fixing in cement sand mortar 1:4 single paitam (rebated) stone doors windows and ventilator frames of approved quarry		
7.43.1	(b) size 75x75 mm	metre	84.00
7.43.2	(c) size 100x60 mm	metre	95.00
7.43.3	(d) size 100x75 mm	metre	101.00
7.43.4	(e) size 125x100 mm	metre	107.00
7.44	Providing and fixing in cement sand mortar 1:4 double paitam (rebated) stone doors windows and ventilator frames of approved quarry		
7.44.1	(a) size 100x75 mm	metre	112.00
7.44.2	(b) size 125x100 mm	metre	118.00

## 8.0 MARBLE WORK

Code No	Description	Unit	Rate Rs.
8.1	Marble work gang saw cut (polished and machine cut) of thickness 18mm for wall lining (veneer work) 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).		
8.1.1	Raj Nagar Plain white marble/ Udaipur green marble/ Zebra black marble.		
8.1.1.1	Area of slab upto 0.50 sqm	sqm	1,842.00
8.1.1.2	Area of slab over 0.50 sqm	sqm	1,923.75
8.2	Providing and fixing 18mm thick gang saw cut mirror polished (premoulded and prepolished) machine cut for kitchen platforms, vanity counters ,window sills , facias and similar locations of required size of approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement : 4 coarse sand) with joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing moulding and polishing to edge to give high gloss finish etc. complete at all levels.		
8.2.1	Raj Nagar Plain white marble/ Udaipur green marble/ Zebra black marble.		
8.2.1.1	Area of slab upto 0.50 sqm.	sqm	1,626.30
8.2.1.2	Area of slab over 0.50 sqm.	sqm	1,620.90
8.2.2	Granite of any colour and shade		
8.2.2.1	Area of slab upto 0.50 sqm	sqm	2,909.50
8.2.2.2	Area of slab over 0.50 sqm.	sqm	2,974.00
8.3	Extra for providing edge moulding to 18mm 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	72.95
8.3.2	Granite work.	metre	123.65
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	158.55

Code No	Description	Unit	Rate Rs.
8.5	Extra for providing opening of required size & shape for wash basins/ kitchen sink in kitchen platform, vanity counters and similar location in marble/Granite/stone work including necessary holes for pillar taps etc. including rubbing and polishing of cut edges etc. complete.	each	157.30
8.6	Mirror polishing on marble work/Granite work/stone work where ever required to give high gloss finish complete.	sqm	114.95
8.7	Providing and fixing cramps of required size & shape in RCC/ CC backing with cement mortar 1:2 ( 1 cement :2 coarse sand) including drilling necessary hole in stones and embedding the cramp in the hole (fastener to be paid separately).		
8.7.1	Gunmetal cramps.	kg	481.80
8.7.2	Stainless steel cramps.	kg	507.75
8.8	Providing and fixing expansion hold fasteners on C.C. /R.C.C. 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 6 mm.	each	19.10
8.8.1.2	Fastener with threaded dia 10 mm.	each	21.80
8.8.1.3	Fastener with threaded dia 12 mm.	each	35.40
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 @ 3.3 kg/sqm including pointing in white cement complete.		
8.9.1	8mm thick.		
8.9.1.1	Raj Nagar plain white marble/ Udaipur green marble/ Zebra black marble.	sqm	1,054.90
8.9.1.2	Granite of any colour and shade.	sqm	1,378.60
8.10	Providing and fixing stone slab table rubbed, edges rounded and polished of size 75x50 cm deep and 1.8 cm thick fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6 mm nominal size) as per direction of Engineer-in-charge and finished smooth.		
8.10.1	White Agaria Marble Stone.	sqm	2,299.75
8.10.2	Granite Stone of approved shade.	sqm	2,633.75



## 9.0 WOOD AND P.V.C. WORK

Code No	Description	Unit	Rate Rs.
9.1	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position :		
9.1.1	Second class teak wood	cum	71,544.70
9.1.2	Sal wood	cum	46,000.30
9.1.3	Kiln seasoned and chemically treated Hollock wood.	cum	36,388.90
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 as per directions of Engineer-in-charge.	cum	73,877.20
9.3	Providing wood work in frames of false ceiling, partitions etc. sawn and put up in position :		
9.3.1	Sal wood	cum	41,843.20
9.3.2	Kiln seasoned and chemically treated Hollock wood.	cum	32,116.30
9.4	Extra for additional labour for circular works, such as in frames of fan light :		
9.4.1	Second class teak wood	cum	7,154.70
9.4.2	Sal wood	cum	4,600.30
9.4.3	Kiln seasoned and chemically treated Hollock wood.	cum	3,639.15
9.5	Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows including ISI marked black enamelled M.S butt hinges with necessary screws excluding, panelling which will be paid for separately.		
9.5.1	Second class teak wood		
9.5.1.1	35 mm thick shutters	sqm	1,899.80
9.5.1.2	30 mm thick shutters	sqm	1,695.90
9.5.2	Kiln seasoned and chemically treated Hollock wood.		
9.5.2.1	35 mm thick shutters	sqm	1,091.80
9.5.2.2	30 mm thick shutters	sqm	999.50
9.6	Providing and fixing 35 mm thick factory made laminated veneer lumber door shutter conforming to IS : 14616 and TADS 15:2001 (Part B) including ISI marked black enamelled M.S. butt hinges with necessary screws as per directions of Engineer-in-charge and panelling with panels of:		

Code No	Description	Unit	Rate Rs.
9.6.1	12mm thick plain grade - 1, medium density flat pressed three layer particle board FPT - I or graded wood particle board FPT - I IS : 3087 marked bonded with BWP type synthetic resin adhesive as per IS : 848 :	sqm	1,976.45
9.6.2	12 mm thick pre-laminated particle board (decorative lamination on both sides) grade - 1, medium density flat pressed, three layer particle board FPT - I or graded wood particle board FPT - I, conforming to IS : 3087 bonded with BWP type synthetic resin adhesive as per IS : 848 and pre-lamination conforming to IS : 12823 Grade 1, Type - II marked:	sqm	2,119.25
9.6.3	12 mm thick one side pre-laminated particle board (decorative lamination on one side and other sides balancing lamination) grade - 1 medium density flat pressed, three layer particle board FPT - I or graded wood particle board FPT-1 conforming to IS : 3087 bonded with BWP type synthetic resin adhesive as per IS : 848 and prelamination conforming to IS : 12823 Grade -1, Type II marked:	sqm	2,063.60
9.7	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick :		
9.7.1	Second class teak wood	sqm	1,520.25
9.7.2	Kiln seasoned and chemically treated Hollock wood	sqm	886.65
9.7.3	Ply wood 5 ply, 9 mm thick :		
9.7.3.1	Decorative plywood both side decorative veneer (Type - I) conforming to IS 1328 BWR type.	sqm	1,310.05
9.7.3.2	Decorative plywood one side decorative veneer and commercial veneer on other face (Type 1) conforming to IS 1328 BWR Type	sqm	1,175.70
9.7.4	Ply wood 7 ply, 9 mm thick :		
9.7.4.1	Decorative plywood one side decorative veneer and commercial veneer on other face (Type 1) conforming to IS 1328 BWR Type	sqm	1,233.50
9.7.5	Particle Board 12 mm thick		
9.7.5.1	Plain particle board flat pressed, 3 layer or graded wood particle board medium density Grade I, IS : 3087 marked.	sqm	756.15
9.7.5.2	Veneered flat pressed three layer or graded wood particle board with commercial veneering on both sides conforming to IS:3097, grade I.	sqm	912.75
9.7.5.3	Pre-laminated particle board with decorative lamination on one	sqm	1,168.45

Code No	Description	Unit	Rate Rs.
	side and balancing lamination on other side, Grade I, Type II IS:12823 marked.		
9.7.5.4	Pre-laminated particle board with decorative lamination on both sides, Grade I, Type II, IS:12823 marked.	sqm	1,211.80
9.8	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick. Coir veneer board (conforming to IS : 14842-2000) :		
9.8.1	12 mm thick	sqm	1,100.55
9.9	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass panes including black enamelled ISI marked M.S butt hinges with necessary screws.		
9.9.1	Second class teak wood		
9.9.1.1	35 mm thick	sqm	2,313.40
9.9.1.2	30 mm thick	sqm	2,080.35
9.9.2	Kiln seasoned and chemically treated Hollock wood		
9.9.2.1	35 mm thick	sqm	1,393.75
9.9.2.2	30 mm thick	sqm	1,288.25
9.10	Providing and fixing factory made laminated veneer lumber glazed shutter conforming to IS : 14616 and TADS 15:2001 (Part B) , using 4mm thick float glass panes for doors, windows and clerestory windows including ISI marked black enamelled M.S butt hinges with necessary screws as per directions of Engineer-in-charge		
9.10.1	30 mm thick shutters	sqm	1,722.35
9.11	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)		
9.11.1	5.5 mm thick instead of 4 mm thick.	sqm	111.30
9.12	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	26.60
9.13	Deduct for providing pin headed glass panes instead of ordinary	sqm	78.65

Code No	Description	Unit	Rate Rs.
	float glass panes weighing 4 mm thick in doors, windows and clerestory windows, shutters (Area of opening for glass panes excluding portion inside rebate shall be measured).		
9.14	Extra for providing ISI marked Stainless Steel butt hinges instead of black enamelled M.S. butt hinges with necessary screws. (Shutter area to be measured).	sqm	87.30
9.15	Deduct if fixed shutters (without hinges) are provided instead of openable shutters for doors, windows or clerestory windows with :		
9.15.1	Stainless steel butt hinges with stainless steel screws :		
9.15.1.1	For 2nd class teak wood and other inferior class of wood shutters.	sqm	117.30
9.15.2	Black enamelled M.S. butt hinges with necessary screws.		
9.15.2.1	For 2nd class teak wood and other inferior class of wood shutters.	sqm	30.05
9.16	Providing and fixing 25 mm thick shutters for cup board etc. :		
9.16.1	Panelled or panelled & glazed shutters :		
9.16.1.1	Second class teak wood including ISI marked anodised aluminium butt hinges with necessary screws.	sqm	1,882.20
9.16.2	Glazed shutters :		
9.16.2.1	Second class teak wood including ISI marked anodised aluminium butt hinges with necessary screws.	sqm	1,857.50
9.17	Providing and fixing flat pressed 3 layer particle board medium density exterior grade (Grade I) or graded wood particle board IS : 3087 marked to frame, backing or studding with screws etc. complete (Frames, backing or studding to be paid separately) :		
9.17.1	12 mm thick	sqm	468.00
9.17.2	18 mm thick	sqm	457.10
9.18	Providing and fixing Pre-laminated flat pressed 3 layer (medium density) particle board or graded wood particle board IS : 3087 marked with one side decorative and other side balancing lamination Grade I, Type II exterior grade IS : 12823 marked in shelves with screws and fittings wherever required, edges to be painted with polyurethane primer (fittings to be paid separately).		
9.18.1	18 mm thick	sqm	1,002.65
9.18.2	25 mm thick	sqm	1,077.60
9.19	Providing and fixing 25 mm thick shutters for cupboards etc. including ISI marked black enamelled M.S. butt hinges with necessary screws :		
9.19.1	Panelled or panelled and glazed shutters		

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
9.19.1.1	Second class teak wood	sqm	1,826.80
9.19.2	Glazed shutters		
9.19.2.1	Second class teak wood	sqm	1,876.45
9.20	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.		
9.20.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	sqm	1,767.45
9.20.2	30 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	sqm	1,667.05
9.20.3	25 mm thick (for cupboard) including ISI marked nickel plated bright finished M.S. Piano hinges IS : 3818 marked with necessary screws.	sqm	1,542.20
9.21	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 :		
9.21.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	sqm	1,271.35
9.21.2	30 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	sqm	1,167.30
9.21.3	25mm thick (for cupboard) including ISI marked nickel plated bright finished M.S. piano hinges with necessary screws.	sqm	1,041.25
9.22	Extra for Providing and fixing flush doors with decorative veneering		
9.22.1	On one side in item no. 9.21	sqm	272.25
9.23	Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of shutters (over all area of door shutter to be measured) Over item no. 9.20 and 9.21.	sqm	290.40
9.24	Extra for providing vision panel not exceeding 0.1 sqm in all type of flush doors (cost of glass excluded) (overall area of door shutter to be measured) :		
9.24.1	Rectangular or square.	sqm	108.90
9.24.2	Circular.	sqm	145.20
9.25	Extra if louvers (not exceeding 0.2 sqm) are provided in flush door		

Code No	Description	Unit	Rate Rs.
	shutters (overall area of door shutters to be measured).		
9.25.1	Decorative type door.	sqm of door area	254.10
9.26	Extra for cutting rebate in flush door shutters (Total area of the shutter to be measured).	sqm of door area	72.60
9.27	Providing and fixing 35mm thick wire gauze shutters using galvanised M.S. wire gauze of average width of aperture 1.4mm with wire of dia. 0.63 mm for doors, windows and clerestory windows including ISI marked bright finished or/and black enamelled M.S. butt hinges with necessary screws :		
9.27.1	Second class teak wood.	sqm	2,154.90
9.27.2	Kiln seasoned and chemically treated Hollock wood.	sqm	1,340.40
9.28	Providing and fixing 35mm thick wire gauze shutters using galvanised M.S. wire gauze of average width of aperture 1.4mm with wire of dia. 0.63 mm for doors, windows and clerestory windows including ISI marked stainless steel butt hinges with necessary screws :		
9.28.1	Second class teak wood.	sqm	2,242.15
9.28.2	Kiln seasoned and chemically treated Hollock wood.	sqm	1,427.70
9.29	Providing and fixing 30mm thick wire gauge shutters using galvanised M.S. wire gauge of average width of aperture 1.4mm with wire of dia. 0.63 mm for doors, windows and clerestory windows including ISI marked Stainless Steel butt hinges with necessary screws :		
9.29.1	Second class teak wood.	sqm	1,958.50
9.29.2	Kiln seasoned and chemically treated Hollock wood.	sqm	1,262.05
9.30	Providing and fixing 30mm thick wire gauze shutters using galvanised M.S. wire gauze of average width of aperture 1.4mm with wire of dia 0.63 mm for doors, windows and clerestory windows including ISI marked bright finished or /and black enamelled M.S. butt hinges with necessary screws :		
9.30.1	Second class teak wood.	sqm	1,902.60
9.30.2	Kiln seasoned and chemically treated Hollock wood.	sqm	1,206.20
9.31	Providing and fixing wire gauze laminated veneer lumber shutters conforming to IS : 14616, and as per TADS 15 :2001 (Part B) using galvanised wire gauze with average width of aperture 1.4mm in both directions with wire of dia 0.63mm as per IS :1568 for doors, windows and clerestory windows including ISI marked bright finished or/ and black enamelled M.S. butt hinges with		

Code No	Description	Unit	Rate Rs.
	necessary screws as per directions of Engineer-in-charge:		
9.31.1	35 mm thick shutters	sqm	1,768.35
9.31.2	30 mm thick shutters	sqm	1,552.95
9.32	Providing 50x50x50mm 2nd class teak wood plugs including cutting brick work and fixing in cement mortar 1:3 (1 cement : 3 fine sand) and making good the walls etc.	each	15.00
9.33	Providing and fixing expandable fasteners of specified size with necessary plastic sleeves and galvanised M.S. screws including drilling holes in masonry work /CC/ R.C.C. and making good etc. complete.		
9.33.1	25 mm long	each	9.80
9.33.2	32 mm long	each	11.60
9.33.3	40 mm long	each	14.05
9.33.4	50 mm long	each	16.45
9.34	Providing and fixing 2nd class teak wood plain lining tongued and grooved on and including wooden plugs complete with necessary screws and priming coat on unexposed surface.		
9.34.1	40 mm thick.	sqm	3,419.35
9.34.2	25 mm thick.	sqm	2,221.45
9.34.3	20 mm thick	sqm	1,774.45
9.34.4	12 mm thick	sqm	1,144.10
9.35	Providing and fixing in wall lining flat pressed three layer (medium density) particle board or graded wood Pre-laminated one side decorative lamination on other side balancing lamination Grade I, Type II, IS : 12823 marked including priming coat on unexposed surface, with necessary fixing arrangement and screws etc. complete :		
9.35.1	12 mm thick	sqm	934.25
9.35.2	18 mm thick	sqm	1,095.30
9.35.3	25 mm thick	sqm	1,173.85
9.36	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.		
9.36.1	Hollock wood.	cum	63,134.70
9.37	Providing and fixing plywood 4 mm thick one side decorative veneer conforming to IS: 1328 (type-1) for plain lining / cladding		

Code No	Description	Unit	Rate Rs.
	with necessary screws, priming coat on unexposed surface with:		
9.37.1	Decorative veneer facings of approved manufacture.	sqm	749.05
9.38	Providing and fixing 4mm thick coir veneer board, ISI marked IS : 14842 - 2000, plain lining with necessary screws, priming coat on unexposed surface etc., complete.	sqm	712.75
9.39	Providing and fixing skirting of Pre-laminated with (one side decorative and other side balancing lamination) flat pressed, 3 layer or graded particle board (medium density) Grade I, Type II, IS :12823 marked, with necessary fixing arrangements and screws including drilling necessary holes for rawl plugs etc. and priming coat on unexposed surface complete :		
9.39.1	18 mm thick	sqm	1,226.70
9.39.2	25 mm thick	sqm	1,305.20
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	50x12 mm	metre	84.30
9.40.1.2	50 x 20 mm	metre	112.35
9.40.2	Hollock wood		
9.40.2.1	50x12 mm	metre	61.15
9.40.2.2	50x20 mm	metre	73.75
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	1,242.45
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 6 mm 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 and rawl plugs 50 mm long (designation 10 no.) etc all complete	metre	242.00
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 6 mm 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 and rawl plug 50 mm	metre	346.75



Code No	Description	Unit	Rate Rs.
	long (designation 10 No.) etc., all complete		
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.	metre	23.70
9.44.2	Particle board with decorative veneering on both sides.	metre	85.00
9.45	Providing and fixing teak wood lipping of size 25x3 mm in pelmet.	metre	32.35
9.46	Providing and fixing curtain rods of 1.25 mm thick chromium plated brass plate, with two chromium plated brass brackets fixed with C.P. brass screws and wooden plugs, etc., wherever necessary complete :		
9.46.1	12 mm dia.	metre	172.75
9.46.2	20 mm dia.	metre	199.40
9.46.3	25 mm dia.	metre	314.35
9.47	Providing and fixing nickel plated M.S. pipe curtain rods with nickel plated brackets :		
9.47.1	20 mm dia (heavy type)	metre	67.75
9.47.2	25 mm dia (heavy type)	metre	76.20
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. all complete.		
9.48.1	Fixed to steel windows by welding.	kg	78.20
9.48.2	Fixed to openings /wooden frames with rawl plugs screws etc.	kg	83.55
9.49	Providing and fixing expanded metal 20x60mm strands 3.25mm wide and 1.6mm thick for windows etc. including 62x19mm beading of IInd class teak wood.	sqm	610.90
9.50	Providing and fixing hard drawn steel wire fabric 75x25 mm mesh of weight not less than 7.75 Kg per sqm to window frames etc. including 62x19 mm beading of second class teak wood.	sqm	756.95
9.51	Providing and fixing fly proof galvanised M.S. wire gauze to windows and clerestory windows using galvanised M.S. wire gauge with average width of aperture 1.4 mm in both directions with wire of dia. 0.63 mm.		
9.51.1	With 2nd class teak wood beading 62X19 mm.	sqm	613.55
9.51.2	With 12 mm mild steel U beading.	sqm	403.75
9.52	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	sqm	-75.00

Code No	Description	Unit	Rate Rs.
	window shutter instead of glass sheet 4 mm thick.		
9.53	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 30x10x15cm 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size)	each	78.95
9.54	Providing beams including hoisting, fixing in position and applying wood preservative for the unexposed surfaces, etc. complete with :		
9.54.1	Sal wood.	cum	40,382.70
9.54.2	Hollock wood.	cum	30,136.80
9.55	Providing and fixing ISI marked M.S. pressed butt hinges bright finished with necessary screws etc. complete :		
9.55.1	125x65x2.12 mm	each	19.50
9.55.2	100x58x1.90 mm	each	15.65
9.55.3	75x47x1.70 mm	each	12.05
9.55.4	50x37x1.50 mm	each	6.55
9.56	Providing and fixing IS : 1341 marked M.S. heavy weight butt hinges with necessary screws etc. complete :		
9.56.1	125x90x4.00 mm	each	41.05
9.56.2	100x75x3.50 mm	each	25.20
9.56.3	75x60x3.10 mm	each	16.05
9.56.4	50x40x2.50 mm	each	9.90
9.57	Providing and fixing ISI marked oxidised M.S. pressed butt hinges with necessary screws etc. complete.		
9.57.1	125x65x2.12 mm	each	21.20
9.57.2	100x58x1.90 mm	each	16.00
9.57.3	75x47x1.70 mm	each	11.80
9.57.4	50x37x1.50 mm	each	6.90
9.58	Providing and fixing ISI marked oxidised M.S. pressed Parliamentary hinges with necessary screws etc. complete :		
9.58.1	150x125x27x2.50 mm	each	41.55
9.58.2	125x125x27x2.50 mm	each	35.50
9.58.3	100x125x27x2.50 mm	each	30.65

Code No	Description	Unit	Rate Rs.
9.58.4	75x100x20x2.24 mm	each	23.80
9.59	Providing and fixing ISI marked oxidised M.S. single acting spring hinges with necessary screws etc. complete :		
9.59.1	150 mm	each	106.25
9.59.2	125 mm	each	100.20
9.59.3	100 mm	each	81.55
9.60	Providing and fixing oxidised M.S. double acting spring hinges with necessary screws etc. complete.		
9.60.1	150 mm	each	108.65
9.60.2	125 mm	each	96.55
9.60.3	100 mm	each	76.70
9.61	Providing M.S. Piano hinges ISI marked IS : 3818 finished with nickel plating and fixing with necessary screws etc., complete.		
9.61.1	Overall width 35 mm.	metre	100.05
9.61.2	Overall width 50 mm.	metre	106.10
9.61.3	Overall width 65 mm.	metre	112.15
9.62	Providing and fixing ISI marked oxidised M.S. sliding door bolts with nuts and screws etc. complete :		
9.62.1	300x16 mm	each	81.35
9.62.2	250x16 mm	each	71.70
9.63	Providing and fixing ISI marked oxidised M.S. tower bolt black finish, (Barrel type) with necessary screws etc. complete :		
9.63.1	250x10 mm	each	36.20
9.63.2	200x10 mm	each	30.75
9.63.3	150x10 mm	each	25.35
9.63.4	100x10 mm	each	18.70
9.64	Providing and fixing ISI marked 85x42mm oxidised M.S. pull bolt lock conforming to IS : 7534 with necessary screws bolts, nut and washers etc. complete.	each	40.25
9.65	Providing and fixing ISI marked oxidised M.S. door latches conforming to IS:5930 with screws etc. complete :		
9.65.1	300x20x6 mm	each	36.70
9.65.2	250x20x6 mm	each	36.70
9.66	Providing and fixing ISI marked oxidised M.S. handles conforming		

Code No	Description	Unit	Rate Rs.
	to IS:4992 with necessary screws etc. complete :		
9.66.1	125 mm	each	11.55
9.66.2	100 mm	each	9.10
9.66.3	75 mm	each	6.70
9.67	Providing and fixing oxidised M.S. hasp and staple (safety type) conforming to IS : 363 with necessary screws etc. complete :		
9.67.1	150 mm	each	14.50
9.67.2	115 mm	each	13.10
9.67.3	90 mm	each	10.90
9.68	Providing and fixing oxidised M.S. casement stays (straight peg type) with necessary screws etc. complete.		
9.68.1	300 mm weighing not less than 200 gms.	each	21.15
9.68.2	250 mm weighing not less than 150 gms.	each	18.80
9.68.3	200 mm weighing not less than 120 gms.	each	17.60
9.69	Providing and fixing oxidised M.S. Safety chain with necessary fixtures for doors. (Weighing not less than 450 gms.)	each	56.95
9.70	Providing and fixing IS : 12817 marked stainless steel butt hinges with stainless steel screws etc. complete :		
9.70.1	125x64x1.90 mm	each	51.00
9.70.2	100X58X1.90 mm	each	38.70
9.70.3	75x47x1.80 mm	each	26.85
9.70.4	50x37x1.50 mm	each	16.35
9.71	Providing and fixing IS : 12817 marked stainless steel butt hinges (heavy weight) with stainless steel screws etc. complete :		
9.71.1	125x64x2.50 mm	each	58.40
9.71.2	100x60x2.50 mm	each	43.80
9.71.3	75x50x2.50 mm	each	32.05
9.72	Providing and fixing bright finished brass butt hinges with necessary screws etc. complete :		
9.72.1	125x85x5.5 mm (heavy type)	each	201.70
9.72.2	125x70x4 mm (ordinary type)	each	85.55
9.72.3	100x85x5.5 mm (heavy type)	each	173.85
9.72.4	100x70x4 mm (ordinary type)	each	60.10

