

The Scientific Costing Guide

BuildCOST

Building Construction Cost Data



Item of Work Cost Database

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2010

(Seventh Edition)

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01 45		Quality Control						
01 45 23		Testing and Inspecting Services	UNIT	BARE COST				TOTAL INCL OHP
				Material	Labour	Equipment	TOTAL	
21		Pile Test						
		Vertical load testing (INITIAL) of piles in accordance with IS 2911 (Part IV) including installation of loading platform / or reaction piles and preparation of pile head or construction of test cap and dismantling of test cap after test etc. to 150% of designed load, complete, of pile capacities :						
	10005	upto 50 ton	/test	33,750.00	-	-	33,750.00	38,812.50
	10010	above 50 ton and upto 100 ton	/test	67,500.00	-	-	67,500.00	77,625.00
	10015	add for every additional 50 ton or part thereof	/test/50 t	33,750.00	-	-	33,750.00	38,812.50
		Vertical load testing (ROUTINE) of piles in accordance with IS 2911 (Part IV) including installation of loading platform / or reaction piles and preparation of pile head or construction of test cap and dismantling of test cap after test etc. to 150% of designed load, complete, of pile capacities :						
	10020	Upto 50 ton	/test	33,750.00	-	-	33,750.00	38,812.50
	10025	above 50 ton and upto 100 ton	/test	67,500.00	-	-	67,500.00	77,625.00
	10030	add for every additional 50 ton or part thereof	/test/50 t	28,125.00	-	-	28,125.00	32,343.75
		Cyclic vertical load testing of pile in accordance with IS:2911 (part IV) including preparation of pile head etc., to 150% of designed load, complete, of pile capacities :						
	10035	upto 50 ton	/test	33,750.00	-	-	33,750.00	38,812.50
	10040	above 50 t and upto 100 ton	/test	67,500.00	-	-	67,500.00	77,625.00
	10045	add for every additional 50 ton or part thereof	/test/50 t	33,750.00	-	-	33,750.00	38,812.50
		Lateral load testing of single pile in accordance with IS:2911 (Part IV) to 150% of designed load, complete, of pile capacities :						
	10050	upto 50 ton	/test	33,750.00	-	-	33,750.00	38,812.50
	10055	Above 50 ton and upto 100 ton	/test	61,875.00	-	-	61,875.00	71,156.25
	10060	Add for every additional 50 ton or part thereof.	/test/50 t	33,750.00	-	-	33,750.00	38,812.50
		Vertical load testing (INITIAL) of piles in accordance with IS 2911 (Part IV) including installation of loading platform / or reaction piles and preparation of pile head or construction of test cap and dismantling of test cap after test etc. to 250% of designed load complete, of pile capacities :						
	10065	upto 50 ton	/test	33,750.00	-	-	33,750.00	38,812.50
	10070	above 50 ton and upto 100 ton	/test	67,500.00	-	-	67,500.00	77,625.00
	10075	add for every additional 50 ton or part thereof	/test/50 t	33,750.00	-	-	33,750.00	38,812.50
		Vertical load testing (ROUTINE) of piles in accordance with IS 2911 (Part IV) including installation of loading platform / or reaction piles and preparation of pile head or construction of test cap and dismantling of test cap after test etc. to 250% of designed load, complete, of pile capacities :						
	10080	upto 50 ton	/test	33,750.00	-	-	33,750.00	38,812.50
	10085	above 50 ton and upto 100 ton	/test	56,250.00	-	-	56,250.00	64,687.50
	10090	add for every additional 50 ton or part thereof	/test/50 t	33,750.00	-	-	33,750.00	38,812.50
50		Testing						