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
9.72.5	75x65x4 mm (heavy type)	each	67.95
9.72.6	75x40x2.5 mm (ordinary type)	each	36.75
9.72.7	50x40x2.5 mm (ordinary type)	each	16.35
9.73	Providing and fixing bright finished brass parliamentary hinges with necessary screws etc. complete :		
9.73.1	150x125x27x5 mm	each	217.05
9.73.2	125x125x27x5 mm	each	192.85
9.73.3	100x125x27x5 mm	each	159.60
9.73.4	75x100x20x3.2 mm	each	121.80
9.74	Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete :		
9.74.1	250x10 mm	each	162.85
9.74.2	200x10 mm	each	132.95
9.74.3	150x10 mm	each	102.70
9.74.4	100x10 mm	each	71.60
9.75	Providing and fixing bright finished brass door latch with necessary screws etc. complete :		
9.75.1	300x16x5 mm	each	115.50
9.75.2	250x16x5 mm	each	111.85
9.76	Providing and fixing bright finished brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles with necessary screws etc. complete (best make of approved quality).	each	377.10
9.77	Providing and fixing bright finished brass 100 mm mortice latch with one dead bolt and a pair of lever handles with necessary screws etc. complete (best make of approved quality).	each	350.45
9.78	Providing and fixing bright finished brass night latch including necessary screws etc. complete (best make of approved quality).	each	475.10
9.79	Providing and fixing special quality bright finished brass cupboard or wardrobe locks with four levers including necessary screws etc. complete (best make of approved quality) :		
9.79.1	40 mm	each	109.65
9.79.2	50 mm	each	118.15
9.79.3	65 mm	each	132.65
9.79.4	75 mm	each	150.80

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
9.80	Providing and fixing 50 mm bright finished brass cup board or wardrobe knob with necessary screws (best make of approved quality)	each	26.85
9.81	Providing and fixing bright finished brass handles with screws etc. complete :		
9.81.1	125 mm	each	108.70
9.81.2	100 mm	each	96.60
9.81.3	75 mm	each	72.40
9.82	Providing and fixing bright finished brass hanging type floor door stopper with necessary screws, etc. complete.	each	58.60
9.83	Providing and fixing IS : 3564 marked Aluminium die cast body tubular type universal hydraulic door closer with necessary accessories and screws etc. complete.	each	648.75
9.84	Providing and fixing IS : 3564 marked aluminium extruded section body tubular type universal hydraulic door closer with double speed adjustment with necessary accessories and screws etc. complete.	each	962.15
9.85	Providing and fixing bright finished brass casement window fastener with necessary screws etc. complete.	each	38.75
9.86	Providing and fixing bright finished brass casement stays (straight peg type) with necessary screws etc. complete :		
9.86.1	300 mm weighing not less than 330 gms	each	87.65
9.86.2	250 mm weighing not less than 280 gms	each	73.85
9.86.3	200 mm weighing not less than 240 gms	each	62.95
9.87	Providing and fixing bright finished brass hasp and staple (safety type) with necessary screws etc. complete:		
9.87.1	150 mm	each	65.70
9.87.2	115 mm	each	53.15
9.87.3	90 mm	each	43.70
9.88	Providing and fixing chromium plated brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles with necessary screws etc. complete (best make of approved quality).	each	465.40
9.89	Providing and fixing chromium plated brass night latch including necessary screws etc. complete (Best make of approved quality).	each	538.00
9.90	Providing and fixing special quality chromium plated brass cupboard locks with six levers including necessary screws etc. complete (Best make of approved quality) of :		

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
9.90.1	Size 40 mm	each	112.10
9.90.2	Size 50 mm	each	130.25
9.90.3	Size 65 mm	each	143.55
9.90.4	Size 75 mm	each	156.85
9.91	Providing and fixing chromium plated brass 50 mm cupboard or wardrobe knobs with nuts complete.	each	35.35
9.92	Providing and fixing chromium plated brass handles with necessary screws etc. complete:		
9.92.1	125 mm	each	120.55
9.92.2	100 mm	each	101.45
9.92.3	75 mm	each	88.15
9.93	Providing and fixing chromium plated brass casement window fastener with necessary screws etc. complete.	each	73.05
9.94	Providing and fixing chromium plated brass casement stays (straight peg type) with necessary screws etc. complete :		
9.94.1	300 mm weighing not less than 330 gms	each	97.70
9.94.2	250 mm weighing not less than 280 gms	each	90.45
9.94.3	200 mm weighing not less than 240 gms	each	75.45
9.95	Providing and fixing ISI marked aluminium butt hinges ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete:		
9.95.1	125x75x4 mm	each	79.75
9.95.2	125x63x4 mm	each	76.00
9.95.3	100x75x4 mm	each	71.90
9.95.4	100x63x4 mm	each	64.40
9.95.5	100x63x3.2 mm	each	68.75
9.95.6	75x63x4 mm	each	48.00
9.95.7	75x63x3.2 mm	each	40.05
9.95.8	75x45x3.2 mm	each	25.85
9.96	Providing and fixing aluminium sliding door bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with nuts and screws etc. complete :		

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
9.96.1	300x16 mm	each	173.45
9.96.2	250x16 mm	each	148.05
9.97	Providing and fixing aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868 ) transparent or dyed to required colour or shade with necessary screws etc. complete :		
9.97.1	300x10 mm	each	76.75
9.97.2	250x10 mm	each	67.05
9.97.3	200x10 mm	each	56.65
9.97.4	150x10 mm	each	46.20
9.97.5	100x10 mm	each	35.05
9.98	Providing and fixing aluminium pull bolt lock anodised 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 bolts, nut and washers etc. complete.	each	48.70
9.99	Providing and fixing 50cm long aluminium kicking plate 100x3.15 mm anodised (anodic coating not less than grade AC 10 as per IS :1868) transparent or dyed to required colour or shade with necessary screws etc. complete.	each	126.30
9.100	Providing and fixing aluminium handles ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete :		
9.100.1	125 mm	each	51.60
9.100.2	100 mm	each	37.70
9.100.3	75 mm	each	30.40
9.101	Providing and fixing aluminium hanging floor door stopper ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade with necessary screws etc. complete.		
9.101.1	Single rubber stopper	each	20.05
9.101.2	Twin rubber stopper	each	56.35
9.102	Providing and fixing aluminium casement stays ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade with necessary screws etc. complete.	each	51.25
9.103	Providing and fixing bright finished brass 100 mm mortice latch and lock ISI marked with six levers and a pair of anodised (anodic	each	479.15



Code No	Description	Unit	Rate Rs.
	coating not less than grade AC 10 as per IS : 1868) aluminium lever handles with necessary screws etc. complete (Best make of approved quality).		
9.104	Providing and fixing aluminium tee channels (heavy duty) with rollers, stop end in pelmets as curtain rod.	metre	44.00
9.105	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/ role form G.I. sheet with zinc coating of grade 175 in consisting of floor and ceiling channel 50mm wide having equal flanges of 32mm and 0.5mm thick fixed to the floor and ceiling at the spacing of 610mm centre to centre with dash fastener of 12.5mm diameter 40mm length and the studs 48mm wide having one flange of 34mm and other flange 36mm and 0.50mm thick fixed vertically within flanges of floor and ceiling channel and placed at a spacing of 610mm centre to centre by 6mm dia bolts and nuts at both ends of partition fixed flush to wall with rawl plugs at spacing of 450mm centre to centre and fixing of boards to either side of frame work by 25mm dry wall screws on studs, floor and ceiling channels at the spacing of 300mm centre to centre, including jointing and finishing to a flush finish with recommended jointing compound, jointing tape, joint finisher and two coats of primer suitable for board as per manufacture's specification all complete.		
9.105.1	67mm overall thickness partition with 8.5mm thick double skin glass reinforced Gypsum board (GRG) conforming to IS: 2095: part III	sqm	944.05
9.105.2	75mm overall thickness partition with 12.5mm thick double skin plain Gypsum board conforming to IS: 2095: part I	sqm	798.85
9.105.3	66mm overall thickness Partition with 8mm thick double skin Calcium Silicate Board made with Calcareous & Siliceous materials reinforced with cellulose fibre manufactured through autoclaving process with compressive Strength 225 kg/sq.cm, Bending Strength 100 kg/ sg.cm.	sqm	953.70
9.105.4	66mm overall thickness partition using 8mm thick double skin non-asbestos multipurpose cement board reinforced with cellulose fibre manufactured through autoclaving process (High pressure steam cured) as per IS: 14862 with suitable fibre cement screw.	sqm	1,062.60
9.106	Providing and fixing PTMT handles with necessary screws etc. complete.		
9.106.1	125x34x24 mm weighing not less than 23 gms.	each	35.20

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
9.106.2	150x34x24 mm weighing not less than 26 gms.	each	38.85
9.107	Providing and fixing PTMT Butt hinges with necessary screws etc. complete.		
9.107.1	75x60x10 mm fitted with 5.5 mm dia M.S. Bright Bar Rod weighing not less than 34 gms.	each	51.50
9.107.2	100x75x10 mm fitted with 5.5 mm dia MS Bright Bar Rod weighing not less than 53 gms.	each	67.20
9.108	Providing and fixing PTMT Tower Bolts with 12 mm one piece rod inside and necessary screws etc., complete.		
9.108.1	152x42x18 mm weighing not less than 60 gms.	each	76.75
9.108.2	202x42x18 mm weighing not less than 78 gms.	each	92.45
9.109	Providing and fixing PTMT door catcher of length 72 mm and dia. of 42 mm with suitable washers weighing not less than 33 gms.	each	30.50
9.110	Providing and fixing Bamboo jaffery/ fencing consisting of superior quality 25mm dia (Average) half cut bamboo placed vertically and fixed together with three numbers horizontal running members of hollock wood in scantling of section 50X25mm fixed with nails and G.I wire to existing surface complete as per direction of Engineer-in-charge.	sqm	273.90
9.111	Providing and fixing wooden moulded corner beading of triangular shape to the junction of panelling etc. with iron screws, plugs and priming coat on unexposed surface etc. complete 2nd class teak wood.		
9.111.1	50x50mm (base and height).	metre	143.70
9.112	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 direction of Engineer-in-charge.	metre	36.00
9.113	Providing and fixing bright finished 100mm mortice lock with 6 levers without pair of handles for aluminium door with necessary screws etc complete (Best make of approved quality) as per direction of Engineer-in-charge.	each	352.85
9.114	Providing and fixing magnetic catcher in cupboard / ward robe shutters including fixing with necessary screws etc. complete (Best make of approved quality).		
9.114.1	Triple strip vertical type.	each	19.50
9.114.2	Double strip (horizontal type).	each	15.25

Code No	Description	Unit	Rate Rs.
9.115	Providing and fixing powder coated telescopic drawer channels 300mm long with necessary screws etc. complete as per directions of Engineer-in-charge.	each	123.45
9.116	Providing and fixing sliding arrangement in racks/ cupboards/cabinets shutter by P/F stainless steel rollers to run inside C or E aluminium channel section (The payment of C or E channel shall be made separately)	each	7.30
9.117	Providing and fixing factory made UPVC door frame made of UPVC profile section having an overall dimension as below (tolerance $\pm 1$ mm) with wall thickness 2.0mm $\pm 0.2$ mm, corners of the door frame to be mitred and welded of plastic, galvanized brackets and stainless steel screws. The hinge side vertical of the frames reinforced by galvanized M.S. tube of size 19 X 19mm and 1mm $\pm 0.1$ mm wall thickness and 3 nos. stainless steel hinges fixed to the frame complete as per manufacturers specification and direction of Engineer-in-charge		
9.117.1	Extruded section Profile size 48x40 mm.	metre	152.95
9.117.2	Extruded section Profile size 42x50 mm.	metre	159.00
9.118	Providing and fixing to existing door frames.		
9.118.1	24 mm thick factory made PVC door shutters made of styles and rails of a UPVC hollow section of size 59x24 mm and wall thickness 2 mm $\pm 0.2$ mm with inbuilt edging on both sides. The styles and rails mitred and joined at the corners by means of M.S. galvanised/ plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 20x20 mm and 1 mm $\pm 0.1$ mm wall thickness. The lock rail made up of 'H' section, a UPVC hollow section of size 100x24 mm and 2 mm $\pm 0.2$ mm wall thickness fixed to the shutter styles by means of plastic/ galvanised M.S. 'U' cleats. The shutter frame filled with a UPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm $\pm 0.1$ mm wall thickness . The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge. (For W.C. and bathroom door shutter).	sqm	2,311.90
9.118.2	30 mm thick factory made Polyvinyl Chloride (PVC) door shutter made of styles and rails of a UPVC hollow section of size 60x30 mm and wall thickness 2 mm $\pm 0.2$ mm with inbuilt decorative moulding edging on one side. The styles and rails mitred and joined at the corners by means of M.S. galvanised/ plastic brackets of size 75x220 mm having wall thickness 1.0 mm and	sqm	2,396.60

Code No	Description	Unit	Rate Rs.
9.118.3	<p>stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 25x20 mm and 1 mm <math>\pm</math> 0.1 mm wall thickness. The lock rail made up of 'H' section, a UPVC hollow section of size 100x30 mm and 2 mm <math>\pm</math> 0.2 mm wall thickness fixed to the shutter styles by means of plastic/galvanised M.S. 'U' cleats. The shutter frame filled with a UPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm <math>\pm</math> 0.1 mm wall thickness . The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge.</p>	sqm	2,487.35
9.119	<p>25mm thick PVC flush door shutters made out of a one piece Multi chamber extruded PVC section of the size of 762mm X 25mm or less as per requirement with an average wall thickness of 1mm <math>\pm</math> 0.3mm. PVC foam end cap of size 23x10mm are provided on both vertical edges to ensure the overall thickness of 25mm. An M.S. tube having dimensions 19mm x 19mm is inserted along the hinge side of the door. Core of the door shutter should be filled with High Density Polyurethane foam. The Top &amp; Bottom edges of the shutter are covered with an end-cap of the size 25mm X 11mm. Door shutter shall be reinforced with special polymeric reinforcements as per manufactures' 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.</p>	metre	373.15
9.120	<p>Providing and fixing to existing door frames.</p>		
9.120.1	<p>30mm thick factory made panel PVC door shutter consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 19mm x 19mm for styles and 15x15mm for top &amp; bottom rails. M.S. frame shall have a coat of steel primers of approved make and manufacture . M.S. frame covered with 5mm thick heat moulded PVC 'C' channel of size 30mm thickness, 70mm width out of which 50mm shall be flat and 20mm shall be tapered in 45degree angle on either side forming styles; and 5mm thick,</p>	sqm	2,228.00

Code No	Description	Unit	Rate Rs.
9.120.2	<p>95mm wide PVC sheet out of which 75mm shall be flat and 20mm shall be tapered in 45 degree on the inner side to form top and bottom rail and 115mm wide PVC sheet out of which 75mm shall be flat and 20mm shall be tapered on both sides to form lock rail. Top, bottom and lock rails shall be provided either side of the panel. 10mm (5mm x 2 ) thick, 20mm wide cross PVC sheet be provided as gap insert for top rail &amp; bottom rail. paneling of 5mm thick both side PVC sheet to be fitted in the M.S. frame welded/ sealed to the styles &amp; rails with 7mm (5mm+2mm) thick x 15mm wide PVC sheet beading on inner side, and joined together with solvent cement adhesive. An additional 5mm thick PVC strip of 20mm 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 &amp; drawing (for W.C. and bathroom door shutter).</p>	sqm	2,718.05
9.121	<p>Providing and fixing of Fibre Glass Reinforced plastic (FRP) Door Frames of three legged of cross-section 90mm x 45mm having single rebate of 32mm x 15mm to receive shutter of 30mm thickness .The laminate doorframe moulded with fire resistant grade unsaturated polyester resin and chopped mat .Doorframe laminate shall be 2mm thick and shall be filled with suitable</p>	metre	420.35

Code No	Description	Unit	Rate Rs.
	wooden block in all the three legs. The frame shall be covered with fibreglass from all sides. MS stat shall be provided at the bottom to sturdy the frame.		
9.122	Providing and fixing to existing door frames.		
9.122.1	30 mm thick Glass Fibre Reinforced Plastic (FRP) panelled door shutter of required colour and approved brand and manufacture, made with fire - retardant grade unsaturated polyester resin, moulded to 3 mm thick FRP laminate for forming hollow rails and styles, with wooden frame and suitable blocks of seasoned wood inside at required places for fixing of fittings, cast monolithically with 5 thick FRP laminate for panels and conforming to IS: 14856 - 2000 including fixing to frames.	sqm	2,030.75
9.122.2	30mm thick fibreglass reinforced plastic (F.R.P.) flush door shutter in different plain and wood finish 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 F.R.P. laminate conforming to table - 3 of IS: 14856 : 2000, complete as per direction of Engineer-in-charge.	sqm	2,490.55
9.123	Providing and fixing factory made door frame (single rebate) made of solid PVC foam profile with homogenous fine cellular structure having smooth outer integral skin having 60mm width & 30mm thickness and shall be fixed to wall as per instructions of engineer-in-charge using 100x8 sheet metal CSK screws.	metre	287.25
9.124	Providing and fixing 28 mm thick door shutter made of solid PVC foam profile with homogenous fine cellular structure having smooth outer integral skin having 71mm width & 28mm thick as styles and rails. Joints are made using solvent adhesive and GI 'C' sections (39mm x 19mm x 0.6mm thick) or M S pipe (40mm x 20mm ) stiffener frame insert & telescopic polymeric 'L' corners .The panel shall be filled with 3mm thick high - pressure compact laminate as per manufacturer's specifications and direction of Engineer-in-charge, cover moulding shall be provided for covering fixing screws and elegant look.( for W.C. and bathroom door shutter).	sqm	2,508.70
9.125	Providing and fixing PVC rigid foam sheet 1mm thick on existing door shutters (bathroom and W.C. doors) using synthetic rubber based adhesive.	sqm	540.05
9.126	Providing and fixing 12mm thick panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (area of opening for panel		

Code No	Description	Unit	Rate Rs.
	inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25mm to 40mm thick.		
9.126.1	Marine plywood of lamination / painting quality and conforming to IS: 710	sqm	1,377.95
9.126.2	Fire retardant plywood of lamination / painting quality conforming to IS: 5509.	sqm	1,305.70
9.127	Providing & Fixing decorative high pressure laminated sheet of plain / wood grain in gloss / matt / suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S including cost of adhesive of approved quality.		
9.127.1	1.5 mm thick.	sqm	656.90
9.127.2	1.0 mm thick.	sqm	557.10
9.128	Providing and fixing factory made Fibreglass 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 and duly reinforced by 2nos. vertically and 1nos. horizontally 50x2mm thick M.S. flat with 12mm in built 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 fibre glass chopped strand mat (CSM) as per IS: 11551 complete with protective Gel coat U/V coating on Top for complete resistance from the extreme of temperature, weather & sunlight,	sqm	4,579.65
9.129	Providing and fixing cup board 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 balancing lamination including IInd class teak wood lipping of 25mm wide x12 mm thick with necessary screws and bright finished stainless steel piano hinges complete as per direction of the Engineer-in-Charge.	sqm	1,198.50
9.130	Providing and fixing cup board shutters with 25mm thick veneered particle board IS : 3097 marked exterior grade (Grade I) of approved make including IInd class teak wood lipping of 25mm wide x 12 mm thick with necessary screws and bright finished stainless steel piano hinges complete as per direction of		

Code No	Description	Unit	Rate Rs.
	Engineer-in-Charge.		
9.130.1	With decorative veneering on one side and commercial veneering on other side.	sqm	1,101.20
9.130.2	With non decorative veneering on both sides.	sqm	961.85
9.131	Providing and fixing factory made 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 aluminium 'U' type edge beading all-round the shutter, including fixing with angle cleat, grip strip, cadmium plated steel screws including fixing of aluminium hinges 100x63x4 mm etc. complete as per architectural drawing and direction of Engineer-in-Charge (Cost of 'U' beading and hinges will be paid for separately).		
9.131.1	25 mm thick.	sqm	1,547.05
9.132	Providing and fixing aluminum U beading of required size to Pre-laminated /flush door shutter including fixing etc. complete as per direction of Engineer-in-charge.	kg	353.90
9.133	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 10.55 mm 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 drywall screws. Board is fixed to the 'W' profile with 25 mm countersunk ribbed head screws @ 200mm C/C., all complete as per the drawing & directions of Engineer-in-charge the joints of the boards are finished with specially formulated jointing compound and 48mm wide fibre tape to provide seamless finish.		
9.133.1	Tapered edge calcium silicate board made with calcareous & siliceous materials reinforced with cellulose fibre manufactured through autoclaving process to give stable crystalline structure, with compressive strength 225 kg/sq.cm, Bending strength 100 kg/sq.cm.		
9.133.1.1	10mm thick.	sqm	704.20
9.133.2	Non-asbestos multipurpose cement board reinforced with cellulose fibre manufactured through autoclaving process (high pressure steam cured ) as per IS 14862 with suitable fibre cement screw.		



<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
9.133.2.1	8 mm thick.	sqm	602.55
9.133.3	Gypsum board conforming to IS: 2095 - 1996: Part - I .		
9.133.3.1	12.5 mm thick.	sqm	470.70

## 10.0 STEEL WORK

Code No	Description	Unit	Rate Rs.
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	55.95
10.2	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete:	kg	60.40
10.3	Providing and fixing in position collapsible steel shutters with vertical channels 20x10x2mm and braced with flat iron diagonals 20x5mm 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	3,616.90
10.4	Providing and fixing 1mm thick M.S. sheet sliding-shutters with frame and diagonal 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	2,597.15
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. angels 40x40x6 mm for diagonal braces.	sqm	2,170.30
10.5.2	Using flats 30x6mm for diagonal braces and central cross piece.	sqm	2,056.00
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 27.5cm long wire springs grade No.2 and M.S. top cover of required thickness for rolling shutters.		
10.6.1	80x1.25mm M.S. laths with 1.25 mm thick top cover.	sqm	1,325.55
10.6.2	80x1.20 mm M.S. laths with 1.20 mm thick top cover.	sqm	1,368.70
10.6.3	80x0.90 mm M.S. laths with 0.90 mm thick top cover.	sqm	1,298.90
10.7	Providing and fixing ball bearing for rolling shutters.	each	338.80
10.8	Extra for providing mechanical device chain and crank operation for operating rolling shutters.		
10.8.1	Exceeding 10.00 sqm and upto 16.80 sqm in the area.	sqm	484.00
10.8.2	Exceeding 16.80 sqm in area.	sqm	544.50

Code No	Description	Unit	Rate Rs.
10.9	Extra for providing grilled rolling shutters manufactured out of 8 mm dia. M.S. bar instead of laths as per design approved by Engineer-in-charge. (area of grill to be measured).	sqm	223.85
10.10	Fixing standard steel glazed doors, windows and ventilators in walls with 15x3mm lugs 10 cm long embedded in cement concrete blocks 15x10x10cm of 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required, 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 with lugs, glass panes cut to size and glazing clips or metal beading with screws, shall be supplied by department free of cost.)	kg	30.25
10.11	Providing and fixing factory made ISI marked steel glazed doors, windows and ventilators side /top /centre hung with beading and all members such as K11 B and K12 B etc. complete of standard rolled steel sections, joints mitred and flash butt welded and sash bars tenoned and rivetted with 15x3mm lugs, 10cm long, embedded in cement concrete blocks 15x10x10cm of 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required, including providing and fixing of hinges, pivots, float glass panes with glazing clips and special metal sash putty of approved make and a priming coat of approved steel primer excluding the cost of metal beading and other fittings except necessary hinges or pivots complete as per approved design.	kg	189.70
10.12	Extra for providing and fixing steel beading of approved shape and section with screws instead of glazing clips and metal sash putty in steel doors, windows, ventilators and composite units.	metre	21.72
10.13	Providing and fixing T-iron frames for doors, windows and ventilators of mild steel Tee-sections, joints mitred and welded with 15x3 mm lugs 10cm long embedded in cement concrete blocks 15x10x10 cm of 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) or with wooden plugs and screws or with dash fastener or rawl plugs and screws or with fixing clips or with bolts and nuts as require including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer.	kg	65.30
10.14	Providing and fixing pressed steel door frames conforming to IS: 4351 manufactured from commercial mild steel sheet of 1.25 mm thickness including hinges jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25mm, or base ties of 1.25mm pressed mild steel welded or rigidly fixed together by mechanical means, adjustable lugs with split end tail to each jamb including steel 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		

Code No	Description	Unit	Rate Rs.
	by Engineer-in-charge:		
10.14.1	Profile B	metre	300.00
10.14.2	Profile C	metre	316.95
10.14.3	Profile E	metre	341.15
10.15	Providing and fixing M.S. Tubular frames for doors, windows, ventilators and cupboard with L-Type section made of 1.60mm thick M.S. Sheet, joints mitred and welded and grinded finish profiles required size with 15x3mm lugs 10cm long embedded in cement concrete blocks 15x10x10cm of 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primers.	kg	129.35
10.16	Steel work in built up tubular trusses including cutting, hoisting fixing in position and applying a priming coat of approved steel primer, welded and bolted including special shaped washers etc. complete.		
10.16.1	Hot finished welded type tubes	kg	67.10
10.16.2	Hot finished seamless type tubes	kg	102.70
10.16.3	Electric resistance or induction butt welded tubes.	kg	116.70
10.17	Providing and fixing M.S. fan clamp type I or II of 16 mm dia M.S. bar bent to shape with hooked ends in R.C.C. slabs, beams during laying including painting the exposed portion of loop, all as per standard design complete.	each	99.80
10.18	Providing and fixing circular/ Hexagonal cast iron or M.S. sheet box for ceiling fan clamp of internal dia 140mm, 73mm height, top lid of 1.5mm 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. Clamp shall be made of 12mm dia M.S. bar bent to shape as per standard drawing.	each	96.10
10.19	Providing and fixing M.S. round holding down bolts with nuts and washer plates complete.	kg	60.30
10.20	Providing and fixing bolts including nuts and washers complete.	kg	74.35
10.21	Providing and fixing M.S. rivets of sizes in position.	kg	98.60
10.22	Welding by gas or electric plant including transportation of plant at site etc. complete.	cm	1.20
10.23	Providing and fixing bright finished brass casement window fasteners or peg stays to windows/ ventilators with necessary welding and machine screws etc. complete.	kg	46.65
10.24	Providing and fixing 14 mm bright finished brass spring catch to steel centre hung ventilators with necessary welding and machine screws etc. complete.	each	28.40

Code No	Description	Unit	Rate Rs.
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.	kg	62.25
10.25.2	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works.	kg	69.35
10.26	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing and staircase railing including applying a priming coat of approved steel primer.		
10.26.1	M.S. tube.	kg	65.85
10.26.2	E.R.W. tubes.	kg	119.70
10.26.3	G.I. pipes.	kg	89.30
10.27	Providing and fixing steel glazed doors, windows and ventilator shutters of standard rolled steel section joints mitred and welded with steel lugs 13x3mm, 10cm. long embedded in cement concrete block 15x10x10cm. of 1:3:6 (1cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) or with wooden plugs and screws or rawl plugs and screws with fixing clips or with bolts and nuts as required including providing and fixing of plain glass panes 4mm thick with cooper glazing clips and special metal sash putty of approved make or metal beading with screws complete including priming coat of approval steel primer, excluding the cost of metal beading and other fitting except necessary hinges of pivots steel handles peg stay etc. as required		
10.27.1	(i) Doors	Sqm.	1931.00
10.27.2	(ii) Windows fixed	Sqm.	1924.00
10.27.3	(iii) Windows side hung (openable)	Sqm.	1940.00
10.27.4	(vi) Partly fixed and partly openable [ fixed area not to exceed 33%]	Sqm.	1924.00
10.28	Supplying and fixing fixed wire gauge of 14 mesh x 24 gauge to the metal frame of rolled section by metal beading 20x3mm with suitable screw at not exceeding 150mm distance.	Sqm.	343.00
10.29	Supplying and fixing of chain link fencing with angle iron posts 50x50x6mm placed at every 3 Mtr. apart 30cm in ground embedded in cement concrete 1:3:6 (30x30x45cm) corner and every tenth post to be strutted with (50 x 50 x 6cm) angle iron provided, fixed and fitted with posts including earth work in excavation etc. complete in all respect with following chain link sizes.		
	(i) 50mm x 50mm x 3.15mm	Sqm.	349.00
	(ii) 75mm x 75mm x 3.15mm	Sqm.	314.00
	(iii) 100mm x 100mm x 3.15mm	Sqm.	290.00
	(iv) 150mm x 150mm x 3.15mm	Sqm.	267.00

## 11.0 FLOORING

Code No	Description	Unit	Rate Rs.
11.1	Brick on edge flooring with bricks of class designation 75 including cement slurry etc. complete in cement mortar with F.P.S. bricks:		
11.1.1	1:4 (1 cement : 4 coarse sand)	sqm	428.80
11.1.2	1:6 (1cement : 6 coarse sand)	sqm	392.65
11.2	Dry brick on edge flooring in required pattern with bricks of class designation 75 on a bed of 12 mm mud mortar including filling joints with Jamuna sand (with F.P.S. bricks) complete.	sqm	305.45
11.3	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement including cement slurry, but excluding the cost of nosing of steps etc. complete.		
11.3.1	40mm thick with 20mm nominal size stone aggregate.	sqm	223.20
11.4	52 mm 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 12 mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6 mm nominal size) by volume .hardening compound is mixed @ 2 litre per 50kg of cement or as per manufacturers specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete.	sqm	353.00
11.5	62 mm thick cement concrete flooring with concrete hardener topping under layer 50 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) and top layer 12mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6mm nominal size) by volume. Hardening compound is mixed @ 2 litre per 50kg of cement or as per manufactures specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete.	sqm	388.05
11.6	Cement plaster skirting (upto 30 cm height) with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement.		
11.6.1	18 mm thick.	sqm	223.95
11.7	Cement concrete pavement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including finishing complete.	cum	4,095.50

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
11.8	Extra for making chequers of approved pattern on cement concrete floors, steps, landing, pavements etc.	sqm	21.65
11.9	40 mm thick marble chips flooring rubbed and polished to granolithic finish, under layer 34 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size) and top layer 6mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from 1mm to 4mm nominal size laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume including cement slurry etc. complete :		
11.9.1	Dark shade pigment with ordinary cement.	sqm	355.75
11.9.2	Light shade pigment with white cement .	sqm	477.30
11.9.3	Medium shade pigment with 50% white cement and 50% ordinary cement.	sqm	428.15
11.9.4	White cement without any pigment.	sqm	375.45
11.9.5	Light shade pigment with ordinary cement.	sqm	392.50
11.9.6	Ordinary cement without any pigment.	sqm	340.40
11.10	40 mm 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 4mm 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 etc. complete.		
11.10.1	Dark shade pigment with Ordinary cement.	sqm	362.65
11.10.2	Light shade pigment with white cement.	sqm	536.10
11.10.3	Medium shade pigment with 50% white cement and 50% ordinary cement.	sqm	465.80
11.10.4	White cement without any pigment.	sqm	404.15
11.10.5	Light shade pigment with ordinary cement.	sqm	399.40
11.10.6	Ordinary cement without any pigment.	sqm	357.30
11.11	40 mm thick marble chips flooring, rubbed and polished to granolithic finish, under layer 28 mm thick cement concrete 1:2:4 (1 cement : 2 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 7mm		

Code No	Description	Unit	Rate Rs.
	to 10mm nominal size laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 2:3 (2 cement marble powder mix : 3 marble chips) by volume including cement slurry etc. complete :		
11.11.1	Dark shade pigment with ordinary cement.	sqm	397.55
11.11.2	Light shade pigment with white cement.	sqm	479.00
11.11.3	Medium shade pigment with 50% white cement and 50% ordinary cement.	sqm	432.45
11.11.4	White cement without any pigment.	sqm	437.70
11.11.5	Light shade pigment with ordinary cement.	sqm	413.35
11.11.6	Ordinary cement without any pigment.	sqm	372.05
11.12	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 :		
11.12.1	18 mm thick with under layer 12 mm thick in cement plaster 1:3 (1 cement : 3 coarse sand) :		
11.12.1.1	Dark shade pigment with ordinary cement.	sqm	480.15
11.12.1.2	Light shade pigment with white cement.	sqm	520.90
11.12.1.3	Medium shade pigment with 50% white cement and 50% ordinary cement.	sqm	497.65
11.12.1.4	White cement without any pigment.	sqm	499.85
11.12.1.5	Light shade pigment with ordinary cement.	sqm	488.05
11.12.1.6	Ordinary cement without any pigment.	sqm	464.80
11.13	Providing and fixing glass strips in joints of terrazo/ cement concrete floors.		
11.13.1	40 mm wide and 4 mm thick.	metre	21.90
11.14	Extra for laying terrazo flooring on staircase treads not exceeding 30 cm in width including cost of forming, nosing etc.	sqm	23.25
11.15	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) and under layer 25mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5 mm		



Code No	Description	Unit	Rate Rs.
	nominal size) rubbing, polishing and cement slurry etc. complete :		
11.15.1	18 mm thick crazy marble stone white, black or as specified.	sqm	600.00
11.16	Precast terrazo tiles 22mm thick with graded marble chips of size upto 12mm laid in floors, and landings, jointed with neat cement slurry mixed with pigment to match the shade of the tiles including rubbing and polishing complete with precast tiles on 20mm thick bed of cement mortar 1:4 (1 cement :4 coarse sand) :		
11.16.1	Light shade using white cement.	sqm	653.70
11.16.2	Medium shade using 50%white cement and 50% ordinary cement.	sqm	597.80
11.16.3	Dark shade using ordinary cement.	sqm	572.20
11.16.4	Ordinary cement without any pigment.	sqm	542.10
11.17	Extra if terrazo tiles are laid in treads of steps not exceeding 30 cm in width.	sqm	28.00
11.18	Precast terrazo tiles 22 mm thick with graded marble chips of sizes upto 12 mm in skirting and risers of steps not exceeding 30 cm in height on 12 mm 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 and polishing complete with tiles of :		
11.18.1	Light shade using white cement.	sqm	839.30
11.18.2	Medium shades using 50% white cement and 50% ordinary cement.	sqm	770.75
11.18.3	Dark shade using ordinary cement.	sqm	735.65
11.18.4	Ordinary cement without any pigment.	sqm	705.60
11.19	Chequered terrazo tiles 22 mm thick with graded marble chips of size up to 6 mm in floors jointed with neat cement slurry mixed with pigment to match the shade of the tiles including rubbing and polishing complete on 20 mm thick bed of cement mortar 1:4 (1 cement :4 coarse sand) :		
11.19.1	Light shade using white cement.	sqm	696.30
11.19.2	Medium shade using 50% white cement, 50% ordinary cement.	sqm	631.10
11.19.3	Dark shade using ordinary cement.	sqm	572.20
11.19.4	Ordinary cement without any pigment.	sqm	542.10
11.20	Chequerred precast cement concrete tiles 22 mm thick in footpath & courtyard jointed with neat cement slurry mixed with pigment to match the shade of tiles including rubbing and cleaning etc. complete on 20 mm thick bed of cement mortar 1:4 (1 cement: 4		

Code No	Description	Unit	Rate Rs.
	coarse sand).		
11.20.1	Light shade using white cement.	sqm	603.05
11.20.2	Medium shade using 50% white cement 50% Grey cement.	sqm	697.25
11.20.3	Dark shade using ordinary cement.	sqm	548.50
11.20.4	Ordinary cement without any pigment.	sqm	518.40
11.21	Providing and fixing 10mm thick acid and or alkali resistant tiles of approved make and colour using acid and or alkali resisting mortar bedding and joints filled with acid and or alkali resisting cement as per IS : 4457 complete as per the direction of Engineer-in- Charge.		
11.21.1	In flooring on a bed of 10 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand).		
11.21.1.1	Acid and alkali resistant tile.	sqm	913.60
11.21.2	In dado/skirting on 12 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand).		
11.21.2.1	Acid and alkali resistant tile.	sqm	959.35
11.22	Tile work in skirting, risers of steps and dado (upto 2 m height) over 12 mm thick bed of cement mortar 1:3 (1 cement :3 coarse sand) and jointed with grey cement slurry @ 3.3 kg/sqm including pointing in white cement mixed with pigment of matching shade complete.		
11.22.1	Marble tiles (polished) Raj Nagar.		
11.22.1.1	8 mm thick.	sqm	634.60
11.23	Marble stone flooring with 18mm thick marble stone (sample of marble shall be 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 and polishing complete with :		
11.23.1	Makrana white second quality.	sqm	2,850.40
11.23.2	Raj Nagar plain.	sqm	1,124.95
11.23.3	Agaria White	sqm	1,806.80
11.23.4	Black Zebra.	sqm	992.75
11.23.5	Udaipur green marble	sqm	1,264.10
11.23.6	Pink plain marble.	sqm	1,180.60
11.24	Extra for prefinished nosing to treads of steps of marble stone.	metre	177.85
11.25	Extra for marble stone flooring in treads of steps and risers using	sqm	194.55

Code No	Description	Unit	Rate Rs.
	single length upto 2.00 metre .		
11.26	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) :		
11.26.1	25 mm thick.	sqm	776.80
11.27	Kota stone slabs 25 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 and polishing complete.	sqm	813.90
11.28	40 mm thick fine dressed stone flooring over 20 mm (average) thick base of cement mortar 1:5 ( 1cement : 5 coarse sand) with joints finished flush.		
11.28.1	Red sand stone	sqm	392.20
11.28.2	White sand stone	sqm	464.80
11.29	40 mm thick fine dressed stone flooring over 20 mm (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.		
11.29.1	Red sand stone	sqm	528.90
11.29.2	White sand stone	sqm	601.50
11.30	40 mm thick rubbed stone flooring over 20 mm (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) admixed with pigment to match the shade of stone and pointing with same mortar		
11.30.1	Red sand stone	sqm	568.95
11.30.2	White sand stone	sqm	641.55
11.31	Extra for pre finished nosing in treads of steps of Kota stone/ sand stone slab.	metre	63.50
11.32	Extra for Kota stone/ sand stone in treads of steps and risers using single length upto 1.05 metre .	sqm	11.15
11.33	25mm wooden planking, tongued and grooved in flooring including fixing with iron screws complete with :		
11.33.1	Second class teak wood	sqm	2,275.75

Code No	Description	Unit	Rate Rs.
11.33.2	Second class deodar wood	sqm	1,536.05
11.34	38mm thick wood block flooring of first class teak wood laid over 25mm thick levelling 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	6,819.45
11.35	Providing and fixing M.S. angle 50x50x5 mm to act as nosing with lugs of M.S. flat 10x5 mm 10cm long forked at end 60cm apart (minimum three lugs to be provided) including necessary welding and applying a priming coat of approved primer on exposed surface etc. complete.	kg	66.20
11.36	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS : 15622 (thickness to be specified by the manufacture ) 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	605.25
11.37	Providing and laying Ceramic glazed floor tiles 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick Cement Mortar 1:4 (1 Cement : 4 Coarse sand) including pointing the joints with white cement and matching pigment etc., complete.	sqm	637.35
11.38	Providing and laying Ceramic glazed floor tiles 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in all colours, shades, except White, Ivory, Grey, Fume Red Brown laid on 20mm thick bed of Cement Mortar 1:4 (1 Cement : 4 Coarse sand) including pointing the joints with white cement and matching pigments etc., complete.	sqm	670.85
11.39	Providing and laying rectified Glazed Ceramic floor tiles 300x300 mm or more (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours White, Ivory, Grey, Fume Red Brown, laid on 20mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand) including grouting the joints with white cement and matching pigments etc., complete.	sqm	805.35
11.40	Providing and laying rectified Glazed Ceramic floor tiles 300x300	sqm	847.50

Code No	Description	Unit	Rate Rs.
	mm or more (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick Cement Mortar 1:4 (1 Cement : 4 Coarse sand) including pointing the joints with white cement and matching pigments etc., complete.		
11.41	Providing and laying polished vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption's 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 (1 cement : 4 coarse sand) including grouting the joints with white cement and matching pigments etc., complete.		
11.41.1	Size of Tile 50x50 cm	sqm	1,376.35
11.41.2	Size of Tile 60x60 cm	sqm	1,522.70
11.41.3	Size of Tile 80x80 cm	sqm	2,145.30
11.41.4	Size of Tile 100x100 cm	sqm	2,884.50
11.42	Deduct for not using 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) bedding in laying of floor tiles.	sqm	264.95
11.43	Fixing glazed/ Ceramic/ Vitrified floor tiles with cement based high polymer modified quick-set tile adhesive (Water based) conforming to IS: 15477, using 5kg. adhesive per sqm of tile area, in average 3mm thickness.	sqm	248.25
11.44	Random rubble dry stone Kharanja (soling) under floor.	Cum	875.677

## 12.0 ROOFING

Code No	Description	Unit	Rate Rs.
12.1	Providing corrugated G.S. sheet roofing including vertical/ curved surface fixed with polymer coated J or L hooks, bolts and nuts 8 mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead and 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 surfaces) excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.		
12.1.1	1.00mm thick with zinc coating not less than 275gm/m <sup>2</sup>	sqm	1017.50
12.1.2	0.80mm thick with zinc coating not less than 275gm/m <sup>2</sup>	sqm	850.65
12.1.3	0.63 mm thick with zinc coating not less than 275gm/m <sup>2</sup>	sqm	708.65
12.2	Extra for straight cutting in C.G.S. sheet roofing for making opening of area exceeding 40 sq. decimetre for chimney stacks, sky light etc. :		
12.2.1	1.00 mm thick	metre	24.20
12.2.2	0.80 mm thick	metre	19.35
12.2.3	0.63 mm thick	metre	19.35
12.3	Extra for circular cutting in C.G.S. sheet roofing for making opening of area exceeding 40 square decimetre :		
12.3.1	1.00 mm thick	metre	139.80
12.3.2	0.80 mm thick	metre	111.70
12.3.3	0.63 mm thick	metre	111.70
12.4	Providing ridges or hips of width 60 cm over all width plain G.S. sheet fixed with polymer coated J or L hooks, bolts and nuts 8 mm dia. G.I. limpet and bitumen washers complete.		
12.4.1	0.80mm thick with zinc coating not less than 275gm/m <sup>2</sup>	metre	410.00
12.4.2	0.63mm thick with zinc coating not less than 275gm/m <sup>2</sup>	metre	356.00
12.5	Providing valleys of 90cm wide overall in plain G.S. sheet fixed with polymer coated J or L hooks, bolts and nuts 8mm dia. G.I. limpet and bitumen washers complete :		
12.5.1	1.60mm thick with zinc coating not less than 350gm/m <sup>2</sup>	metre	797.90
12.6	Providing flashing of 40 cm over all width in plain, G.S. sheet fixed with polymer coated J, or L hooks, bolts and nuts, G.I. limpet and bitumen washer complete, bent to shape and fixed in wall with cement mortar 1:3 (1cement : 3 coarse sand).		

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
12.6.1	1.00mm thick with zinc coating not less than 275gm/m <sup>2</sup>	metre	299.85
12.7	Providing and fixing 15 cm wide 45 cm over all 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	0.80mm thick with zinc coating not less than 275gm/m <sup>2</sup>	metre	386.35
12.7.2	0.63mm thick with zinc coating not less than 275gm/m <sup>2</sup>	metre	341.35
12.8	Providing non-asbestos high impact Polypropylene reinforced cement 6 mm thick corrugated sheets (As per IS:14871) roofing upto any pitch and fixing with polymer coated J or L hooks, bolts and nuts 8mm dia. G.I. plain and bitumen washers or with self drilling fastener and EPDM washers etc. complete excluding the cost of purlins, rafters and trusses: corrugated sheets and including cutting to size and shape wherever required.	sqm	316.15
12.9	Extra for straight cutting in non- asbestos polypropylene reinforced cement corrugated, semi-corrugated 6 mm thick sheet roofing for making openings of area exceeding 40 square decimetre for chimney stacks, skylights etc.	metre	23.25
12.10	Extra for circular cutting in non-asbestos polypropylene reinforced cement corrugated/ semi-corrugated 6 mm thick sheet roofing for making openings of area exceeding 40 square decimetre.	metre	64.20
12.11	Extra for providing and fixing wind ties of 40x 6mm flat iron section.	metre	102.20
12.12	Providing and fixing ridges and hips in non-asbestos fibre cement high impact polypropylene reinforced roofing with suitable fixing accessories or self drilling fastener and EPDM washer etc. complete.		
12.12.1	Corrugated serrated adjustable ridges	metre	282.10
12.12.2	Plain wing adjustable ridges	metre	302.55
12.12.3	Close fitting adjustable ridges	metre	371.15
12.12.4	Unserrated adjustable hips	metre	312.75
12.13	Providing and fixing non-asbestos fibre cement high impact polypropylene reinforced roofing accessories 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:		
12.13.1	Corrugated apron pieces	metre	191.80
12.13.2	Eave's filler pieces	metre	131.45
12.13.3	North light curves	metre	283.80

Code No	Description	Unit	Rate Rs.
12.13.4	ventilator curves	metre	373.30
12.13.5	Barge boards	metre	375.35
12.13.6	Ridge finials	pair	119.80
12.13.7	Special north light curves	each	381.75
12.13.8	S type louvers	metre	206.85
12.14	Providing flat iron brackets 50x3mm size with necessary bolts, nuts and washers etc. for fixing asbestos cement/G.S. sheets gutters with purlins.	metre	30.90
12.15	Painting top of roofs with bitumen of approved quality at 17kg per 10 sqm impregnated with a coat of coarse sand at 60 cum per 10sqm including cleaning the slab surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil complete :		
12.15.1	With residual type petroleum bitumen of penetration 80/100	sqm	92.60
12.16	10 cm 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 35 kg per cum of earth and gobri leaping with mix 1:1 (1 clay : 1 cow dung) and covered with flat tile bricks of class designation 100 grouted with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% of integral water proofing compound by weight of cement and finished neat :		
12.16.1	With F.P.S. brick tiles	sqm	323.95
12.17	10cm thick (average) mud phaska of damped brick earth on roofs laid to slope consolidated and plastered with 25mm thick mud mortar with bhusha at 35kg per cum of earth and gobri leaping with mix 1:1 (1 clay : 1 cow-dung) and covered with machine moulded tile bricks of class designation 125 conforming to IS : 2690 (Part I) -1992 grouted with cement mortar 1:3 ( 1 cement : 3 fine sand ) mixed with 2% of integral water proofing compound by weight of cement and finished neat.		
12.17.1	With machine moulded F.P.S. brick tiles	sqm	346.95
12.18	Extra for every additional 1 cm thickness of mud phaska	sqm	6.00
12.19	Providing and laying brick tiles of class designation 100 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 :		
12.19.1	With F.P.S. brick tiles	sqm	267.45
12.20	Providing and laying pressed clay tiles (as per approved pattern 20 mm nominal thickness and of approved size) on roofs jointed with cement mortar 1:4 (1 cement : 4 coarse sand) mixed with 2%	sqm	437.70