02 32 Geotechnical Investigations								
02 32 19		Exploratory Excavations	UNIT	BARE COST				TOTAL INCL OHP
				Material	Labour	Equipment	TOTAL	
17		Test Pit						
		Drilling 150 mm diameter bore holes in all type of soils by manual auguring, conducting standard penetration tests, collecting disturbed and undisturbed soil samples, conducting necessary laboratory tests, recommending suitable type of foundation and allowable bearing pressure and submission of report in three copies :						
	10005	Ground level to 6.0 m or refusal, whichever is earlier	m	309.38	-	-	309.38	355.78
	10010	Over 6.0 m and upto 10.0 m or refusal, whichever is earlier	m	337.50	-	-	337.50	388.13
	10015	Over 10.0 m and upto 12.0 m or refusal, whichever is earlier	m	365.63	-	-	365.63	420.47
		Drilling 150 mm diameter bore holes in all type of soils by Calyx drilling, conducting standard penetration tests, collecting disturbed and undisturbed soil samples, conducting necessary laboratory tests, recommending suitable type of foundation and allowable bearing pressure and submission of report in three copies :						
	10020	Ground level to 6.0 m or refusal, which is earlier	m	731.25	-	-	731.25	840.94
	10025	Over 6.0 m and upto 10.0 m or refusal, which is earlier	m	765.00	-	-	765.00	879.75
	10030	Over 10.0 m and upto 12.0 m or refusal, which is earlier	m	956.25	-	-	956.25	1,099.69
		Drilling 100 mm dia bore hole in rock using double core barrel Diamond/TC including recovery of cores, wherever possible and keeping a log of the same :						
	10035	Weathered / disintegrated rock	m	1,968.75	-	-	1,968.75	2,264.06
	10040	Hard rock	m	3,937.50	-	-	3,937.50	4,528.13

02 41 Demolition								
02 41 13		Selective Site Demolition	UNIT	BARE COST				TOTAL INCL OHP
				Material	Labour	Equipment	TOTAL	
21		Concrete / RCC / Masonry Demolition						
	10005	Demolishing lime concrete / cement concrete in all mixes, in foundations, super structure and basement, at all heights / depths, including disposal of unserviceable materials upto a 50 m lead.	cum	-	130.08	-	130.08	149.59
	10010	Demolishing RCC work in foundations, super structure and basement, at all heights / depths, including cutting, straightening scrapping, cleaning and stacking of reinforcement bars and disposal of unserviceable materials upto a 50 m lead.	cum	-	533.33	-	533.33	613.33
	10015	Demolishing RB work in foundations, super structure and basement, at all heights / depths, including cutting, straightening scrapping, cleaning and stacking of reinforcement bars and disposal of unserviceable materials upto a 50 m lead.	cum	-	484.85	-	484.85	557.58
	10020	Dismantling / Demolishing brick work in cement / lime mortar in foundations, super	cum	-	592.59	-	592.59	681.48

03 05 Common Work Results for Concrete								
03 05 13		Basic Concrete Materials	UNIT	BARE COST				TOTAL INCL OHP
				Material	Labour	Equipment	TOTAL	
20		Admixture, Concrete						
		Providing and mixing admixtures, conforming to IS:9103, in recommended proportions, in concrete :						
	10005	Accelerating admixtures	kg	41.37	3.20	-	44.57	51.26
	10010	Retarding admixtures	kg	44.07	3.20	-	47.27	54.36
	10015	Air entraining admixture	kg	29.68	3.20	-	32.88	37.82
	10020	Water reducing admixtures (Plasticizer/Super Plasticizer)	kg	62.07	3.20	-	65.27	75.06
21		Concrete Additives						
	10005	Providing and mixing water proofing compound, conforming to IS:2645, in cement concrete/reinforced concrete works.	kg	53.97	3.20	-	57.17	65.75

03 11 Concrete Forming								
03 11 13		Structural Cast-in-Place Concrete Forming	UNIT	BARE COST				TOTAL INCL OHP
				Material	Labour	Equipment	TOTAL	
18		Forms In Place						
		Providing and fixing centering and shuttering for concrete work (plain and reinforced) in following locations, including strutting, propping, bracing, bolting tie bolt / spring coil / plastic cone, wedging, easing, striking, removal etc, complete. Allow for forming grooves, drips, throats, chamfers, cut-outs, openings etc. where called for and for dressing with approved shuttering oil to prevent adhesion. The works are at all levels. The floor height is up to 4.00 m :						
	10005	Sides of footings of columns and walls and sides of base slabs.	sqm	49.19	36.40	-	85.59	98.43
	10010	Foundation beams, floor channels, kerb stones and drain walls.	sqm	49.19	36.40	-	85.59	98.43
	10015	Sides of columns, piers and pedestals of any shape, size and profile.	sqm	61.97	115.54	-	177.51	204.15
	10020	Sides of walls, retaining walls, attached columns, pilasters.	sqm	48.09	104.42	-	152.51	175.38
	10025	Soffits and sides of beams, plinth beams, lintels, ties, ribs, pergolas and such other, string courses, cornices, corbels.	sqm	50.60	83.20	-	133.80	153.87
	10030	Sides of facias, parapets, railings, planting boxes and such other vertical elements.	sqm	44.74	145.65	-	190.39	218.96
	10035	Soffits and sides of suspended slabs, floor and roof projections, landing slabs, canopies, chajjas, slabs of planting boxes and such other horizontal elements, coffer ribs and slabs.	sqm	50.85	115.54	-	166.39	191.35
	10040	Soffits and sides of waist slabs of stairs, sides of risers and stepped waist slabs, spiral staircases, etc.	sqm	37.12	126.52	-	163.64	188.18
	10045	Sides of mullions, suspenders, struts, ties, slings including flarings or taperings of any shape and profile.	sqm	64.06	241.40	-	305.46	351.27
	10050	Soffits of inclined slabs and ramps, folded plates. (slopes more than 15o and upto 45o)	sqm	52.68	145.65	-	198.33	228.09
	10055	Arches, archribs, domes, shells, vaults, etc.	sqm	262.86	253.18	-	516.04	593.45
	10060	Well Steinings	sqm	60.69	559.87	-	620.56	713.64
	10065	Vertical and horizontal fins individually or	sqm	44.74	145.65	-	190.39	218.96