Code No	Description	Unit	Rate Rs.
	integral water proofing compound laid over a bed of 20 mm thick cement mortar 1:4 (1 cement : 4 coarse sand) and finished neat complete.		
12.21	Providing gola 75x75 mm in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 stone aggregate 10mm and down gauge) including finishing with cement mortar 1:3 (1 cement : 3 fine sand) as per standard design :		
12.21.1	In 75x75mm deep chase	metre	90.55
12.22	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 1mx1mx400micron, finished with 12mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement rounding the edge sand making and finishing the outlet complete.	each	105.35
12.23	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 (Karries and battens to be paid separately) including pointing the ceiling joints with cement mortar 1:3 (1 cement : 3 fine sand ) complete :		
12.23.1	Red sand stone slab		
12.23.1.1	40 to 50 mm thick	sqm	453.15
12.23.2	White sand stone slab :		
12.23.2.1	40 to 50 mm thick	sqm	533.00
12.24	Providing and fixing insulating board ceiling of approved quality with necessary nails etc. complete (frame work to be paid separately) :		
12.24.1	Natural colour insulating board		
12.24.1.1	12 mm thick	sqm	420.85
12.24.2	White face insulating board		
12.24.2.1	12 mm thick	sqm	523.05
12.24.3	Flame retardant face insulating board		
12.24.3.1	12 mm thick	sqm	473.55
12.25	Providing and fixing flat pressed 3 layer medium density particle board or graded particle board (Grade I) IS: 3087 marked in ceiling with necessary nails etc. complete (frame work to be paid separately) :		
12.25.1	12 mm thick	sqm	553.40
12.26	Providing and fixing plain Multipurpose Cement board (High Pressure steam cured) as per IS : 14862 : 2000) with suitable		

Code No	Description	Unit	Rate Rs.
	fibres cement screw in ceiling etc. complete (frame work to be paid separately) :		
12.26.1	6 mm thick cement board	sqm	380.90
12.27	Extra for Circular cutting and waste in ceiling with:		
12.27.1	2nd class teak wood planks 20 mm thick	metre	268.85
12.27.2	Natural colour insulating board		
12.27.2.1	12 mm thick	metre	145.65
12.27.3	White face insulating board:		
12.27.3.1	12 mm thick	metre	158.35
12.27.4	Flame retardant face insulating board:		
12.27.4.1	12 mm thick	metre	152.20
12.27.5	Standard quality hard board sheet:		
12.27.5.1	3 mm thick	metre	127.90
12.27.5.2	4.5 mm thick	metre	130.75
12.28	Extra for providing and fixing ceiling to curved surfaces in narrow widths	sqm	110.10
12.29	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 aluminium primer on both sides & edges and two coats of synthetic enamel paint of approved quality on exposed face fixed to a grid made out of anodised aluminium (with 15 micron anodic coating) T-sections 35 x15x1.5 mm size main runners and 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. The suspenders shall be placed 600x 1200 mm centre to centre including fixing to the frame with C.P brace screws and applying a priming coat of zinc chromate yellow primer ( aluminium frame work shall be paid separately.)	sqm	261.10
12.30	Extra for providing 3 mm thick translucent white acrylic plastic sheets of approved quality in false ceiling instead of 12 mm thick plain/or with design particle board ceiling tiles in item above.	sqm	350.90
12.31	Providing 10 mm thick plaster of Paris (gypsum anhydrous) ceiling upto a height of 5 m 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) :		

Code No	Description	Unit	Rate Rs.
12.31.1	Flat surfaces	sqm	590.90
12.31.2	Curved surfaces	sqm	678.05
12.32	Extra for any sunk or raised mouldings in the plaster of Paris (Gypsum anhydrous) ceiling	sqm	188.80
12.33	Extra for providing plaster of Paris (Gypsum anhydrous) ceiling above 5 metres height from floor level	sqm/ metre	64.25
12.34	Providing and fixing thermal insulation of ceiling (under deck insulation) with Resin Bonded Fibre glass wool conforming to IS : 8193 density 24kg/m <sup>3</sup> , 50mm thick, wrapped in 200 G Virgin Polythene bags fixed to ceiling with metallic cleats (50x50x3 mm) @ 60 cm and wire mesh of 12.5mm x 24g wire and mesh, for top most ceiling of building.	sqm	351.85
12.35	Providing and fixing thermal insulation with Resin Bonded Fibre glass wool conforming to IS : 8193, density 16kg/m <sup>3</sup> , 50mm thick, wrapped in 200G Virgin Polythene bags placed over existing false ceiling and held in position by criss-crossing GI wire.	sqm.	187.05
12.36	Thermal Insulation of roofing with Expanded polystyrene fixed with suitable adhesive to the false ceiling as per the directions of the Engineer-in-charge :		
12.36.1	With Type N - Normal 50 mm thick	sqm	173.55
12.36.2	With Type SE - Self Extinguishing type 50 mm thick	sqm	204.20
12.37	Providing and fixing 100 mm diameter and 60 cm long rain water spout in cement mortar 1:4 (1 cement : 4 fine sand)		
12.37.1	Stone ware spout	each	44.25
12.38	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. :		
12.38.1	100 mm diameter	each	103.25
12.38.2	150 mm diameter	each	109.30
12.39	Providing lead caulked joints to sand cast iron rain water pipes and fittings :		
12.39.1	100 mm dia. Pipe	each	151.55
12.39.2	150 mm dia. Pipe	each	207.45
12.40	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		

Code No	Description	Unit	Rate Rs.
	will be paid for separately) :		
12.40.1	Sand cast iron plain shoes :		
12.40.1.1	150 mm diameter	each	289.85
12.41	Providing and fixing on wall face Unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion. (i) Single socketed pipes		
12.41.1	75 mm diameter	metre	138.45
12.41.2	110 mm diameter	metre	236.40
12.42	Providing and fixing on wall face Unplasticised - PVC moulded fittings/ accessories for Unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion.		
12.42.1	Coupler		
12.42.1.1	75 mm	each	84.80
12.42.1.2	110 mm	each	105.90
12.42.2	Single push fit Coupler :		
12.42.2.1	75 mm	each	105.40
12.42.2.2	110 mm	each	144.60
12.42.3	Single tee with door		
12.42.3.1	75x75x75 mm	each	184.85
12.42.3.2	110x110x110 mm	each	271.60
12.42.4	Single tee without door		
12.42.4.1	75x75x75 mm	each	164.25
12.42.4.2	110x110x110 mm	each	217.15
12.42.5	Bend 87.5°		
12.42.5.1	75 mm bend	each	92.05
12.42.5.2	110 mm bend	each	139.80
12.42.6	Shoe (Plain)		
12.42.6.1	75 mm Shoe	each	158.60
12.42.6.2	110 mm Shoe	each	274.10
12.43	Providing and fixing Unplasticised -PVC pipe clips of approved design to Unplasticised - PVC rain water pipes by means of 50x50x50mm hard wood plugs, screwed with M.S. screws of required length including cutting brick work and fixing in cement		

Code No	Description	Unit	Rate Rs.
	mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete.		
12.43.1	75 mm	each	115.30
12.43.2	110 mm	each	133.45
12.44	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	24.40
12.45	Providing and fixing at all height false ceiling including providing and fixing of frame work made of special sections power pressed from M.S. sheet and galvanised in accordance with zinc coating of grade 350 as per IS : 277 and consisting of angle cleats of size 25mm wide x 1.6mm thick with flanges of 22mm and 37mm at 1200mm centre to centre one flange fixed to the ceiling with dash fastener 12.5mm diax40mm long with 6mm dia bolts to the angle hangers of 25x25x0.55mm of required length, and other end of angle hanger being fixed with nut and bolts to G.I. channels 45x15x0.9mm running at the rate of 1200mm centre to centre to which the ceiling section 0.5mm thick button wedge of 80mm with tapered flanges of 26mm each having clips of 10.5mm at 450mm centre to centre shall be fixed in a direction perpendicular to G.I. channel with connecting clips made out of 2.64mm diax230mm long G.I. wire at every junction including fixing the gypsum board with ceiling section and perimeter channels 0.5mm thick 27mm high having flanges of 20mm and 30mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450mm centre to centre with 25mm long drive-all screws @ 230mm interval including jointing and fixing to a flush finish of tapered and square edges of the board with recommended filler, jointing tapes, finisher and two coats of primer suitable for board as per manufactures 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 :		
12.45.1	12.5 mm thick tapered edge gypsum board conforming to IS: 2095- Part I,	sqm	605.60
12.46	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	89.75
12.47	Providing & fixing UV stabilised fibreglass reinforced plastic sheet roofing upto any pitch including fixing with polymer coated 'J' or 'L' hooks, bolts & nuts 8mm dia. G.I plain/bitumen washers complete but excluding the cost of purlins, rafters, trusses etc. The sheets shall be manufactured out of 2400 TEX panel rovigs incorporating minimum 0.3% Ultra-violet stabiliser in resin system under		

Code No	Description	Unit	Rate Rs.
	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.		
12.47.1	2mm thick corrugated (2.5" or 4.2" or 6") or step-down (2" or 3" or 6") as specified.	sqm	890.55
12.47.2	2mm thick flat.	sqm	849.55
12.48	Providing & fixing pressed clay tile (Mangalor tile) 20 mm nominal thickness and of approved size and as per approved pattern ceiling on steel frame work complete (steel frame work to be paid separately)	sqm	228.80
12.49	Providing & laying pressed clay tile ridge (Mangalore tile) of 20mm thickness of approved pattern ceiling over steel frame work complete (steel frame work to be paid separately)	sqm	110.90
12.50	Supply & installation of pre-coated galvanized iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm +/- 5% total coated thickness (TCT), Zinc coating 120gsm as per IS: 277 in 240mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches while 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 55mm) with EPDM seal or 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 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	468.20
12.51	Providing and fixing pre-coated galvanised steel sheet roofing accessories 0.50 mm +/- 5% total coated thickness (TCT), Zinc coating 120gsm as per IS: 277 in 240mpa 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 or with polymer coated J or L hooks, bolts and nuts and or G.I. seam bolts and nuts, G.I. plain and bitumen washers complete :		
12.51.1	Ridges plain (500 - 600mm).	metre	485.25
12.51.2	Flashings/ Aprons.( Upto 600 mm)	metre	471.10
12.51.3	North light curves.	metre	530.40
12.51.4	Barge board (Upto 300 mm).	metre	436.40
12.51.5	Crimp curve	sqm	563.85
12.51.6	Gutter .(600 mm over all girth).	metre	624.05

Code No	Description	Unit	Rate Rs.
12.52	Providing and fixing False Ceiling Tiles of approved materials of size 595x595 mm in true horizontal level suspended on inter locking metal grid of hot dipped galvanised steel sections ( galvanized @ 170 gsm/sqm.) consisting of main "T" runner suitably spaced at joints to get required length and of size 24x38mm made from 0.30mm thick (minimum) sheet spaced at 1200mm center to center and cross "T" of size 24x25mm made of 0.30mm thick (minimum) sheet, 1200mm long spaced between main "T" at 600mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600mm and size 24x25mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600mm panel to form grids of 600x600mm 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 fixed to ceiling with 6 mm dia and 50mm long dash fasteners, 4mm GI adjustable rods with galvanised level clips spaced at 1200m center to center along main T, bottom exposed width of 24mm of all T-sections shall be pre-painted with polyester paint, all complete at all heights as per specifications drawings and as directed by Engineer-in-Charge. (The rate is excluding cost of tiles which will be paid separately ).	sqm	411.95
12.53	Stone slab roofing on ground floor with fine grained stone slab from approved quarry including filling of joints of parapet and slab on both sides in cement sand mortar 1:4, ralthal, stone kharanja, lime terracing 90mm average thickness with ceiling pointing in cement sand mortar 1 : 3 complete as per specification for span :		
12.53.1	(a) Up to 2.00 metre.	Sqm.	940.00
12.53.2	(b) Above 2.00 metre and up to 2.50 metre	Sqm.	968.00
12.53.3	(c) Above 2.50 metre and up to 3.00 metre	Sqm.	988.00
12.53.4	(d) Above 3.00 metre and up to 3.30 metre	Sqm.	1017.00

## 13.0 FINISHING

Code No	Description	Unit	Rate Rs.
13	Cement Plastering on new surface of wall including (T&P) scaffolding material and complete labour for fixing of material including cost of water and curing, racking of joints etc.		
13.1	12 mm cement plaster of mix :		
13.1.1	1:4 (1 cement : 4 fine/ coarse sand)	sqm	104.50
13.1.2	1:6 (1 cement : 6 fine/ coarse sand)	sqm	92.50
13.2	15 mm cement plaster on the rough side of single or half brick wall of mix :		
13.2.1	1:4 (1 cement : 4 fine/ coarse sand)	sqm	122.20
13.2.2	1:6 (1 cement : 6 fine/ coarse sand)	sqm	107.85
13.3	20 mm cement plaster of mix :		
13.3.1	1:4 (1 cement : 4 fine/ coarse sand)	sqm	149.00
13.3.2	1:6 (1 cement : 6 fine/ coarse sand)	sqm	130.35
13.7	12 mm cement plaster finished with a floating coat of neat cement of mix :		
13.7.1	1:3 (1 cement : 3 fine/ coarse sand)	sqm	145.30
13.7.2	1:4 (1 cement : 4 fine/ coarse sand)	sqm	133.30
13.8	15 mm cement plaster on 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/ coarse sand)	sqm	165.35
13.8.2	1:4 (1 cement : 4 fine/ coarse sand)	sqm	151.00
13.16	6 mm cement plaster of mix :		
13.16.1	1:3 (1 cement : 3 fine sand)	sqm	82.95
13.17	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	115.65
13.18	Neat cement punning	sqm	30.10
13.21	Extra for providing and mixing water proofing material in cement plaster work in proportion recommended by the manufacturers.	per bag of 50kg. of cement used in the mix.	24.20
13.22	Extra for plastering exterior walls of height more than 10 m from ground level for every additional height of 3 m or part thereof.	sqm	15.20



<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
13.23	Extra for plastering on circular work not exceeding 6 m in radius:		
13.23.1	In one coat	sqm	11.15
13.23.2	In two coats	sqm	16.70
13.24	Extra for plastering done on moulding cornices or architraves including neat finish to line and level:		
13.24.1	In one coat	sqm	171.50
13.24.2	In two coats	sqm	284.30
13.25	Extra for plastering :		
13.25.1	Spherical ceiling	sqm	41.55
13.25.2	Groined ceiling	sqm	44.55
13.25.3	Flewing soffits	sqm	27.85
13.26	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete	sqm	76.95
13.27	Extra for lining out plaster to imitate stone or concrete blocks walling	sqm	28.05
13.28	12 mm thick plain cement mortar bands in cement mortar 1:4 (1 cement : 4 fine sand) :		
13.28.1	Flush Band	cm per metre	2.05
13.28.2	Sunk Band	cm per metre	2.20
13.28.3	Raised Band	cm per metre	2.50
13.28.4	Moulded Band	cm per metre	4.15
13.29	18 mm thick plain cement mortar band in cement mortar 1:4 (1 cement : 4 fine sand):		
13.29.1	Flush Band	cm per metre	2.55
13.29.2	Sunk Band	cm per metre	2.75
13.29.3	Raised Band	cm per metre	3.10
13.29.4	Moulded Band	cm per metre	5.60

Code No	Description	Unit	Rate Rs.
13.30	18 mm thick moulded cement mortar band in two coats under layer 12mm 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 metre	5.60
13.31	Pointing on brick work or brick flooring with cement mortar 1:3 (1 cement : 3 fine sand) :		
13.31.1	Flush / Ruled/ Struck or weathered pointing.	sqm	60.95
13.31.2	Raised and cut pointing	sqm	103.80
13.32	Pointing on tile brick work with cement mortar 1:3 (1 cement :3 fine sand) :		
13.32.1	Flush/ Ruled/ Struck or weathered pointing	sqm	84.25
13.33	Pointing on stone work with cement mortar 1:3 (1 cement : 3 fine sand) :		
13.33.1	Flush/ Ruled pointing	sqm	89.30
13.33.2	Raised and cut pointing	sqm	167.95
13.34	Raised and cut pointing on stone work in white cement mortar 1:3 (1 white cement : 3 marble dust)	sqm	183.70
13.35	Pointing on stone slab ceiling with cement mortar 1:2 (1 cement : 2 fine sand):		
13.35.1	Flush/ Ruled pointing	sqm	51.30
13.36	Extra for pointing on walls on the outside at height more than 10 m from ground level for every additional height of 3 m or part there of.	sqm	3.25
13.37	White washing with lime to give an even shade:		
13.37.1	New work (three or more coats)	sqm	8.95
13.38	Satna lime wash on walls one coat	sqm	3.50
13.39	Colour washing such as green, blue or buff to give an even shade :		
13.39.1	New work (two or more coats) with a base coat of white washing with lime	sqm	11.50
13.39.2	New work (two or more coats) with a base coat of whiting	sqm	11.30
13.40	Distempering with dry distemper of approved brand and manufacture (two or more coats) and of required shade on new work, over and including priming coat of whiting to give an even shade.	sqm	39.20
13.41	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade		

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
13.41.1	New work (two or more coats) over and including priming coat with cement primer.	sqm	58.65
13.42	Distemping with 1st quality acrylic washable distemper (ready mixed) of approved manufacturer and of required shade and colour complete. as per manufacturer's specification.		
13.42.1	Two or more coats on new work.	sqm	31.15
13.43	Applying one coat of cement primer of approved brand and manufacture on wall surface :		
13.43.1	Cement primer.	sqm	24.95
13.44	Finishing walls with water proofing cement paint of required shade :		
13.44.1	New work (Two or more coats applied @ 3.84 kg/10 sqm).	sqm	38.35
13.45	Finishing walls with textured exterior paint of required shade :		
13.45.1	New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including base coat of water proofing cement paint applied @ 2.20kg/10 sqm.	sqm	108.65
13.46	Finishing walls with Acrylic Smooth exterior paint of required shade :		
13.46.1	New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including base coat of water proofing cement paint applied @ 2.20 kg/ 10 sqm).	sqm	60.90
13.47	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade		
13.47.1	New work (Two or more coats applied @ 1.43 ltr/ 10 sqm. over and including base coat of water proofing cement paint applied @ 2.20 kg/ 10 sqm).	sqm	71.00
13.48	Finishing walls with Deluxe Multi surface paint system for interiors and exteriors using Primer as per manufacturers specifications :		
13.48.1	Two or more coats applied @ 1.25 ltr/10 sqm. over and including one coat of Special primer applied @ 0.75 ltr / 10 sqm.	sqm	73.25
13.48.2	Painting wood work with Deluxe Multi Surface Paint of required shade. Two or more coat applied @0.90 ltr/10 sqm over an under coat of primer applied @0.75 ltr/ 10 sqm of approved brand or manufacture	sqm	62.10
13.48.3	Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two or more coat applied @0.90 ltr/10 sqm over an under coat of primer applied @ 0.80 ltr/ 10 sqm of approved brand or manufacture	sqm	64.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
13.49	Extra for applying water proofing cement paint as primer applied @ 2.2 kg/ 10 sqm instead of primer for exterior finishing in Item No. 13.48.1	sqm	2.70
13.50	Applying priming coat :		
13.50.1	With ready mixed pink or Grey primer of approved brand and manufacture on wood work (hard and soft wood)	sqm	22.60
13.50.2	With ready mixed aluminium primer of approved brand and manufacture on resinous wood and plywood	sqm	22.15
13.50.3	With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron/steel works	sqm	19.65
13.50.4	With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel work (second coat)	sqm	11.05
13.51	Painting one thin coat with white lead of approved brand and manufacture on wet or patchy portion of plastered surfaces	sqm	30.75
13.52	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.		
13.52.1	On steel work	sqm	104.00
13.52.2	On concrete work	sqm	106.60
13.53	Painting on G.S. sheet with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :		
13.53.1	New work (two or more coats) including a coat of approved steel primer but excluding a coat of mordant solution.	sqm	55.45
13.54	Applying a coat of mordant solution on G.S. sheet :		
13.54.1	With a solution of 38 gms of copper acetate in a litre of soft water	sqm	14.75
13.54.2	With a solution made of 13 gms of hydrochloric acid in a solution of 13 gms each of copper chloride, copper nitrate and ammonium chloride dissolved in a litre of soft water.	sqm	14.60
13.55	Painting (two or more coats) on rain water, soil, waste and vent pipes and fittings with black anticorrosive bitumastic paint approved brand and manufacture over and including a priming of ready mixed zinc chromate yellow primer on new work :		
13.55.1	100 mm diameter pipes	metre	23.05
13.55.2	150 mm diameter pipes	metre	34.35
13.56	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		

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
	approved steel primer on new work.		
13.56.1	100 mm diameter pipes	metre	23.70
13.56.2	150 mm diameter pipes	metre	35.35
13.57	Painting with oil type wood preservative of approved brand and manufacture:		
13.57.1	New work (two or more coats)	sqm	15.55
13.58	Providing and applying two coats of fire retardant paint unthinned on cleaned wood/ply surface @ 3.5 sqm per litre per coat including preparation of base surface as per recommendations of manufacturer to make the surface fire retardant.	sqm	248.25
13.59	Coal tarring two coats on new work using 0.16 and 0.12 litre coal tar per sqm in the first coat and second coat respectively.	sqm	21.50
13.60	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade:		
13.60.1	Two or more coats on new work	sqm	59.50
13.61	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :		
13.61.1	Two or more coats on new work	sqm	48.90
13.62	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade:		
13.62.1	Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture.	sqm	71.15
13.63	Painting with aluminium paint of approved brand and manufacture to give an even shade .		
13.63.1	Two or more coats on new work	sqm	44.10
13.64	Painting with acid proof paint of approved brand and manufacture of required colour to give an even shade:		
13.64.1	Two or more coats on new work.	sqm	71.65
13.65	Painting with black anti-corrosive bitumastic paint of approved brand and manufacture to give an even shade:		
13.65.1	Two or more coats on new work.	sqm	41.40
13.66	Floor painting with floor enamel paint of approved brand and manufacture of required colour to give an even shade:		
13.66.1	Two or more coats on new work.	sqm	50.15
13.67	Varnishing with varnish of approved brand and manufacture:		
13.67.1	Two or more coats of glue sizing with copal varnish over an under	sqm	66.90

Code No	Description	Unit	Rate Rs.
	coat of flatting varnish.		
13.67.2	Two or more coats glue sizing with spar varnish or an under coat of flatting varnish.	sqm	68.55
13.68	French spirit polishing :		
13.68.1	Two or more coats on new works including a coat of wood filler.	sqm	123.35
13.69	Polishing on wood work with ready mixed wax polish of approved brand and manufacture :		
13.69.1	New work	sqm	55.75
13.70	Floor polishing on masonry or concrete floors with wax polish of approved brand and manufacture.	sqm	24.20
13.71	Lettering with black Japan paint of approved brand and manufacture	per letter per cm height	1.55
13.72	Washed stone grit plaster on exterior walls of height upto 10 M. above level in two layers, under layer 12mm cement plaster 1:4 (1 cement : 4 coarse sand ) furrowing the under layer with scratching tool, applying cement slurry on the under layer @ 2 Kg of cement per square metre, top layer 15mm cement plaster 1:1/2:2 (1 cement : 1/2 coarse sand : 2 stone chipping 10mm nominal size) in panels with groove all around as per approved pattern including scrubbing and washing, the top layer with brushes and water to expose the stone chippings ,complete as per specification and direction of Engineer-in- charge (Payment for providing grooves shall be made separately).	sqm	364.55
13.73	Forming groove of uniform size in the top layer of washed stone grit plaster as per approved pattern using wooden battens, nailed to the under layer including removal of wooden battens, repair to the edges of panels and finishing the groove complete as per specifications and direction of the Engineer-in-charge :		
13.73.1	15 mm wide and 15 mm deep groove	metre	20.00
13.73.2	20 mm wide and 15 mm deep groove	metre	20.35
13.74	Extra for washed grit plaster on exterior walls of height more than 10m from ground level for every additional height of 3 m or part thereof.	sqm	46.20
13.75	Extra for washed stone grit plaster on circular work not exceeding 6m in radius (in two coats).	sqm	29.05
13.76	Forming groove of uniform size from 12x12mm and upto 25x15mm in plastered surface as per approved pattern using wooden battens, nailed to the under layer including removal of wooden battens, repairs to the edges of plaster panel and	metre	20.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
	finishing the groove complete as per specifications and direction of the Engineer-in-Charge.		
13.77	Extra for using white cement in place of ordinary cement in the top layer of the item of washed stone grit plaster.	sqm	81.05
13.78	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 & ceiling at all floors and locations, finished in smooth line and level etc. complete.	sqm	174.95
13.79	Add extra over items of Cement Plaster / Cement Concrete Flooring / Plain or RCC work providing and mixing admixture of synthetic fibre 6 mm / 12 mm @ rate of 125 gm.pack per 50 kg.of Cement or in the ratio of as specified by manufacture specification and direction of the Engineer with all leads and lifts.	Per Pack 125 gm.	32.00

## 14.0 REPAIR TO BUILDING

Code No	Description	Unit	Rate Rs.
14.1	Repairs to plaster of thickness 12mm to 20mm in patches of area 2.5 sq. metres and under including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete including disposal of rubbish to the dumping ground within 50metres lead :		
14.1.1	With cement mortar 1:4 (1 cement : 4 fine sand)	sqm	159.40
14.1.2	With cement mortar 1:4 (1 cement : 4 coarse sand).	sqm	159.40
14.2	Fixing chowkhats in existing opening including embedding chowkhats in floors or walls cutting masonry for holdfasts embedding hold fasts in cement concrete blocks 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 metres lead :		
14.2.1	Door chowkhats	each	492.95
14.2.2	Window chowkhats	each	307.00
14.2.3	Clerestory window chowkhats	each	214.05
14.3	Fixing chowkhat in existing opening in brick / RCC wall with dash fasteners of appropriate size/ chemical fastener (3nos on each vertical member of door chowkhat and 2 nos. on each vertical member of window 1.20 metre height as per CPWD specification including cost of dash fasteners/ chemical fastener.	each	88.15
14.4	Making the opening in brick masonry including dismantling in floor or walls by cutting masonry and making good the damages to walls, flooring and jambs complete to match existing surface i/c disposal of mulba/ rubbish to the nearest municipal dumping ground.		
14.4.1	For door/ window/ clerestory window.	sqm	307.85
14.5	Renewing glass panes, with putty and nails wherever necessary:		
14.5.1	Float glass panes of thickness 4 mm	sqm	485.85
14.5.2	Float glass panes of thickness 5.5 mm	sqm	608.30
14.6	Renewing glass panes, with wooden fillets wherever necessary:		



<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
14.6.1	Float glass panes of thickness 4 mm	sqm	605.95
14.6.2	Float glass panes of thickness 5.5 mm	sqm	728.40
14.7	Renewing glass panes and refixing existing wooden fillets:		
14.7.1	Float glass panes of thickness 4 mm	sqm	504.60
14.7.2	Float glass panes of thickness 5.5 mm	sqm	627.05
14.8	Supplying and fixing new wooden fillets wherever necessary:		
14.8.1	2nd class teak wood fillets	metre	23.50
14.8.2	Hollock wood fillets.	metre	19.30
14.9	Renewal of old putty of glass panes (length)	metre	14.45
14.10	Refixing old glass panes with putty and nails	sqm	187.80
14.11	Fixing old glass panes with wooden fillets (excluding cost of fillets)	sqm	160.80
14.12	Providing and fixing 16 mm M.S. Fan clamps of standard shape and size in existing R.C.C. slab including cutting chase and making good and painting exposed portion of the clamps complete.	each	157.55
14.13	Re-grading terracing of mud phaska covered with tiles or brick, in cement by dismantling tiles or bricks, removing mud plaster preparing the surface of mud phaska to proper slope relaying mud plaster gobi 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 metres lead.	sqm	172.70
14.14	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 metres of lead :		
14.14.1	Red/ white sand stone slabs 30 to 50 mm thick.	sqm	500.30
14.15	Renewing wooden battens in roofs, including making good the holes in wall and painting with oil type wood preservative of approved brand and manufacture complete including removal of rubbish to the dumping ground within 50 metres lead :		
14.15.1	Sal wood battens.	cum	39,962.35
14.16	Renewing wooden beams in roofs including making good the		

Code No	Description	Unit	Rate Rs.
	holes in walls and painting with oil type wood preservative of approved brand and manufacture complete including removal of rubbish to the dumping ground within 50 metres lead :		
14.16.1	Not exceeding 4.00 metres in length.		
14.16.1.1	Sal wood beams	cum	41,470.45
14.16.1.2	Hollock wood beams	cum	31,122.00
14.16.2	Above 4.00 metres and upto 5.00 metres length.		
14.16.2.1	Sal wood beams	cum	42,062.10
14.16.2.2	Hollock wood beams	cum	31,704.50
14.17	Raking out joints in lime or cement mortar and preparing the surface for re-pointing or replastering including disposal of rubbish to the dumping ground within 50 metres lead.	sqm	14.55
14.18	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 :		
14.18.1	With F.P.S. brick tiles	sqm	33.10
14.18.2	With modular brick tiles	sqm	34.00
14.19	Taking out wind ties from roof including cutting out rusted bolts, nuts etc. and removing materials to any distance within compound and stacking.	kg	1.10
14.20	Fixing of old wind tie with new fittings including painting two or more coats with anticorrosive bitumastic paint of approved brand & manufacturer over and including priming coat of ready mixed zinc chromate yellow primer of approved brand.	metre	39.25
14.21	Renewing bottom rail and/or top rubber of collapsible gate including making good all damages and applying priming coat of zinc chromate yellow primer of approved brand and manufacturer.	kg	106.00
14.22	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.		
14.22.1	Wheel 50 mm dia. and below.	per wheel	97.35
14.22.2	Wheel above 50 mm dia.	per wheel	148.80
14.23	Pumping out water caused by springs, tidal or river seepage, broken water mains or drains and the like.	kilo litre	53.05

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
14.24	Mud mortar	cum	193.05
14.25	Brick work with bricks of class designation 75 in mud mortar	cum	2319.40
14.26	Providing and fixing 25 mm thick shutters for cup board etc. :		
14.26.1	Panelled or panelled & glazed shutters :		
14.26.1.1	Superior class teak wood including nickel plated bright finished M.S. piano hinges with necessary screws.	sqm	3,132.05
14.26.1.2	1st class teak wood including nickel plated bright finished M.S. piano hinges with necessary screws.	sqm	3,165.65
14.26.2	Glazed shutters :		
14.26.2.1	Superior class teak wood including nickel plated bright finished M.S. piano hinges with necessary screws.	sqm	3,268.30
14.26.2.2	1st class teak wood including nickel plated bright finished M.S. piano hinges with necessary screws.	sqm	3,304.45
14.27	Providing and fixing plain jaffri door and window shutters including bright or/and black enamelled M.S. butt hinges with necessary screws 35x10mm laths placed 35mm apart (frames to be paid separately) including fixing 50x12mm beading complete with :		
14.27.1	Second class teak wood.	sqm	2,095.55
14.28	Providing and fixing curtain rods of 1.25mm thick brass plates with two brass brackets fixed with brass screws and wooden plugs etc. wherever necessary complete.		
14.28.1	20 mm diameter.	metre	123.60
14.28.2	25 mm diameter.	metre	142.95
14.29	Providing and fixing M.S. round or square bars with M.S. flats at required spacing in wooden frames of windows and clerestory windows.	kg	58.55
14.30	Providing joists (karries) including hoisting fixing in position and applying wood preservative on unexposed surface etc. complete with:		
14.30.1	Sal wood.	cum	39,306.00
14.30.2	Hollock wood.	cum	29,062.10
14.31	Providing and fixing bright finished brass single acting spring hinges with necessary screws etc. complete :		
14.31.1	150 mm	each	271.25

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
14.31.2	125 mm	each	220.40
14.31.3	100 mm	each	156.45
14.32	Providing and fixing bright finished brass double acting spring hinges with necessary screws etc. complete :		
14.32.1	150 mm	each	412.80
14.32.2	125 mm	each	290.60
14.32.3	100 mm	each	237.50
14.33	Providing and fixing bright finished brass flush bolts with necessary screws etc. complete :		
14.33.1	250 mm	each	114.40
14.33.2	150 mm	each	90.35
14.33.3	100 mm	each	64.95
14.34	Providing and fixing 150 mm bright finished floor brass door stopper with rubber cushion, screws etc. to suit shutter thickness complete	each	133.80
14.35	Providing and fixing bright finished brass hard drawn hooks and eyes :		
14.35.1	300 mm	each	57.50
14.35.2	250 mm	each	53.35
14.35.3	200 mm	each	49.35
14.35.4	150 mm	each	46.20
14.35.5	100 mm	each	38.50
14.36	Providing and fixing bright finished brass fan light pivot with necessary screws etc. complete.	each	23.05
14.37	Providing and fixing 300 mm long bright finished brass chain with hook for fan light including necessary screws etc. complete.	each	23.05
14.38	Providing and fixing bright finished brass quadrant stay 300mm long with necessary screws etc. complete.	each	95.65
14.39	Providing and fixing bright finished brass helical door spring (superior quality).	each	255.80
14.40	Providing and fixing chromium plated brass butt hinges with necessary screws etc. complete.		

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
14.40.1	125x70x4 mm (ordinary type)	each	85.00
14.40.2	100x70x4 mm (ordinary type)	each	81.30
14.40.3	75x65x4 mm (heavy type)	each	76.65
14.40.4	75x40x2.5 mm (ordinary type)	each	33.85
14.40.5	50x40x2.5 mm (ordinary type)	each	21.20
14.41	Providing and fixing 85x42mm chromium plated brass pull bolt lock with necessary screws, nuts, bolts and washers etc. complete.	each	164.85
14.42	White washing with lime to give an even shade :		
14.42.1	Old work (two or more coats)	sqm	5.35
14.42.2	Old work (one or more coats)	sqm	3.30
14.43	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete	sqm	4.10
14.44	Distemping 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	17.50
14.45	Distemping with oil bound washable distemper of approved brand and manufacture to give an even shade :		
14.45.1	Old work (one or more coats)	sqm	18.85
14.46	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	sqm	5.35
14.47	Painting on G.S. sheet with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :		
14.47.1	Old work (one or more coats)	sqm	27.35
14.48	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 :		
14.48.1	75 mm diameter pipes	metre	17.25
14.49	Painting (one or more coats) on rain water, soil, waste and vent pipes and fittings with black anticorrosive bitumastic paint of		

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
	approved brand and manufacture on old work :		
14.49.1	75 mm diameter pipes	metre	8.00
14.50	Painting (two or more coats) on rain water, soil, waste and vent pipes and fittings with aluminium paint of approved brand and manufacture over a priming coat of ready mixed zinc chromate yellow primer on new work :		
14.50.1	75 mm diameter pipes	metre	17.75
14.51	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 :		
14.51.1	75 mm diameter pipes	metre	8.40
14.51.2	100 mm diameter pipes	metre	10.85
14.51.3	150 mm diameter pipes	metre	15.55
14.52	Painting with oil type wood preservative of approved brand and manufacture :		
14.52.1	Old work (one or more coats)	sqm	11.95
14.53	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade :		
14.53.1	One or more coats on old work.	sqm	37.45
14.54	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :		
14.54.1	One or more coats on old work.	sqm	31.55
14.55	Painting with aluminium paint of approved brand and manufacture to give an even shade :		
14.55.1	One or more coats on old work.	sqm	28.05
14.56	Painting with acid proof paint of approved brand and manufacture of required colour to give an even shade :		
14.56.1	One or more coats on old work.	sqm	45.10
14.57	Painting with black anti-corrosive bitumastic paint of approved brand and manufacture to give an even shade :		
14.57.1	One or more coats on old work.	sqm	26.95
14.58	French spirit polishing :		
14.58.1	One or more coats on old work.	sqm	62.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
14.59	Polishing on wood work with ready made wax polish of approved brand and manufacture :		
14.59.1	Old work	sqm	28.10
14.60	Re-lettering with black Japan paint of approved brand and manufacture.	letter per cm height	1.00
14.61	Painting (one or more coats) with black Japan paint of approved brand and manufacture to give an even shade.	sqm	26.50
14.62	Providing and fixing C.P. brass chain and rubber plug complete for sink or wash basin :		
14.62.1	32 mm dia	each	52.10
14.62.2	40 mm dia	each	58.15
14.63	Distemping with 1st quality acrylic washable distemper (ready mixed) of approved manufacturer and of required shade and colour complete. as per manufacturer's specification.		
14.63.1	One or more coats on old work.	sqm	16.60
14.64	Finishing walls with water proofing cement paint of required shade :		
14.64.1	Old work (one or more coats applied @ 2.20 kg/10 sqm) over priming coat of primer applied @ 0.80 ltrs/10 sqm complete including cost of Priming coat.	sqm	35.30
14.65	Finishing walls with textured exterior paint of required shade :		
14.65.1	Old work (Two or more coats on existing cement paint surface applied @ 3.28 ltr/10 sqm.	sqm	92.40
14.65.2	Old work (One or more coats) applied @ 1.82 ltr/10 sqm.	sqm	54.85
14.66	Finishing walls with Acrylic Smooth exterior paint of required shade :		
14.66.1	Old work (Two or more coat applied @ 1.67 ltr/ 10 sqm) on existing cement paint surface).	sqm	44.35
14.66.2	Old work (One or more coat applied @ 0.90 ltr/10 sqm).	sqm	27.95
14.67	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade		
14.67.1	Old work (Two or more coats applied @ 1.43 ltr/ 10 sqm) over existing cement paint surface.	sqm	54.75
14.67.2	Old work (one or more coats applied @ 0.83 ltr/10 sqm).	sqm	34.85

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
14.68	Painting (one or more coats) on rain water, soil, waste and vent pipes and fittings with black anticorrosive bitumastic paint approved brand and manufacture on old work :		
14.68.1	100 mm diameter pipes	sqm	10.60
14.68.2	150 mm diameter pipes	sqm	15.20
14.69	Varnishing with varnish of approved brand and manufacture:		
14.69.1	One or more coats with copal varnish.	sqm	28.20
14.69.2	One or more coats with spar varnish.	sqm	28.90
14.70	Melamine polishing on wood work (one or more coat).	sqm	55.00
14.71	Varnishing with flatting varnish of approved brand and manufacture one or more coats on old work.	sqm	26.15
14.72	Providing and fixing double scaffolding system (cup lock type) on the exterior side, upto seven story height made with 40mm dia. M.S. tube 1.5 m centre to centre horizontal & vertical tubes joining with cup & lock system with M.S. tubes, M.S. tube challies, M.S. clamps and M.S. staircase system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for the required duration as approved and removing it there after .The scaffolding system shall be stiffened with bracings, runners, connection with the building etc wherever required for inspection of work at required locations with essential safety features for the workmen etc. complete as 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. (To be used for maintenance work judicially . necessary deduction for scaffolding in the existing item to be done.)	sqm	96.20



## 15.0 DISMANTLING & DEMOLISHING

Code No	Description	Unit	Rate Rs.
15.12	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead :		
15.12.1	Of area 3 sq. metres and below	each	85.20
15.12.2	Of area beyond 3 sq. metres	each	115.45
15.13	Taking out doors, windows and clerestory window shutters (steel or wood) including stacking within 50 metres lead:		
15.13.1	Of area 3 sq. metres and below	each	32.55
15.13.2	Of area beyond 3 sq. metres	each	42.95
15.23	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead.		
15.23.1	For thickness of tiles 10 mm to 25 mm	sqm	18.00
15.23.2	For thickness of tiles above 25 mm and upto 40 mm	sqm	29.15
15.24	Demolishing dry brick pitching in floors, drains etc. including stacking serviceable material and disposal of unserviceable material within 50 metres lead :	cum	272.25
15.25	Dismantling stone slab flooring laid in cement mortar including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	sqm	54.90
15.26	Demolishing brick tile covering in terracing including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	sqm	27.00
15.27	Demolishing mud phaska in terracing and disposal of material within 50 metres lead.	cum	189.50
15.28	Dismantling roofing including ridges, hips valleys and gutters etc., and stacking the material within 50 metres lead of:		
15.28.1	G.S. Sheet	sqm	36.90
15.28.2	Asbestos sheet	sqm	16.95
15.29	Dismantling stone slab roofing over wooden karries or R.C.C. battens (dismantling karries and battens to be paid for separately) including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	cum	548.85
15.30	Dismantling jack arch roofing and floors including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	sqm	52.25

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
15.31	Dismantling tiled roofing with battens boarding etc. complete including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	sqm	43.10
15.32	Demolishing thatch roofing including mats, bamboo, jaffari etc. complete including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	sqm	11.75
15.33	Dismantling wooden ballies in posts and struts including stacking within 50 metres lead.	metre	4.35
15.34	Dismantling and stacking within 50 metres 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	each	54.40
15.34.2	R.C.C.	each	60.15
15.35	Cutting ballies or wooden posts of fencing at the point of projection above the concrete or ground and stacking the same within 50 metres lead.	each	5.05
15.36	Dismantling barbed wire or flexible wire rope in fencing including making rolls and stacking within 50 metres lead.	kg	7.60
15.37	Dismantling wooden trellis work excluding frames but including stacking the serviceable material within 50 metres lead.	sqm	14.30
15.38	Dismantling expanded metal or I.R.C. fabrics with necessary battens and beading including stacking the serviceable material within 50 metres lead.	sqm	16.10
15.39	Dismantling wooden boardings in lining of walls and partitions, excluding supporting members but including stacking within 50 metres lead :		
15.39.1	Upto 10 mm thick	sqm	13.25
15.39.2	Thickness above 10 mm upto 25 mm	sqm	16.95
15.39.3	Thickness above 25 mm upto 40 mm	sqm	19.10
15.40	Dismantling precast concrete or stone slabs in walls, partition walls etc. including stacking within 50 metres lead:		
15.40.1	Thickness upto 40 mm	sqm	61.25
15.40.2	Thickness above 40 mm upto 75 mm	sqm	91.85
15.41	Dismantling cement asbestos, Celotax or other hard board ceiling or partition walls including stacking of serviceable materials and disposal of unserviceable materials within 50 metres lead.	sqm	12.60
15.42	Dismantling C.I. or asbestos rain water pipe with fittings and		

Code No	Description	Unit	Rate Rs.
	clamps including stacking the material within 50 metres lead :		
15.42.1	75 to 80 mm dia pipe.	metre	15.70
15.42.2	100 mm dia pipe	metre	16.10
15.42.3	150 mm dia pipe	metre	16.55
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 metres lead as per direction of Engineer-in-charge :		
15.44.1	15 mm to 40 mm nominal bore	metre	33.10
15.44.2	Above 40 mm nominal bore	metre	37.45
15.45	Dismantling C.I. pipes including excavation and refilling trenches after taking out the pipes manually/ by mechanical means, breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes, lead at site within 50 metre lead as per direction of Engineer-in-charge:		
15.45.1	Upto 150 mm diameter	metre	86.20
15.45.2	Above 150 mm dia upto 300 mm dia.	metre	116.05
15.45.3	Above 300 mm diameter	metre	152.70
15.47	Dismantling asbestos cement pressure pipes including excavation and refilling trenches after taking out the pipes manually/ by mechanical means and stacking the pipes within 50 metres lead as per direction of Engineer-in-charge:		
15.47.1	Upto 150 mm diameter	metre	68.55
15.47.2	Above 150 mm diameter	metre	83.15
15.48	Taking out C.I. cover with frame from R.C.C. top slab of manholes of various sizes including demolishing of R.C.C. work manually/ by mechanical means and stacking of useful materials near the site and disposal of unserviceable materials into municipal dumps within 50 metres lead as per direction of Engineer-in-charge.	each	140.95
15.49	Taking out C.I. cover with frame from R.C.C. top slab of inspection chambers of various sizes including demolishing of R.C.C. work manually/ by mechanical means and stacking of useful materials near the site and disposal of unserviceable materials into municipal dumps within 50 metres lead as per direction of Engineer-in-charge.	each	81.35
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	each	1,001.20

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
	disposal of unserviceable materials within 50 metres lead.		
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 metres lead including refilling the excavated gap.	each	202.95
15.52	Dismantling of flushing cistern of any size including stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead.	each	199.65
15.53	Dismantling of C.I. sluice valve including stacking of useful materials within a lead of 50 metres		
15.53.1	Upto 150 mm diameter	each	77.15
15.53.2	Above 150 mm diameter	each	274.65
15.54	Dismantling of spindle fire hydrant including stacking of useful materials within 50 metres lead.	each	165.75
15.56	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	sqm	11.05
15.57	Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable surplus material and stacking of serviceable material with in 50 meters lead as directed by Engineer-in-charge.	sqm	12.60

## 17.0 SANITARY INSTALLATIONS

Code No	Description	Unit	Rate Rs.
17.1	Providing and fixing water closet squatting pan (Indian type W.C. pan ) with 100mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern 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 :		
17.1.1	White Vitreous china Orissa pattern W.C. pan of size 580x440mm with integral type foot rests.	each	2,923.25
17.1.2	Stainless Steel AISI-304(18/8) Orissa pattern W.C. pan of size 585x480 mm with flush pipe and integrated type foot rests.	each	5,948.25
17.2	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern 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 :		
17.2.1	W.C. pan with ISI marked white solid plastic seat and lid	each	2,724.80
17.2.2	W.C. pan with ISI marked black solid plastic seat and lid	each	2,700.60
17.3	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I. brackets, 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 :		
17.3.1	W.C. pan with ISI marked white solid plastic seat and lid.	each	4,102.30
17.3.2	W.C. pan with ISI marked black solid plastic seat and lid.	each	4,078.10
17.4	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350mm and 340x410x265mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :		
17.4.1	One urinal basin with 5 litre white P.V.C. automatic flushing cistern.	each	2,766.75

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
17.4.2	Range of two urinal basins with 5 litre white P.V.C. automatic flushing cistern.	each	4,445.35
17.4.3	Range of three urinal basins with 10litre white P.V.C. automatic flushing cistern.	each	5,977.40
17.4.4	Range of four urinal basins with 10 litre white P.V.C. automatic flushing cistern.	each	7,938.15
17.5	Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350mm with white PVC automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS : 2556, C.I. trap with outlet grating and other couplings in C.P. brass including painting of fittings and cutting and making good the walls and floors wherever required :		
17.5.1	Single half stall urinal with 5 litre P.V.C. automatic flushing cistern.	each	5,462.50
17.5.2	Range of two half stall urinals with 5 litre P.V.C. automatic flushing cistern.	each	8,441.40
17.5.3	Range of three half stall urinals with 10 litre P.V.C. automatic flushing cistern.	each	11,064.60
17.5.4	Range of four half stall urinals with 10 litre P.V.C. automatic flushing cistern.	each	13,569.15
17.6	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. flush pipe for back and front flush with standard spreader pipes with fittings, G.I clamps and C.P. brass coupling complete including painting of fittings and cutting and making good the walls and floors etc. wherever required :		
17.6.1	Single squatting plate with 5 litre P.V.C. automatic flushing cistern.	each	3,417.60
17.6.2	Range of two squatting plates with 5 litre P.V.C. automatic flushing cistern.	each	4,805.35
17.6.3	Range of three squatting plates with 10 litre P.V.C. automatic flushing cistern.	each	6,321.40
17.6.4	Range of four squatting plates with 10 litre P.V.C. automatic flushing cistern.	each	7,533.70
17.7	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps,32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making		

Code No	Description	Unit	Rate Rs.
	good the walls wherever require :		
17.7.1	White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps.	each	1,880.35
17.7.2	White Vitreous China Wash basin size 630x450 mm with a single 15 mm C.P. brass pillar tap.	each	1,606.65
17.7.3	White Vitreous China Wash basin size 550x400 mm with a pair of 15 mm C.P. brass pillar taps.	each	2,025.55
17.7.4	White Vitreous China Flat back wash basin size 550x400 mm with single 15 mm C.P. brass pillar tap.	each	1,751.85
17.7.5	White Vitreous China Angle back wash basin size 600x480 mm with single 15 mm C.P. brass pillar tap.	each	1,497.75
17.7.6	White Vitreous China Angle back wash basin size 400x400 mm with single 15 mm C.P. brass pillar tap.	each	1,279.95
17.7.7	White Vitreous China Flat back wash basin size 450x300 mm with single 15 mm C.P. brass pillar tap.	each	1,279.95
17.7.8	White Vitreous China Surgeon type wash basin of size 660x460 mm with a pair of 15 mm C.P. brass pillar taps with elbow operated levers.	each	2,533.75
17.7.9	White Vitreous China Surgeon type wash basin of size 660x460 mm with single 15 mm C.P. brass pillar taps with elbow operated levers ISI marked.	each	2,042.25
17.7.10	Stainless Steel AISI-304(18/8) Round basin 405x355 mm with single 15 mm C.P. brass pillar tap.	each	2,659.35
17.7.11	Stainless Steel AISI-304(18/8) Wash basin 530x345 mm with single 15 mm C.P. brass pillar tap.	each	2,477.85
17.8	Providing and fixing white vitreous china pedestal for wash basin completely recessed at the back for the reception of pipes and fittings.	each	1,005.20
17.9	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 :		
17.9.1	White glazed fire clay kitchen sink of size 600x450x250 mm.	each	2,043.95
17.10	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS 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 :		
17.10.1	Kitchen sink with drain board		

Code No	Description	Unit	Rate Rs.
17.10.1.1	510x1040 mm bowl depth 250mm.	each	6,627.85
17.10.1.2	510x1040 mm bowl depth 225mm.	each	6,264.85
17.10.1.3	510x1040 mm bowl depth 200mm.	each	5,659.85
17.10.1.4	510x1040 mm bowl depth 178mm.	each	3,844.85
17.10.2	Kitchen sink without drain board		
17.10.2.1	610x510 mm bowl depth 200 mm.	each	3,716.20
17.10.2.2	610x460 mm bowl depth 200 mm.	each	3,474.20
17.10.2.3	470x420 mm bowl depth 178 mm.	each	2,385.20
17.11	Providing and fixing white vitreous china laboratory sink with C.I. brackets, C.P. brass chain with rubber plug 40mm C.P brass waste and 40mm C.P. brass trap with necessary C.P. brass unions complete including painting of fittings and brackets, cutting and making good the wall wherever required :		
17.11.1	Size 450x300x150mm	each	2,408.25
17.11.2	Size 600x450x200mm	each	2,589.75
17.12	Providing and fixing draining board with C.I. brackets including painting of brackets, cutting and making good the walls wherever required :		
17.12.1	White glazed fire clay draining board of size 600x450x25mm	each	729.60
17.13	Providing and fixing white vitreous china water closet squatting pan (Indian type)		
17.13.1	Long pattern W.C. pan of size 580 mm	each	851.10
17.13.2	Orissa pattern W.C. pan of size 580x440 mm	each	1,335.10
17.14	Extra for using coloured W.C. pan instead of white W.C. pan		
17.14.1	Orissa pattern W.C. pan 580x440 mm	each	233.55
17.15	Providing and fixing white vitreous china pedestal type (European type/ wash down type) water closet pan.	each	1,093.10
17.16	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	983.75
17.17	Providing and fixing a pair of white vitreous china foot rests of standard pattern for squatting pan water closet:		
17.17.1	250x130x30 mm	pair	164.65
17.17.2	250x125x25 mm	pair	128.35
17.18	Providing and fixing P.V.C. low level flushing cistern with		



<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
	manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete.		
17.18.1	10 litre capacity - White	each	762.30
17.18.2	10 litre capacity - coloured	each	837.30
17.19	Providing and fixing controlled flush, low level cistern made of vitreous china with all fittings complete.		
17.19.1	10 litre (full flush) capacity-white	each	1,328.60
17.19.2	10 litre (full flush) capacity-coloured	each	1,835.55
17.20	Providing and fixing solid plastic seat with lid for pedestal type W.C. pan complete :		
17.20.1	White solid plastic seat with lid	each	379.20
17.20.2	Black solid plastic seat with lid	each	355.00
17.21	Extra for providing coloured other than black solid P.V.C. plastic seat and cover in European type W.C. pan, instead of white plastic seat and cover.	each	96.80
17.22	Providing and fixing G.I. inlet connection for flush pipe connecting with W.C. pan.	each	76.70
17.23	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350mm and 340x410x265mm sizes respectively.	each	680.50
17.24	Providing and fixing white vitreous china squatting plate urinal with integral rim longitudinal flush pipe.	each	1,331.95
17.25	Providing and fixing white vitreous china wash basin including making all connections but excluding the cost of fittings :		
17.25.1	Flat back wash basin of size 630x450mm.	each	827.40
17.25.2	Flat back wash basin of size 550x400mm.	each	972.60
17.25.3	Angle back wash basin of size 600x480mm.	each	718.50
17.25.4	Angle back wash basin of size 400x400mm.	each	500.70
17.25.5	Flat back wash basin of size 450x300mm.	each	500.70
17.25.6	Surgeon type wash basin of size 660x460mm.	each	1,045.20
17.26	Providing and fixing kitchen sink including making all connections excluding cost of fittings.		
17.26.1	White glazed fire clay sink of size 600x450x250mm.	each	1,491.25
17.27	Providing and fixing white vitreous china laboratory sink including making all connections excluding cost of fittings:		

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
17.27.1	Size 450x300x150 mm.	each	1,682.40
17.27.2	Size 600x450x200 mm.	each	1,863.90
17.28	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.		
17.28.1	Semi rigid pipe		
17.28.1.1	32 mm dia	each	48.75
17.28.1.2	40 mm dia	each	49.95
17.28.2	Flexible pipe		
17.28.2.1	32 mm dia	each	48.75
17.28.2.2	40 mm dia	each	51.15
17.29	Providing and fixing 100 mm sand cast Iron grating for gully trap.	each	17.15
17.30	Providing and fixing in position 25mm diameter mosquito proof coupling of approved municipal design.	each	30.05
17.31	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	623.90
17.32	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 :		
17.32.1	Circular shape 450mm dia.	each	678.55
17.32.2	Rectangular shape 453x357mm	each	539.00
17.32.3	Oval shape 450x350mm (outer dimensions)	each	579.50
17.32.4	Rectangular shape 1500x450 mm	each	1,132.15
17.33	Providing and fixing 600x120x5mm glass shelf with edges round of supported on anodised aluminium angle frame with C.P. brass brackets and guard rail complete fixed with 40 mm long screws, rawl plugs etc., complete.	each	269.25
17.34	Providing and fixing toilet paper holder :		
17.34.1	C.P. brass	each	239.65
17.34.2	Vitreous china	each	428.85
17.35	Providing and fixing soil, waste and vent pipes :		
17.35.1	100 mm dia.		
17.35.1.1	Sand cast iron S&S pipe as per IS: 1729.	metre	473.45

Code No	Description	Unit	Rate Rs.
17.35.1.2	Centrifugally cast (spun) iron socketed pipe as per IS: 3989.	metre	818.85
17.35.2	75 mm diameter :		
17.35.2.1	Sand cast iron S&S pipe as per IS: 1729.	metre	415.30
17.35.2.2	Centrifugally cast (spun) iron socketed pipe as per IS: 3989.	metre	703.15
17.36	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 :		
17.36.1	75 mm dia pipe	each	42.75
17.36.2	100 mm dia pipe	each	50.35
17.37	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 10x10x10cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) including cost of cutting holes and making good the walls etc. :		
17.37.1	For 100 mm dia. Pipe	each	103.25
17.37.2	For 75 mm dia. Pipe	each	100.85
17.38	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.		
17.38.1	100 mm		
17.38.1.1	Sand cast iron S&S as per IS - 1729	each	347.90
17.38.1.2	Sand cast iron S&S as per IS - 3989	each	393.90
17.38.2	75 mm dia		
17.38.2.1	Sand cast iron S&S as per IS - 1729	each	265.95
17.38.2.2	Sand cast iron S&S as per IS- 3989	each	302.25
17.39	Providing and fixing plain bend of required degree.		
17.39.1	100 mm		
17.39.1.1	Sand cast iron S&S as per IS - 1729	each	272.90
17.39.1.2	Sand cast iron S&S as per IS : 3989	each	311.60
17.39.2	75 mm		
17.39.2.1	Sand cast iron S&S as per IS -1729	each	228.45
17.39.2.2	Sand cast iron S&S as per IS - 3989	each	261.10
17.40	Providing and fixing heel rest sanitary bend		
17.40.1	100 mm dia		
17.40.1.1	Sand cast iron S&S as per IS - 1729	each	333.40

Code No	Description	Unit	Rate Rs.
17.40.1.2	Sand cast iron S&S as per IS - 3989	each	379.35
17.40.2	75 mm		
17.40.2.1	Sand cast iron S&S as per IS - 1729	each	255.05
17.40.2.2	Sand cast iron S&S as per IS - 3989	each	291.35
17.41	Providing and fixing double equal junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete :		
17.41.1	100x100x100x100mm		
17.41.1.1	Sand cast iron S&S as per IS - 1729	each	691.40
17.41.1.2	Sand cast iron S&S as per IS - 3989	each	790.60
17.41.2	75x75x75x75 mm		
17.41.2.1	Sand cast iron S&S as per IS - 1729	each	483.75
17.41.2.2	Sand cast iron S&S as per IS - 3989	each	552.70
17.42	Providing and fixing double equal plain junction of required degree.		
17.42.1	100x100x100x100 mm		
17.42.1.1	Sand cast iron S&S as per IS - 1729	each	635.90
17.42.1.2	Sand cast iron S&S as per IS - 3989	each	727.85
17.42.2	75x75x75x75 mm		
17.42.2.1	Sand cast iron S&S as per IS - 1729	each	442.60
17.42.2.2	Sand cast iron S&S as per IS - 3989	each	506.75
17.43	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.		
17.43.1	100x100x100 mm		
17.43.1.1	Sand cast iron S&S as per IS - 1729	each	502.80
17.43.1.2	Sand cast iron S&S as per IS - 3989	each	572.95
17.43.2	75x75x75 mm		
17.43.2.1	Sand cast iron S&S as per IS - 1729	each	368.80
17.43.2.2	Sand cast iron S&S as per IS - 3989	each	420.85
17.44	Providing and fixing single equal plain junction of required degree :		
17.44.1	100x100x100 mm		

Code No	Description	Unit	Rate Rs.
17.44.1.1	Sand cast iron S&S as per IS - 1729	each	445.90
17.44.1.2	Sand cast iron S&S as per IS - 3989	each	510.05
17.44.2	75x75x75 mm		
17.44.2.1	Sand cast iron S&S as per IS - 1729	each	315.55
17.44.2.2	Sand cast iron S&S as per IS - 3989	each	357.90
17.45	Providing and fixing double unequal junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete :		
17.45.1	100x100x75x75 mm		
17.45.1.1	Sand cast iron S&S as per IS - 1729	each	579.00
17.45.1.2	Sand cast iron S&S as per IS - 3989	each	877.90
17.46	Providing and fixing double unequal plain junction of required degree:		
17.46.1	100x100x75x75 mm		
17.46.1.1	Sand cast iron S&S as per IS - 1729	each	528.20
17.46.1.2	Sand cast iron S&S as per IS - 3989	each	789.55
17.47	Providing and fixing single unequal junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete :		
17.47.1	100x100x75 mm		
17.47.1.1	Sand cast iron S&S as per IS - 1729	each	419.30
17.47.1.2	Sand cast iron S&S as per IS - 3989	each	663.70
17.48	Providing and fixing single unequal plain junction of required degree :		
17.48.1	100x100x75 mm		
17.48.1.1	Sand cast iron S&S as per IS - 1729	Each	364.85
17.48.1.2	Sand cast iron S&S as per IS - 3989	each	597.15
17.49	Providing and fixing double equal plain invert branch of required degree:		
17.49.1	100x100x100x100 mm		
17.49.1.1	Sand cast iron S&S as per IS - 1729	each	649.20
17.49.1.2	Sand cast iron S&S as per IS - 3989	each	742.35
17.49.2	75x75x75x75 mm		

Code No	Description	Unit	Rate Rs.
17.49.2.1	Sand cast iron S&S as per IS - 1729	each	458.35
17.49.2.2	Sand cast iron S&S as per IS - 3989	each	524.90
17.50	Providing and fixing single equal plain invert branch of required degree:		
17.50.1	100x100x100 mm		
17.50.1.1	Sand cast iron S&S as per IS - 1729	each	488.25
17.50.1.2	Sand cast iron S&S as per IS - 3989	each	558.45
17.50.2	75x75x75 mm		
17.50.2.1	Sand cast iron S&S as per IS - 1729	each	376.05
17.50.2.2	Sand cast iron S&S as per IS - 3989	each	430.50
17.51	Providing and fixing double unequal invert branch of required degree :		
17.51.1	100x100x75x75 mm		
17.51.1.1	Sand cast iron S&S as per IS - 1729	each	570.55
17.51.1.2	Sand cast iron S&S as per IS - 3989	each	814.95
17.52	Providing and fixing single unequal plain invert branch of required degree :		
17.52.1	100x100x75 mm		
17.52.1.1	Sand cast iron S&S as per IS - 1729	each	478.60
17.52.1.2	Sand cast iron S&S as per IS - 3989	each	730.25
17.53	Providing and fixing sand cast iron S&S off sets as per IS: 1729		
17.53.1	76 mm off sets		
17.53.1.1	With 75 mm dia. pipe	each	165.50
17.53.1.2	With 100 mm dia. pipe	each	279.25
17.53.2	114 mm off sets		
17.53.2.1	With 75 mm dia. pipe	each	335.80
17.53.2.2	With 100 mm dia. Pipe	each	436.00
17.53.3	152 mm off sets		
17.53.3.1	With 75 mm dia. Pipe	each	354.45
17.53.3.2	With 100 mm dia. pipe	each	458.50
17.54	Providing and fixing sand cast iron S&S off sets as per IS: 3989.		
17.54.1	75 mm off sets		

Code No	Description	Unit	Rate Rs.
17.54.1.1	With 75 mm dia. pipe	each	272.95
17.54.2	150 mm off sets		
17.54.2.1	With 75 mm dia. pipe	each	343.30
17.54.2.2	With 100 mm dia. pipe	each	455.10
17.55	Providing and fixing door piece, insertion rubber washer 3mm thick, bolts & nuts complete :		
17.55.1	100 mm		
17.55.1.1	Sand cast iron S&S as per IS - 1729	each	383.00
17.55.1.2	Sand cast iron S&S as per IS - 3989	each	369.70
17.55.2	75 mm		
17.55.2.1	Sand cast iron S&S as per IS - 1729	each	279.25
17.55.2.2	Sand cast iron S&S as per IS - 3989	each	290.15
17.56	Providing and fixing terminal guard:		
17.56.1	100 mm		
17.56.1.1	Sand cast iron S&S as per IS - 1729	each	246.25
17.56.1.2	Sand cast iron S&S as per IS - 3989	each	240.20
17.56.2	75 mm		
17.56.2.1	Sand cast iron S&S as per IS - 1729	each	200.60
17.56.2.2	Sand cast iron S&S as per IS - 3989	each	218.75
17.57	Providing and fixing collar:		
17.57.1	100 mm		
17.57.1.1	Sand cast iron S&S as per IS - 1729	each	167.60
17.57.1.2	Sand cast iron S&S as per IS - 3989	each	240.20
17.57.2	75 mm		
17.57.2.1	Sand cast iron S&S as per IS - 1729	each	154.65
17.57.2.2	Sand cast iron S&S as per IS- 3989	each	218.75
17.58	Providing lead caulked joints to sand cast iron/ centrifugally cast (spun) iron pipes and fittings of diameter:		
17.58.1	100 mm	each	151.55
17.58.2	75 mm	each	127.95
17.58.3	50 mm	each	101.90
17.59	Providing and fixing M.S. stays and clamps for sand cast iron/		

Code No	Description	Unit	Rate Rs.
	centrifugally cast (spun) iron pipes of diameter :		
17.59.1	100 mm	each	50.25
17.59.2	75 mm	each	43.30
17.59.3	50 mm	each	35.70
17.60	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 :		
17.60.1	100 mm inlet and 100 mm outlet		
17.60.1.1	Sand cast iron S&S as per IS: 3989.	each	680.65
17.60.1.2	Sand Cast iron S&S as per IS: 1729.	each	574.15
17.60.2	100 mm inlet and 75 mm outlet		
17.60.2.1	Sand cast iron S&S as per IS - 3989	each	710.90
17.60.2.2	Sand Cast iron S&S as per IS- 1729.	each	505.20
17.61	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) :		
17.61.1	100 mm dia.	metre	192.90
17.61.2	75 mm dia.	metre	137.50
17.61.3	50 mm dia.	metre	87.90
17.62	Painting C.I. cistern with bitumastic or any other anti-corrosive paint inside and white paint over a coat of zinc chromate yellow primer (of approved quality ) on the outside surface of the cistern flush pipe, other fittings, etc. complete for new work.	each	337.65
17.63	Re-painting C.I. cistern with bitumastic or any other anti-corrosive paint inside and white paint on the outside surface of the cistern, flush pipe, other fittings, etc. complete including polishing of wooden seat and lid and cleaning of W.C. pan with acid wherever necessary.	each	221.40
17.64	Repainting C.I. cistern with synthetic enamel paint of approved colour brand and manufacture on the outside surface of cistern flush pipe, other fittings etc. complete.	each	92.10
17.65	Painting sand cast iron/ centrifugally cast (spun) iron soil, waste vent pipes and fittings with paint of any colour such as chocolate grey, or buff etc. over a coat of primer (of approved quality) for		



Code No	Description	Unit	Rate Rs.
	new work :		
17.65.1	100 mm diameter pipe	metre	25.80
17.65.2	75 mm diameter pipe	metre	19.65
17.66	Repainting sand cast iron/ centrifugally cast iron (spun) iron, soil, waste, vent pipes and fittings with paint of any colour such as chocolate, grey or buff etc :		
17.66.1	100 mm diameter pipe	metre	12.40
17.66.2	75 mm diameter pipe	metre	9.30
17.67	Repainting bath tub of size 1700x730x430mm with enamel paint.	each	304.30
17.68	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 lid with C.P. brass hinges and rubber buffers, 10 litre low level flushing cistern with fitting and brackets, 40mm flush bend 20mm over flow pipe with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :		
17.68.1	White vitreous china dual purpose WC pan with white solid plastic seat and lid with white vitreous china flushing cistern and C.P. flush bend.	each	6,106.35
17.69	Providing and fixing PTMT Waste Coupling for wash basin and sink, of approved quality and colour.		
17.69.1	Waste coupling 31mm of 79mm length and 62mm breadth weighing not less than 45gms.	each	157.65
17.69.2	Waste coupling 38mm of 83mm length and 77mm breadth, weighing not less than 60gms.	each	193.95
17.70	Providing and fixing PTMT Bottle Trap for Wash basin and sink.		
17.70.1	Bottle trap 31mm single piece moulded with height of 270mm, effective length of tail pipe 260mm from the centre of the waste coupling 77mm breadth with 25mm minimum water seal, weighing not less than 260gms.	each	605.35
17.70.2	Bottle trap 38mm single piece moulded with height of 270mm, effective length of tail pipe 265mm from the centre of the waste coupling 77mm breadth with 25mm minimum water seal, weighing not less than 263gms.	each	944.15
17.71	Providing and fixing PTMT liquid soap container 109mm wide, 125mm high and 112mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved	each	189.70

Code No	Description	Unit	Rate Rs.
	quality and colour. weighing not less than 105 gms.		
17.72	Providing and fixing PTMT towel ring trapezoidal shape 215mm long, 200mm wide with a minimum distances of 37mm from wall face with concealed fittings arrangement of approved quality and colour. Weighing not less than 88 gms.	each	175.80
17.73	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.		
17.73.1	450MM long towel rail with total length of 495mm, 78mm wide and effective height of 88mm, weighing not less than 170gms.	each	354.45
17.73.2	600mm long towel rail with total length of 645mm, width 78mm and effective height of 88mm, weighing not less than 190gms.	each	396.80
17.74	Providing and fixing PTMT shelf 440 mm long, 124 mm width and 36 mm height of approved quality and colour. Weighing not less than 300 gms.	each	463.35
17.75	Providing and fixing PTMT 15 mm Urinal spreader size 95x69x100 mm with 1/2" BSP thread and shapes. Weighing not less than 60 gms.	each	189.70
17.76	Providing and fixing PTMT urinal cock of approved quality and colour.		
17.76.1	15 mm nominal bore, 80mm long. 42 mm high and 30mm wide with BSP female threads weighing not less than 48 gms.	each	118.65
17.77	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 4nos, 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 x1.6mm galvanised M.S. flats of specified shape and of total length 420mm and shall be fixed with M.S. nuts, bolts, & washers of size 25x6mm, one bolts on each side of the pipe.		
17.77.1	Total bracket length 580mm of approved shape and design (for single, 100mm dia pipe).	each	150.80
17.77.2	Total bracket length 810mm of approved shape and design (for two, 100mm dia pipes).	each	185.70
17.77.3	Total bracket length 1040mm of approved shape and design (for three, 100mm dia pipes).	each	220.60

## 18.0 WATER SUPPLY

Code No	Description	Unit	Rate Rs.
18.1	Providing and fixing Polyethelene-Aluminium-Polyethelene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450 U.V. stabilised with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 80 C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required ) e.g. elbows ,tees ,reducers, couplers & connectors etc. with clamps at 1.00 metre spacing. this includes testing of joints complete as per direction of the Engineer in charge. Internal work - Exposed on wall		
18.1.1	1216 (16 mm OD) pipe	metre	179.35
18.1.2	1620 (20 mm OD) pipe	metre	214.35
18.1.3	2025 (25 mm OD) pipe	metre	268.40
18.1.4	2532 (32 mm OD) pipe	metre	355.15
18.1.5	3240 (40 mm OD) pipe	metre	465.65
18.1.6	4050 (50 mm OD) pipe	metre	598.85
18.2	Providing and fixing Polyethelene-Aluminium-Polyethelene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450 U.V. stabilised with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 80 C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required ) e.g. elbows ,tees ,reducers, couplers & connectors etc. with clamps at 1.00 metre spacing. This includes the costs of cutting chases and including testing of joints complete as per direction of the engineer in charge. Concealed work including cutting chases and making good the wall etc.		
18.2.1	1216 (16 mm OD) pipe	metre	278.50
18.2.2	1620 (20 mm OD) pipe	metre	320.40
18.2.3	2025 (25 mm OD) pipe	metre	387.95
18.2.4	2532 (32 mm OD) pipe	metre	495.10
18.3	Providing and fixing Polyethelene-Aluminium-Polyethelene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450 - 2004 U.V. stabilised with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 80 C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required )		

Code No	Description	Unit	Rate Rs.
	e.g. elbows ,tees ,reducers, couplers & connectors etc. with trenching, refilling and testing of joints complete as per direction of the engineer in charge. External work		
18.3.1	1216 (16 mm OD) pipe	metre	171.85
18.3.2	1620 (20 mm OD ) pipe.	metre	203.00
18.3.3	2025 (25 mm OD ) pipe.	metre	253.15
18.3.4	2532 (32 mm OD ) pipe.	metre	332.75
18.3.5	3240 (40 mm OD ) pipe.	metre	434.50
18.3.6	4050 (50 mm OD ) pipe.	metre	567.75
18.4	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes SDR 7.4 U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply including all PP - R plain & brass threaded polypropylene random fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes testing of joints complete as per direction of Engineer in Charge. Internal work - Exposed on wall		
18.4.1	PN - 16 Pipe, 16 mm OD	metre	92.85
18.4.2	PN - 16 Pipe, 20 mm OD	metre	122.65
18.4.3	PN - 16 Pipe, 25 mm OD	metre	168.05
18.4.4	PN - 16 Pipe, 32 mm OD	metre	249.60
18.4.5	PN - 16 Pipe, 40 mm OD	metre	377.40
18.4.6	PN - 16 Pipe, 50 mm OD	metre	517.55
18.5	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes SDR 7.4 U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply including all PP - R plain & brass threaded polypropylene random fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. Concealed work including cutting chases and making good the walls etc.,		
18.5.1	PN - 16 Pipe, 16 mm OD	metre	162.00
18.5.2	PN - 16 Pipe, 20 mm OD	metre	196.95
18.5.3	PN - 16 Pipe, 25 mm OD	metre	252.85
18.5.4	PN - 16 Pipe, 32 mm OD	metre	353.00
18.6	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes SDR 7.4 U V stabilized & anti - microbial fusion		

Code No	Description	Unit	Rate Rs.
	welded, having thermal stability for hot & cold water supply including all PP - R plain & brass threaded polypropylene random fittings i/c trenching, refilling & testing of joints complete as per direction of Engineer in Charge. External work		
18.6.1	PN - 16 Pipe, 16 mm OD	metre	85.30
18.6.2	PN - 16 Pipe, 20 mm OD	metre	111.25
18.6.3	PN - 16 Pipe, 25 mm OD	metre	156.20
18.6.4	PN - 16 Pipe, 32 mm OD	metre	230.60
18.6.5	PN - 16 Pipe, 40 mm OD	metre	346.30
18.6.6	PN - 16 Pipe, 50 mm OD	metre	486.45
18.6.7	PN - 16 Pipe, 63mm OD	metre	744.30
18.6.8	PN - 16 Pipe, 75 mm OD	metre	1,047.10
18.6.9	PN - 16 Pipe, 90 mm OD	metre	1,656.10
18.6.10	PN - 10 Pipe, 110 mm OD (SDR - 11)	metre	1,733.95
18.6.11	PN - 10 Pipe, 160 mm OD (SDR - 11)	metre	3,615.90
18.7	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. Internal work - Exposed on wall		
18.7.1	15 mm nominal outer dia .Pipes.	metre	124.40
18.7.2	20 mm nominal outer dia .Pipes.	metre	145.55
18.7.3	25 mm nominal outer dia .Pipes.	metre	185.35
18.7.4	32 mm nominal outer dia .Pipes.	metre	239.20
18.7.5	40 mm nominal outer dia .Pipes.	metre	332.40
18.7.6	50 mm nominal outer dia .Pipes.	metre	496.80
18.8	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. Concealed work including cutting chases and making good the walls etc.,		

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
18.8.1	15 mm nominal outer dia .Pipes.	metre	199.30
18.8.2	20 mm nominal outer dia .Pipes.	metre	222.60
18.8.3	25 mm nominal outer dia .Pipes.	metre	276.15
18.8.4	32 mm nominal outer dia .Pipes.	metre	339.05
18.9	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings. This included jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge. External work		
18.9.1	15 mm nominal outer dia .Pipes.	metre	113.00
18.9.2	20 mm nominal outer dia .Pipes.	metre	130.30
18.9.3	25 mm nominal outer dia .Pipes.	metre	173.50
18.9.4	32 mm nominal outer dia .Pipes.	metre	220.25
18.9.5	40 mm nominal outer dia .Pipes.	metre	301.30
18.9.6	50 mm nominal outer dia .Pipes.	metre	465.65
18.9.7	62.50 mm nominal inner dia Pipes.	metre	1,407.00
18.9.8	75 mm nominal inner dia .Pipes.	metre	1,834.40
18.9.9	100mm nominal inner dia .Pipes.	metre	2,543.75
18.9.10	150 mm nominal inner dia .Pipes.	metre	4,415.30
18.10	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, including cutting and making good the walls etc. Internal work - Exposed on wall		
18.10.1	15 mm dia. nominal bore	metre	146.60
18.10.2	20 mm dia. nominal bore	metre	182.50
18.10.3	25 mm dia. nominal bore	metre	239.60
18.10.4	32 mm dia. nominal bore	metre	300.80
18.10.5	40 mm dia. nominal bore	metre	359.75
18.10.6	50 mm dia. nominal bore	metre	468.15
18.11	Concealed pipe including painting with anti corrosive bitumastic paint, cutting chases and making good the wall.		
18.11.1	15 mm dia nominal bore	metre	202.15
18.11.2	20 mm dia nominal bore	metre	234.20
18.12	Providing and fixing G.I. pipes complete with G.I. fittings including		

Code No	Description	Unit	Rate Rs.
	trenching and refilling etc. External work :		
18.12.1	15 mm dia. nominal bore	metre	127.10
18.12.2	20 mm dia. nominal bore	metre	155.50
18.12.3	25 mm dia. nominal bore	metre	206.00
18.12.4	32 mm dia. nominal bore	metre	254.10
18.12.5	40 mm dia. nominal bore	metre	295.90
18.12.6	50 mm dia. nominal bore	metre	378.60
18.12.7	65 mm dia. nominal bore	metre	473.45
18.12.8	80 mm dia. nominal bore	metre	599.35
18.13	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 :		
18.13.1	25 to 40 mm nominal bore	each	273.95
18.13.2	50 to 80 mm nominal bore	each	751.40
18.14	Fixing water meter and stop cock in G.I. pipe line including cutting and threading the pipe and making long screws etc. complete (cost of water meter and stop cock to be paid separately).	each	197.70
18.15	Providing and fixing brass bib cock of approved quality :		
18.15.1	15 mm nominal bore	each	360.65
18.15.2	20 mm nominal bore	each	398.70
18.16	Providing and fixing brass stop cock of approved quality :		
18.16.1	15 mm nominal bore	each	360.65
18.16.2	20 mm nominal bore	each	398.70
18.17	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :		
18.17.1	25 mm nominal bore	each	297.40
18.17.2	32 mm nominal bore.	each	372.95
18.17.3	40 mm nominal bore	each	415.65
18.17.4	50 mm nominal bore	each	602.35
18.17.5	65 mm nominal bore	each	866.50
18.17.6	80 mm nominal bore	each	1,426.40
18.18	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :		

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
18.18.1	15 mm nominal bore	each	237.85
18.18.2	20 mm nominal bore	each	347.15
18.18.3	25 mm nominal bore	each	402.00
18.19	Providing and fixing gun metal non- return valve of approved quality (screwed end) :		
18.19.1	25 mm nominal bore		
18.19.1.1	Horizontal	each	304.35
18.19.1.2	Vertical	each	330.95
18.19.2	32 mm nominal bore		
18.19.2.1	Horizontal	each	387.00
18.19.2.2	Vertical	each	483.80
18.19.3	40 mm nominal bore		
18.19.3.1	Horizontal	each	515.60
18.19.3.2	Vertical	each	630.55
18.19.4	50 mm nominal bore		
18.19.4.1	Horizontal	each	769.00
18.19.4.2	Vertical	each	882.75
18.19.5	65 mm nominal bore		
18.19.5.1	Horizontal	each	1,335.65
18.19.5.2	Vertical	each	1,529.25
18.19.6	80 mm nominal bore		
18.19.6.1	Horizontal	each	1,887.95
18.19.6.2	Vertical	each	2,490.50
18.20	Providing and fixing brass ferrule with C.I. mouth cover including boring and tapping the main :		
18.20.1	15 mm nominal bore	each	169.75
18.20.2	20 mm nominal bore	each	214.40
18.20.3	25 mm nominal bore	each	270.80
18.21	Providing and fixing uplasticised PVC connection pipe with brass unions :		
18.21.1	30 cm length		
18.21.1.1	15 mm nominal bore	each	36.55



<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
18.21.1.2	20 mm nominal bore	each	45.05
18.21.2	45 cm length		
18.21.2.1	15 mm nominal bore	each	46.60
18.21.2.2	20 mm nominal bore	each	58.70
18.22	Providing and fixing C.P. brass shower rose with 15 or 20 mm inlet :		
18.22.1	100 mm diameter	each	42.05
18.22.2	150 mm diameter	each	58.15
18.23	Laying in position centrifugally cast (spun) iron S&S or flanged pipes (excluding cost of pipe)	quintal	76.35
18.24	Laying in position S&S or flanged C.I. special such as tees, bends, collars, tapers and caps etc. (excluding cost of specials).	quintal	146.80
18.25	Providing and laying S&S C.I. standard specials such as tees, bends, collars, tapers, caps etc. (Heavy class) :		
18.25.1	Upto 300 mm dia.	quintal	3,050.80
18.25.2	Over 300 mm dia.	quintal	3,286.75
18.26	Providing and laying flanged C.I. standard specials such as tees, bends, collars, tapers, caps etc., suitable for flanged jointing as per IS : 1538 :		
18.26.1	Upto 300 mm dia.	quintal	5,374.00
18.26.2	Over 300 mm dia.	quintal	5,920.90
18.27	Providing and laying S&S centrifugally cast (spun) iron pipes (Class LA) conforming to IS - 1536 :		
18.27.1	100 mm dia. pipe	metre	845.65
18.27.2	125 mm dia. pipe	metre	1035.25
18.27.3	150 mm dia. pipe	metre	1223.80
18.27.4	200 mm dia. pipe	metre	1702.35
18.27.5	250 mm dia. pipe	metre	2416.35
18.27.6	300 mm dia. pipe	metre	1747.50
18.27.7	350 mm dia. pipe	metre	3962.60
18.27.8	400 mm dia. pipe	metre	4852.80
18.27.9	450 mm dia. pipe	metre	5806.85
18.27.10	500 mm dia. pipe	metre	7071.05

Code No	Description	Unit	Rate Rs.
18.27.11	600 mm dia. pipe	metre	9342.80
18.28	Providing lead caulked joints to spun iron or C.I. pipes and specials including testing of joints but excluding the cost of pig lead :		
18.28.1	100 mm diameter pipe	each	120.60
18.28.2	125 mm diameter pipe	each	177.95
18.28.3	150 mm diameter pipe	each	180.65
18.28.4	200 mm diameter pipe	each	239.70
18.28.5	250 mm diameter pipe	each	299.65
18.28.6	300 mm diameter pipe	each	361.35
18.28.7	350 mm diameter pipe	each	370.70
18.28.8	400 mm diameter pipe	each	485.20
18.28.9	450 mm diameter pipe	each	544.00
18.28.10	500 mm diameter pipe	each	575.40
18.28.11	600 mm diameter pipe	each	777.60
18.29	Supplying pig lead at site of work.	quintal	7,018.00
18.32	Constructing masonry Chamber 30x30x50 cm, inside with 75 class designation brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for stop cock, with C. I. surface box 100x100 x75 mm (inside) with hinged cover fixed in cement concrete slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) necessary excavation foundation concrete 1:5:10 (1 cement : 5 fine sand:10 graded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12mm thick finished with a floating coat of neat cement complete as per standard design :		
18.32.1	With F.P.S. bricks	each	724.65
18.33	Constructing masonry Chamber 60x60x75 cm, inside with 75 class designation brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100mm. top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) 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 :		

Code No	Description	Unit	Rate Rs.
18.33.1	With F.P.S. bricks	each	4,473.50
18.34	Constructing masonry Chamber 90x90x100 cm, inside with 75 class designation brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100 mm. top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) 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 :		
18.34.1	With F.P.S. bricks	each	7,720.25
18.35	Constructing masonry Chamber 120x120x100 cm, inside with 75 class designation brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100 mm. top diameter, 160 mm bottom diameter and 180 mm deep ( inside) with chained lid and RCC top slab 1:2:4 mix (1 cement :2 coarse sand : 4 graded stone aggregate 20 mm nominal size) 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 :		
18.35.1	With F.P.S. bricks	each	10,694.55
18.36	Constructing masonry Chamber 60x60x75 cm, inside with 75 class designation brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for fire hydrants, with C.I. surface box 350x350 mm top and 165 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) 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 :		
18.36.1	With F.P.S. bricks	each	4,161.20
18.37	Constructing masonry Chamber 60x45x50 cm, inside with 75 class designation brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for water meter complete with C.I. double flap surface box 400x200x200 mm (inside) with locking arrangement and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) necessary excavation foundation concrete 1:5:10 ( 1 cement : 5 fine sand :10 graded		

Code No	Description	Unit	Rate Rs.
	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 :		
18.37.1	With F.P.S. bricks	each	4,116.20
18.38	Painting G.I. pipes and fittings with synthetic enamel white paint over a ready mixed priming coat, both of approved quality for new work :		
18.38.1	15 mm diameter pipe.	metre	6.25
18.38.2	20 mm diameter pipe.	metre	7.45
18.38.3	25 mm diameter pipe.	metre	9.75
18.38.4	32 mm diameter pipe.	metre	11.60
18.38.5	40 mm diameter pipe.	metre	13.70
18.38.6	50 mm diameter pipe.	metre	16.25
18.39	Repainting G.I. pipes and fittings with synthetic enamel white paint of approved quality :		
18.39.1	15 mm diameter pipe.	metre	3.10
18.39.2	20 mm diameter pipe.	metre	3.65
18.39.3	25 mm diameter pipe	metre	4.65
18.39.4	32 mm diameter pipe	metre	5.55
18.39.5	40 mm diameter pipe	metre	6.45
18.39.6	50 mm diameter pipe	metre	7.60
18.40	Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality :		
18.40.1	15 mm diameter pipe	metre	3.75
18.40.2	20 mm diameter pipe	metre	4.45
18.40.3	25 mm diameter pipe	metre	5.70
18.40.4	32 mm diameter pipe	metre	6.85
18.40.5	40 mm diameter pipe	metre	7.75
18.40.6	50 mm diameter pipe	metre	9.30
18.40.7	65 mm diameter pipe	metre	11.50
18.40.8	80 mm diameter pipe	metre	13.35
18.41	Providing and filling sand of grading zone V or coarser grade all-round the G.I. pipes in external work.		

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
18.41.1	15 mm diameter pipe	metre	47.10
18.41.2	20 mm diameter pipe	metre	47.75
18.41.3	25 mm diameter pipe	metre	49.00
18.41.4	32 mm diameter pipe	metre	50.30
18.41.5	40 mm diameter pipe	metre	50.90
18.41.6	50 mm diameter pipe	metre	52.85
18.41.7	65 mm diameter pipe	metre	83.40
18.41.8	80 mm diameter pipe	metre	85.90
18.41.9	100 mm diameter pipe	metre	91.00
18.41.10	150 mm diameter pipe	metre	135.55
18.42	Boring with 100 mm diameter casting pipe for hand pump/ tube well in all soils except ordinary hard rocks requiring blasting including removing the casing pipe after the hand pipe/tube well is lowered and tested :		
18.42.1	Upto 6 metres depth.	metre	201.65
18.42.2	Beyond 6 m and upto 12 m depth.	metre	240.40
18.42.3	Beyond 12 m and upto 18 m depth.	metre	280.85
18.43	Providing and placing in position filters of 40 mm diameter G.I. pipe with brass strainer of approved quality.	metre	398.30
18.44	Providing and fixing to filter and lowering to proper levels 40 mm G.I. pipe for tube well including cleaning and priming the tube well.	metre	282.15
18.45	Providing and placing in position hand pump of approved quality for 40 mm diameter G.I. pipe complete with all accessories.	each	602.60
18.46	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work)		
18.46.1	15 mm nominal bore	each	126.80
18.46.2	20 mm nominal bore	each	175.20
18.46.3	25 mm nominal bore	each	207.90
18.46.4	32 mm nominal	each	255.05
18.46.5	40 mm nominal bore	each	322.85
18.46.6	50mm nominal bore	each	407.75
18.46.7	65mm nominal bore	each	585.65

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
18.46.8	80 mm nominal bore	each	813.10
18.47	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 :		
18.47.1	15 mm nominal bore.	each	254.60
18.47.2	20 mm nominal bore.	each	303.00
18.47.3	25 mm nominal bore.	each	335.65
18.47.4	32 mm nominal bore.	each	382.85
18.47.5	40 mm nominal bore.	each	450.60
18.47.6	50 mm nominal bore.	each	582.00
18.47.7	65 mm nominal bore.	each	759.90
18.47.8	80 mm nominal bore.	each	987.35
18.48	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank	per litre	5.05
18.49	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931		
18.49.1	15 mm nominal bore.	each	352.80
18.50	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms.		
18.50.1	15 mm nominal bore.	each	382.65
18.51	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.		
18.51.1	15 mm nominal bore	each	410.10
18.52	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931.		
18.52.1	15 mm nominal bore.	each	455.65
18.53	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931		
18.53.1	15 mm nominal bore	each	370.65
18.54	Providing and fixing PTMT bib cock of approved quality and		

Code No	Description	Unit	Rate Rs.
	colour.		
18.54.1	15mm nominal bore, 86 mm long. Weighing not less than 88 gms.	each	125.90
18.54.2	15 mm nominal bore, 122mm long. Weighing not less than 99 gms.	each	294.10
18.54.3	15 mm nominal bore, 165mm long. Weighing not less than 110 gms.	each	197.30
18.54.4	15mm nominal bore, 90mm long. Weighing not less than 93 gms.	each	142.85
18.55	Providing and fixing PTMT stop cock of approved quality and colour.		
18.55.1	15 mm nominal bore, 86mm long. Weighing not less than 88 gms.	each	125.90
18.55.2	20mm nominal bore, 89mm long. Weighing not less than 88 gms.	each	191.25
18.55.3	Concealed stop cock, 15mm nominal bore, 108mm long. Weighing not less than 108 gms.	each	203.35
18.56	Providing and fixing PTMT pillar cock of approved quality and colour .		
18.56.1	15mm nominal bore, 107mm long. Weighing not less than 110 gms.	each	193.00
18.56.2	15mm nominal bore, 125mm long foam flow. Weighing not less than 120 gms.	each	295.85
18.57	Providing and fixing PTMT, push cock of approved quality and colour.		
18.57.1	15 mm nominal bore, 98mm long. Weighing not less than 75 gms.	each	118.65
18.57.2	15 mm nominal bore, 80mm long. Weighing not less than 46 gms.	each	100.50
18.58	Providing and fixing PTMT grating of approved quality and colour.		
18.58.1	Circular type.		
18.58.1.1	100 mm nominal dia.	each	41.35
18.58.1.2	125 mm nominal dia with 25 mm waste hole.	each	48.60
18.58.2	Rectangular type with openable circular lid.		
18.58.2.1	150 mm nominal size square 100 mm diameter of the inner hinged round grating .	each	113.95
18.62	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 ball.		
18.62.1	15 mm nominal bore, 105 mm long. Weighing not less than 138 gms.	each	256.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
18.62.2	20 mm nominal bore, 120 mm long. Weighing not less than 198 gms.	each	329.00
18.62.3	25 mm nominal bore, 152mm long. Weighing not less than 440 gms.	each	518.15
18.62.4	40mm nominal bore, 206mm long. Weighing not less than 690 gms.	each	940.45
18.62.5	50mm nominal bore, 242mm long. Weighing not less than 1240 gms.	each	1,394.20
18.63	Providing and fixing PTMT angle stop cock 15 mm nominal bore. Weighing not less than 85 gms.	each	324.35
18.64	Providing and fixing PTMT swivelling shower, 15mm nominal bore. Weighing not less than 40gms.	each	106.20
18.65	Providing and fixing PTMT soap Dish Holder having length of 138mm, breadth 102mm, height of 75mm with concealed fitting arrangements. Weighing not less than 106 gms.	each	159.45
18.73	Providing and laying Double Flanged (Screwed/ Welded) Centrifugally (Spun) Ductile Iron Pipes of Class K - 9 conforming to IS : 8329 :		
18.73.1	100 mm dia Ductile Iron Double Flanged	metre	2,295.15
18.73.2	150 mm dia Ductile Iron Double Flanged	metre	3,177.65
18.73.3	200 mm dia Ductile Iron Double Flanged	metre	4,118.65
18.73.4	250 mm dia Ductile Iron Double Flanged	metre	5,471.60
18.73.5	300 mm dia Ductile Iron Double Flanged	metre	7,040.80
18.73.6	350 mm dia Ductile Iron Double Flanged	metre	8,768.75
18.73.7	400 mm dia Ductile Iron Double Flanged	metre	10,474.50
18.73.8	450 mm dia Ductile Iron Double Flanged	metre	12,662.15
18.73.9	500 mm dia Ductile Iron Double Flanged	metre	15,348.50
18.73.10	600 mm dia Ductile Iron Double Flanged	metre	20,818.50
18.73.11	700 mm dia Ductile Iron Double Flanged	metre	25,685.80
18.74	Providing and fixing Unplasticised P.V.C. connection pipe with PTMT Nuts collar and bush of approved quality and colour.		
18.74.1	15 mm nominal bore with 30cm length.	each	47.45
18.74.2	15 mm nominal bore with 45 cm length.	each	55.10
18.75	Providing and fixing PTMT extension nipple for water tank pipe, fittings of approved quality and colour.		



Code No	Description	Unit	Rate Rs.
18.75.1	15 mm nominal bore. Weighing not less than 32 gms.	each	40.40
18.75.2	20mm nominal bore. Weighing not less than 40gms.	each	47.65
18.75.3	25mm nominal bore. Weighing not less than 62 gms.	each	69.45
18.76	Cutting holes upto 30x30 cm in walls including making good the same :		
18.76.1	With F.P.S. bricks.	each	124.50
18.77	Cutting holes upto 15x15 cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including finishing complete so as to make it leak proof.	each	121.20
18.78	Making chases upto 7.5x7.5 cm in walls including making good and finishing with matching surface after housing G.I. pipe etc.	metre	52.15
18.79	Making hole upto 20x20 cm and embedding pipes upto 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.	metre	72.30
18.80	Disinfecting C.I. water mains by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water, operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory :		
18.80.1	80mm diameter C.I. pipe.	100metre	273.60
18.80.2	100 mm diameter C.I. pipe.	100 metre	365.90
18.80.3	125 mm diameter C.I. pipe.	100 metre	465.50
18.80.4	150 mm diameter C.I. pipe.	100 metre	569.90
18.80.5	200mm diameter C.I. pipe.	100 metre	784.70
18.80.6	250 mm diameter C.I. pipe.	100 metre	1,017.75
18.80.7	300 mm diameter C.I. pipe.	100 metre	1,177.80
18.80.8	350 mm diameter C.I. pipe.	100 metre	1,352.40
18.80.9	400 mm diameter C.I. pipe.	100 metre	1,545.05
18.80.10	450 mm diameter C.I. pipe.	100 metre	1,748.70
18.80.11	500 mm diameter C.I. pipe.	100 metre	1,969.25
18.80.12	600 mm diameter C.I. pipe.	100 metre	2,446.75
18.81	Extra for every operation of disinfecting the C.I. main by flushing with water containing bleaching powder at 0.5 gms per litre of		

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
	water and cleaning the same with fresh water, including getting the samples of water tested in the municipal laboratory :		
18.81.1	80 mm diametre C.I. pipe.	100metre	99.10
18.81.2	100 mm diametre C.I. pipe.	100metre	124.25
18.81.3	125 mm diametre C.I. pipe.	100metre	155.60
18.81.4	150 mm diametre C.I. pipe.	100metre	185.60
18.81.5	200 mm diametre C.I. pipe.	100metre	298.85
18.81.6	250 mm diametre C.I. pipe.	100metre	352.10
18.81.7	300 mm diametre C.I. pipe.	100metre	402.95
18.81.8	350 mm diametre C.I. pipe.	100metre	485.20
18.81.9	400 mm diametre C.I. pipe.	100metre	572.35
18.81.10	450 mm diametre C.I. pipe.	100metre	664.30
18.81.11	500 mm diametre C.I. pipe.	100metre	758.65
18.81.12	600 mm diametre C.I. pipe.	100metre	964.35
18.82	Dismantling old C.I. pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes at site lead upto 50 metre :		
18.82.1	80 mm diametre C.I. pipe.	100metre	62.10
18.82.2	100 mm diametre C.I. pipe.	100metre	64.65
18.82.3	125 mm diametre C.I. pipe.	100metre	67.20
18.82.4	150 mm diametre C.I. pipe.	100metre	69.45
18.82.5	200 mm diametre C.I. pipe.	100metre	77.60
18.82.6	250 mm diametre C.I. pipe.	100metre	85.45
18.82.7	300 mm diametre C.I. pipe.	100metre	92.15
18.82.8	350 mm diametre C.I. pipe.	100metre	98.25
18.82.9	400 mm diametre C.I. pipe.	100metre	104.00
18.82.10	450 mm diametre C.I. pipe.	100metre	109.95
18.82.11	500 mm diametre C.I. pipe.	100metre	115.05
18.82.12	600 mm diametre C.I. pipe.	100metre	124.00
18.83	Labour for cutting C.I. pipe with steel saw.		
18.83.1	80 mm diametre C.I. pipe.	each cut	22.50

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
18.83.2	100 mm diametre C.I. pipe.	each cut	30.00
18.83.3	125 mm diametre C.I. pipe.	each cut	41.25
18.83.4	150 mm diametre C.I. pipe.	each cut	56.25
18.83.5	200 mm diametre C.I. pipe.	each cut	75.00
18.83.6	250 mm diametre C.I. pipe.	each cut	93.75
18.83.7	300 mm diametre C.I. pipe.	each cut	112.55
18.83.8	350 mm diametre C.I. pipe.	each cut	131.30
18.83.9	400 mm diametre C.I. pipe.	each cut	150.05
18.83.10	450 mm diametre C.I. pipe.	each cut	168.80
18.83.11	500 mm diametre C.I. pipe.	each cut	187.55
18.83.12	600 mm diametre C.I. pipe.	each cut	225.05

## 19.0 DRAINAGE

Code No	Description	Unit	Rate Rs.
19.1	Providing, laying and jointing glazed stoneware pipes grade 'A' with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete :		
19.1.1	100 mm diameter	metre	171.85
19.1.2	150 mm diameter	metre	288.80
19.1.3	200 mm diameter	metre	462.50
19.1.4	230 mm diameter	metre	533.50
19.1.5	250 mm diameter	metre	606.70
19.1.6	300 mm diameter	metre	1,048.45
19.2	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W. pipes including bed concrete as per standard design:		
19.2.1	100 mm diameter S.W. pipe	metre	342.05
19.2.2	150 mm diameter S.W. pipe	metre	418.30
19.2.3	200 mm diameter S.W. pipe	metre	487.65
19.2.4	230 mm diameter S.W. pipe	metre	533.90
19.2.5	250 mm diameter S.W. pipe	metre	563.90
19.3	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) upto haunches of S.W. pipes including bed concrete as per standard design :		
19.3.1	100 mm diameter S.W. pipe	metre	162.55
19.3.2	150 mm diameter S.W. pipe	metre	263.45
19.3.3	200 mm diameter S.W. pipe	metre	309.70
19.3.4	230 mm diameter S.W. pipe	metre	339.75
19.3.5	250 mm diameter S.W. pipe	metre	360.55
19.3.6	300 mm diameter S.W. pipe	metre	416.00
19.4	Providing and fixing square-mouth S.W. gully trap grade 'A' complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design :		
19.4.1	100x100 mm size P type		

Code No	Description	Unit	Rate Rs.
19.4.1.1	With F.P.S. Bricks class designation 75	each	1,178.20
19.4.1.2	With Sewer bricks conforming to IS : 4885	each	1,206.10
19.4.2	150 x 100 mm size P type.		
19.4.2.1	With F.P.S. bricks class designation 75	each	1,211.00
19.4.2.2	With sewer bricks conforming to IS : 4885	each	1,238.90
19.4.3	180x150 mm size P type		
19.4.3.1	With F.P.S. bricks class designation 75	each	1,335.85
19.4.3.2	With Sewer bricks conforming to IS : 4885	each	1,363.75
19.5	Dismantling of old S.W. pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps:		
19.5.1	100 mm diameter	metre	18.50
19.5.2	150 mm diameter	metre	20.45
19.5.3	200 mm diameter	metre	21.80
19.5.4	230 mm diameter	metre	22.45
19.5.5	250 mm diameter	metre	23.10
19.5.6	300 mm diameter	metre	24.40
19.5.7	350 mm diameter	metre	28.10
19.5.8	400 mm diameter	metre	30.70
19.5.9	450 mm diameter	metre	32.00
19.7	Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand ) R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size) inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design :		
19.7.1	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) :		
19.7.1.1	With F.P.S. bricks with class designation 75	each	6,077.75

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
19.7.1.2	With Sewer bricks conforming to IS : 4885	each	6,150.70
19.7.2	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) :		
19.7.2.1	With F.P.S. bricks class designation 75	each	13,534.10
19.7.2.2	With Sewer bricks conforming to IS : 4885	each	13,733.60
19.7.3	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) :		
19.7.3.1	With F.P.S. bricks class designation 75	each	10,117.05
19.7.3.2	With Sewer bricks conforming to IS : 4885	each	10,288.70
19.8	Extra for depth for manholes		
19.8.1	Size 90x80 cm		
19.8.1.1	With F.P.S. bricks class designation 75	metre	3,544.20
19.8.1.2	With Sewer bricks conforming to IS : 4885	metre	3,756.60
19.8.2	Size 120x90 cm		
19.8.2.1	With F.P.S. bricks class designation 75	metre	4,245.85
19.8.2.2	With Sewer bricks conforming to IS : 4885	metre	4,499.00
19.9	Supplying and fixing C.I. cover without frame for manholes :		
19.9.1	455x610 mm rectangular C.I. cover (light duty) the weight of the cover to be not less than 23 kg.	each	1,047.40
19.9.2	500 mm diameter C.I. cover (medium duty) the weight of the cover to be not less than 58 kg.	each	2,602.25
19.9.3	560 mm diameter C.I. cover (heavy duty) the weight of the cover to be not less than 108 kg.	each	1,407.45
19.10	Providing and fixing in position precast R.C.C. manhole cover and frame of required shape and approved quality		
19.10.1	L D- 2.5		
19.10.1.1	Rectangular shape 600x450mm internal dimensions	each	900.90
19.10.1.2	Square shape 450mm internal dimensions	each	759.15
19.10.1.3	Circular shape 450mm internal diameter	each	679.30
19.10.2	M D - 10		

Code No	Description	Unit	Rate Rs.
19.10.2.1	Square shape 450mm internal dimension	each	836.75
19.10.2.2	Circular shape 500mm internal diameter	each	801.50
19.11	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	369.55
19.12	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 :		
19.12.1	Rectangular manhole 90x80 cm and 45 cm deep	each	529.70
19.12.2	Rectangular manhole 120x90 cm and 90 cm deep	each	930.30
19.12.3	Rectangular arch type manhole 140x90cm and 2.45m deep	each	1,747.05
19.12.4	Circular manhole 122 cm diameter and 1.68 m deep	each	1,347.40
19.13	Extra for depth of manholes dismantled:		
19.13.1	Rectangular manhole 90x80 cm and 45 cm deep	metre	424.85
19.13.2	Rectangular manhole 120x90 cm and 90 cm deep	metre	505.95
19.13.3	Rectangular arch type manhole 140x90 cm and 2.45m deep (upto 4.25 m depth).	metre	409.30
19.13.4	Circular manhole 122 cm diameter and 1.68 m deep (upto 2.29 m depth)	metre	708.00
19.14	Constructing brick masonry road gully chamber 50x45x60 cm with bricks of class designation 75 in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm precast R.C.C. horizontal grating with frame complete as per standard design :		
19.14.1	With F.P.S. bricks	each	2,632.80
19.15	Constructing brick masonry road gully chamber 45x45x77.5 cm with bricks of class designation 75 in cement mortar 1:4 (1 cement : 4 coarse sand ) with precast R.C.C. vertical grating complete as per standard design :		
19.15.1	With F.P.S. Bricks	each	2,917.50
19.16	Constructing brick masonry road gully chamber 110x50x77.5 cm with bricks of class designation 75 in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm precast R.C.C. horizontal grating with frame and vertical grating complete as per standard design :		
19.16.1	With F.P.S. bricks	each	5,103.65
19.17	Constructing brick masonry chamber for underground C.I.		

Code No	Description	Unit	Rate Rs.
	inspection chamber and bends with 75 class designation bricks in cement mortar 1:4 (1 cement : 4 coarse sand) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) R.C.C. top slab with 1:2:4 mix (1 cement :2 coarse sand : 4 graded stone aggregate 20 mm nominal size) foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design :		
19.17.1	Inside dimensions 455x610mm and 45 cm deep for single pipe line :		
19.17.1.1	With F.P.S. bricks	each	3,497.85
19.17.2	Inside dimensions 500x700 mm and 45 cm deep for pipe line with one or two inlets :		
19.17.2.1	With F.P.S. bricks	each	4,064.00
19.17.3	Inside dimensions 600x 850 mm and 45 cm deep for pipe line with three or more inlets :		
19.17.3.1	With F.P.S. bricks	each	4,645.90
19.18	Extra for depth beyond 45 cm of brick masonry chamber :		
19.18.1	For 455x610 mm size		
19.18.1.1	With F.P.S. bricks	metre	2,466.20
19.18.2	For 500x700 mm size		
19.18.2.1	With F.P.S. bricks	metre	2,690.30
19.18.3	For 600x850 mm size		
19.18.3.1	With F.P.S. bricks	metre	31,32.65
19.19	Making soak pit 2.5 m diameter 3.0 metre deep with 45 x 45 cm dry brick honey comb shaft with bricks of class designation 75 and S.W. drain pipe 100 mm diameter, 1.8 m long complete as per standard design.		
19.19.1	With F.P.S. bricks	each	10,473.55
19.20	Constructing soak pit 1.20x1.20x1.20m filled with brickbats including S.W. drain pipe 100 mm diameter and 1.20 m long complete as per standard design.	each	1,178.25



Code No	Description	Unit	Rate Rs.
19.21	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 :		
19.21.1	100 mm dia	each	217.15
19.21.2	150 mm dia	each	307.90
19.22	Providing and fixing precast dense cement concrete (Vibro-pressed) drain section block of different size as per approved drawing, design and strength as per IS:2185 (part I) of grade 'D' (5.00mm <sup>2</sup> ) proper quality of additive/admixture like plasticizer etc. added to produce high quality and durable drain section Blocks of 'L' shape 'U' shape etc. with fixing and joining with C.M.1:4 in proper grade and level complete in all respect including earth work and disposal of surplus earth within 500 m lead. (cost of Steel & welded mesh shall be paid extra).		
19.22.1	(i) 40mm thick	Sqm.	300.00
19.22.2	(ii) Upto 60mm thick	Sqm.	372.00
19.22.3	(iii) Upto 80mm thick	Sqm.	456.00
19.23	Cleaning and removal of earth, silt, sludge, kankar, boulder, building material and garbage in existing nallah/drains including construction of bye pass arrangement to bypass water with 1.5m lift from ground level and lead upto 50 m including foul & saturated condition where pumping out or bailing out of water is required, including shoring, shuttering where required and dewatering. Making access for disposal and dressing disposal side as per the directed of the Engineer.		
19.23.1	Depth upto 1.50 m	Cum	248.60
19.24.1	Add extra for depth above 1.50 m and upto 3.00 m over item No. 19.23.1	Cum	30.00
19.24.2	Add extra for depth above 3.00 m and upto 4.50 m over item No. 19.23.1	Cum	66.00
19.24.3	Add extra for depth above 4.50 m and upto 6.00 m over item No. 19.23.1	Cum	109.00
19.24.4	Add extra for depth above 6.00 m and upto 7.50 m over item No. 19.23.1	Cum	160.00
19.24.5	Add extra for depth above 7.50 m and upto 9.00 m over item No. 19.23.1	Cum	222.00

## 21.0 ALUMINIUM WORK

Code No	Description	Unit	Rate Rs.
21.1	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS : 1285, fixed with rawl plugs and screws or with fixing clips, or with expansion hold fasteners including necessary filling up of gaps at junctions, at top, bottom and sides with required PVC/neoprene felt etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium 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 and panelling to be paid for separately) :		
21.1.1	For fixed portion.		
21.1.1.1	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	kg	298.95
21.1.1.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	kg	321.80
21.1.1.3	Polyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron)	kg	334.50
21.1.2	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 PVC / neoprene gasket required (Fittings shall be paid for separately).		
21.1.2.1	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	kg	320.45
21.1.2.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	kg	343.75
21.1.2.3	Polyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron)	kg	358.60
21.2	Providing and fixing 12mm thick Pre-laminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminium 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.		

Code No	Description	Unit	Rate Rs.
21.2.1	Pre-laminated particle board with decorative lamination on one side and balancing lamination on other side.	sqm	830.65
21.2.2	Pre-laminated particle board with decorative lamination on both sides.	sqm	868.80
21.3	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with PVC/ neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item) :		
21.3.1	With float glass panes of 4.0 mm thickness	sqm	609.50
21.3.2	With float glass panes of 5.50 mm thickness	sqm	731.95
21.3.3	With float glass panes of 8 mm thickness	sqm	609.50
21.4	Providing and fixing double action hydraulic floor spring of approved brand and manufacture IS : 6315 marked, for doors including cost of cutting floors as required, embedding in floors 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.		
21.4.1	With stainless steel cover plate	each	1,828.70
21.4.2	With brass cover plate	each	2,010.20
21.5	Providing and fixing powder coated aluminium work (minimum thickness of powder coating 50 micron) consisting of tee/ angle sections, of approved make conforming to IS : 733 in frames of false ceiling including aluminium angle cleats with necessary C.P. brass/ stainless steel sunk screws, aluminium perimeter angles fixed to wall with 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	400.75
21.6	Providing and fixing 6 mm 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 60mm long and expansion hold fasteners 12.5 mm dia. 40mm long complete as per direction of Engineer -in-charge.	each	77.70
21.7	Providing and fixing machine moulded aluminium covering of approved pattern & design, made out of machine cut aluminium sheet and machine holed for receiving screws, over expansion joints on vertical surfaces/ceilings with full threaded, cadmium plated steel screws 4mm dia. stem, 30mm long and aluminium		

Code No	Description	Unit	Rate Rs.
	washers 2mm thick, 15mm dia. at a staggered pitch of 200mm centre to centre including drilling holes in the receiving surface and providing expandable plastic sleeves in holes etc. complete.		
21.7.1	Anodised aluminium sheet 2.5mm thick (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	kg	359.10
21.7.2	Powder coated aluminium sheet 2.5mm thick (minimum thickness of powder coating 50 micron)	kg	381.95
21.8	Filling the gap in between aluminium frame & 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.		
21.8.1	Upto 5mm depth and 5 mm width	metre	61.30
21.9	Extra for applying additional anodic coating AC 25 instead of AC 15 to aluminium extruded sections.		
21.9.1	For fixed portion	kg	9.70
21.9.2	For shutters of doors, windows & ventilators.	kg	9.70
21.10	Providing and fixing double glazed hermetically sealed glazing in aluminium windows, ventilators and partition etc. with 6 mm thick clear float glass both side having 12 mm air gap including providing EPDM gasket, perforated aluminium spacers, desiccants, sealant (Both primary and secondary sealant ) etc. as per specifications, drawings and direction of Engineer-in-charge complete.	sqm	2,964.85
21.11	Providing and fixing stainless steel (SS 304 grade) adjustable friction windows stays of approved quality with necessary stainless steel screws etc. to the side hung windows as per direction of Engineer-in-charge complete.		
21.11.1	205 X 19 mm	each	184.65
21.11.2	255 X 19 mm	each	203.55
21.11.3	355 X 19 mm	each	260.15
21.11.4	510 X 19 mm	each	480.40
21.11.5	710 X 19 mm	each	873.65
21.12	Providing and fixing aluminium tubular handle bar 32 mm outer dia, 3.0 mm thick & 2100 mm long with SS screws etc .complete as per direction of Engineer-in-Charge.		
21.12.1	Anodized (AC 15 ) aluminium tubular handle bar	each	443.70
21.12.2	Powder coated minimum thickness 50 micron aluminium tubular	each	479.30

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
	handle bar.		
21.12.3	Polyester powder coated minimum thickness 50 micron aluminium tubular handle bar	each	499.05
21.13	Providing and fixing 100mm brass locks (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.	each	247.60
21.14	Providing and fixing anodised aluminium (anodised transparent or dyed to required shade according to IS : 1868. Minimum anodic coating of grade AC 15) sub frame work for windows and ventilators a with extruded built up standard tubular sections of approved make conforming to IS: 733 and IS : 1285 fixed with rawl plugs and stainless steel screws etc.	kg	311.55
21.15	Providing fixing aluminium casement windows fastener of required length for aluminium windows with necessary screws etc. complete.		
21.15.1	Anodized (AC 15) aluminium	each	39.50
21.15.2	Powder coated minimum thickness 50 micron aluminium.	each	43.10
21.15.3	Polyester powder coated minimum thickness 50 micron aluminium .	each	45.55
21.16	Providing fixing aluminium round shape handle of outer dia 100mm with SS screws etc. Complete as per direction of Engineer-in-charge		
21.16.1	Anodized (AC 15 ) aluminium	each	47.95
21.16.2	Powder coated minimum thickness 50 micron aluminium	each	52.80
21.16.3	Polyester powder coated minimum thickness 50 micron aluminium .	each	55.20

## 22.0 WATER PROOFING

Code No	Description	Unit	Rate Rs.
22.1	Providing and laying integral cement based treatment for water proofing on horizontal surface at all depth below ground level for under ground structures as directed by Engineer-in-Charge and consisting of : i) 1st layer of 22mm to 25mm thick approved and specified rough stone slab over a 25mm 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 . ii) 2nd layer of 25mm thick cement mortar 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound in recommended proportions. iii) Finishing top with stone aggregate of 10mm to 12mm nominal size spreading @ 8 cumd/sqm thoroughly embedded in the 2nd layer.		
22.1.1	Using rough Kota stone.	sqm	701.70
22.2	Providing and laying integral cement based treatment for water proofing on the vertical surface by fixing specified stone slab 22 mm to 25mm thick with cement slurry mixed with water proofing compound conforming to IS:2645 in recommended proportions with a gap of 20mm (minimum) between stone slabs and the receiving surfaces and filling the gaps with neat cement slurry mixed with water proofing compound and finishing the exterior of stone slab with cement 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 :		
22.2.1	Using rough Kota stone	sqm	874.05
22.3	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen and the like consisting of : i) 1st course of applying cement slurry @ 4.4 Kg/sqm mixed with water proofing compound conforming to IS 2645 in recommended proportions including rounding off junction of vertical and horizontal surface. ii) 2nd course of 20mm 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. iii) 3rd course of applying blown or residual bitumen applied hot at 1.7 Kg. per sqm of area. iv) 4th 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.)	sqm	341.15

Code No	Description	Unit	Rate Rs.
22.4	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 :		
22.4.1	Serrated with central bulb ( 225mm wide, 8-11mm thick).	metre	403.95
22.4.2	Dumb bell with central bulb (180mm wide, 8mm thick).	metre	374.95
22.4.3	Kickers (320mm wide, 5mm thick).	metre	397.90
22.5	Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying : a) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. This layer will be allowed to air cure for 4 hours. b) Second layer of slurry of cement @ 0.242 kg/sqm mixed with water proofing cement compound @ 0.126 kg/sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.	sqm	194.40
22.6	Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying : a) after surface preparation, first layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 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. The entire treatment will be taken upto 30cm on parapet wall and tucked into groove in parapet all around. d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately For the purpose of measurement the entire treated surface will be measured.	sqm	287.30
22.7	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: a) Applying a slurry coat of neat cement using 2.75 kg/sqm. of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300mm height including cleaning the surface before treatment. b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115mm		

Code No	Description	Unit	Rate Rs.
	<p>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 20 mm 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 300 mm height including rounding of junctions of walls and slabs c) After two days of proper curing applying a second coat of cement slurry using 2.75kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge. d) Finishing the surface with 20 mm thick jointless 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 300x300 mm square 3mm deep. e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineer-in-Charge :</p>		
22.7.1	With average thickness of 120mm and minimum thickness at khurra as 65 mm.	sqm	633.00
22.8	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 IS : 702 applied hot @ 1.45 Kg per square metre of area for each course, second course of roofing felt type 3 grade-I (hessian based self finished bitumen felt) and fourth and final course of stone grit 6mm and down size or pea-sized gravel spread at 6 cubic diameter per square metre including preparation of surface but excluding grading complete with :		
22.8.1	Bitumen felt (hessian base) type 3 grade I conforming to IS : 1322.	sqm	256.15
22.9	Providing and laying six courses water proofing treatment with bitumen felt over roofs consisting of first, third and fifth course of blown bitumen 85/25 or 90/15 conforming to IS : 702 applied hot @ 1.45, 1.20 and 1.45 Kg per square metre of area respectively, second and fourth courses of roofing felt type 3 grade I conforming to IS : 1322 (Hessian based self finished bitumen felt) conforming to IS : 1322 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.	sqm	407.70



Code No	Description	Unit	Rate Rs.
22.10	Providing and laying six courses water proofing treatment with bitumen felt over roofs consisting of first, third and fifth courses of blown or / and residual bitumen applied hot at 1.45, 1.20 and 1.70 kg per square metre of area respectively, second and fourth courses of roofing felt type 2 grade I (fibre base self finished bitumen felt) six and final courses of stone grit 6mm and down size or pea sized gravel spread at 6cu.dm per sqm including preparation of surface, excluding grading, complete.	sqm	444.00
22.11	Providing and laying six courses water proofing treatment with bitumen felt over roofs consisting of first, third and fifth courses of blow or/ and residual bitumen applied hot at 1.45, 1.20 and 1.70 kg per square metre of area respectively, second and fourth courses of roofing felt type 2 grade II (glass fibre base self finished bitumen felt) and sixth and final course of stone grit 6mm and down size or pea sized gravel spread at 6 cubic dm per sqm including preparation of surface but excluding grading, complete.	sqm	444.00
22.12	Supplying and applying bituminous solution primer on roof and or wall surface at 0.24 litre per sqm.	sqm	20.65
22.13	Deduct for omitting in water proofing treatment final course of spreading stone grit 6mm down size or pea sized gravel :		
22.13.1	At 6 cudm per sqm.	sqm	7.80
22.13.2	At 8 cudm per sqm.	sqm	10.20
22.14	Grading roof for water proofing treatment with		
22.14.1	Cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	3,603.05
22.14.2	Cement mortar 1:3 (1 cement : 3 coarse sand)	cum	6,067.80
22.14.3	Cement mortar 1:4 (1cement : 4 coarse sand)	cum	5,234.10
22.15	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 @ 0.40Kg 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 1.5mm thick of 2.25 Kg/sqm weight consisting of five layers prefabricated with centre core as 20micron HMHDPE film sandwiched on both sides with polymeric mix and the polymeric mix is protected on both side with 20micron HMHDPE film. 7th, the top most layer shall be finished with brick tiles of class designation 100 grouted with cement mortar 1:3 (1cement:3 fine sand) mixed with 2% integral water proofing compound by weight of cement over a 12mm layer	sqm	349.05

Code No	Description	Unit	Rate Rs.
	of cement mortar 1:3 (1 cement : 3 fine sand) and finished neat which shall be paid for separately.		
22.16	Providing and laying in situ five course water proofing treatment with APP (Atactic Polypropylene) modified Polymeric membrane over roof consisting of first coat of bitumen primer @ 0.40Kg 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, the 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 which shall be paid for separately.	sqm	268.40
22.17	Providing and laying in situ seven course water proofing treatment with APP (Atactic Polypropylene) modified Polymeric membrane over roof consisting of first coat of bitumen primer @ 0.40Kg 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 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. 7th, the 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 12 mm layer of cement mortar 1:3 ( 1 cement : 3 fine sand) and finished neat which shall be paid for separately.	sqm	442.25
22.18	Providing and fixing APP (Atactic Polypropylene Polymer) modified prefabricated five layer 2mm thick water proofing membrane, black finished reinforced with glass fibre matt consisting of a coat of bitumen primer for bitumen membrane @ 0.40 ltr/sq. mtr. 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 : Joint strength in longitudinal and transverse		

Code No	Description	Unit	Rate Rs.
	direction at 23°C as 350/300 N/ 5cm. Tear strength in longitudinal and transverse direction as 60/80N. 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 authorised applicator of the manufacture of membrane.		
22.18.1	2mm (for corrugated roof sheets)	sqm	268.55
22.19	Providing and laying APP (Atactic Polypropylene Polymer) modified prefabricated five layer, 3mm thick water proofing membrane, black finished reinforced with glass fibre matt consisting of a coat of bitumen primer for bitumen membrane @ 0.40 ltr/sqm. by the same membrane manufactured 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 : 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. 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 authorised applicator of the manufacturer of membrane :		
22.19.1	3 mm thick	sqm	319.10
22.20	Providing and laying APP (Atactic Polypropylene Polymer) modified prefabricated five layer 3mm thick water proofing membrane, black finished reinforced with non-woven polyester matt consisting of a coat of bitumen primer for bitumen membrane @ 0.40 ltr/sqm. 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 : Joint strength in longitudinal and transverse direction at 23°C as 650/450N/5cm. Tear strength in longitudinal and transverse direction as 300/250N. 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 authorised applicator of the manufacturer of membrane :		
22.20.1	3 mm thick	sqm	367.05

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
22.21	Extra for covering top of membrane with Geotextile, 120gsm non woven, 100% polyester of thickness 1 to 1.25mm bonded to the membrane with intermittent touch by heating the membrane by Butane Torch as per manufactures recommendation [for Item No. 22.18 to 22.20].	sqm	42.30