04 21 Clay Unit Masonry								
04 21 13	Brick Masonry	UNIT	BARE COST				TOTAL INCL OHP	
			Material	Labour	Equipment	TOTAL		
46	Brick Work, Conventional Bricks							
	Providing brick work with bricks of class 75, joints finished flush/raked to 12 mm depth, cured including necessary scaffolding complete in cement mortar 1:6 with coarse sand, in :							
10005	Foundations and plinths (1.5 m below and upto 1.2 m above GL)	cum	1,858.93	423.07	12.50	2,294.50	2,638.67	
10010	Superstructures upto 20.0 m above plinth level.	cum	1,880.43	810.64	24.00	2,715.07	3,122.33	
10015	Basement, under ground water tank and the like, upto 7.0 m below GL	cum	1,863.33	595.06	17.60	2,475.99	2,847.39	
10020	Arches, vaults, domes, etc., in super structures/basements and the like in cement mortar 1:3 with coarse sand including centering, shuttering, strutting, propping, wedging, bolting and removal, etc., complete.	cum	2,781.59	1,204.80	17.40	4,003.79	4,604.35	
10025	Add for every additional 4.0 m height or part thereof for brick work/exposed brick work beyond 7.0 m below GL	cum	-	120.30	-	120.30	138.35	
10030	Add for every additional 20.0 m height or part thereof for brick work/exposed brick work beyond 20.0 m above plinth level	cum	-	238.80	-	238.80	274.62	
10035	Add for brick work in cement mortar 1:4 in place of 1:6	cum	156.00	-	-	156.00	179.40	
10040	Add for brick work in cement mortar 1:3 in place of 1:6	cum	312.00	-	-	312.00	358.80	
10045	Deduct for brick work in cement mortar with fine sand in place of coarse sand	cum	158.99	-	-	158.99	182.84	
10050	Add for brick work/exposed brick work in square or rectangular pillars	cum	-	145.94	-	145.94	167.83	
10055	Add for brick work, curved in plan/elevation, upto mean radius not exceeding 6.0 m	cum	93.15	134.22	-	227.37	261.47	
10060	Add for cutting or chamfering the bricks to required shape in masonry work	m	-	5.94	-	5.94	6.83	
10065	Deduct for using bricks of class 50 in place of class 75	cum	80.03	-	-	80.03	92.03	
10070	Providing 70 mm thick and 57 mm projected string course/ band with bricks of class 75 in cement mortar 1:4 with coarse sand	m	8.22	3.97	0.10	12.29	14.13	
10075	Providing and making mouldings, cornices & corbels with bricks of class 75 in cement mortar 1:4 with coarse sand (girth to be measured in mm and length in running metres)	100 mm/m	7.70	4.46	0.10	12.26	14.10	
	Providing brick work with bricks of class 75 in half brick thick walls in any shape and profile including curvilinear, laid in cement mortar 1:4 with coarse sand, joints finished flush/raked to 12 mm depth, cured, including scaffolding and flat reinforcement (25 x 3 mm) at every fourth course and embedding the same in adjoining masonry/columns by drilling holes etc complete :							
10080	Super structure upto 20.0 m above plinth level.	sqm	290.70	97.53	1.80	390.03	448.52	
10085	Basements, and the like, upto 7.0 m below GL	sqm	290.70	77.93	2.10	370.73	426.33	
10090	Arches, domes, vaults at all levels in cement mortar 1:3 with coarse sand including centring and shuttering strutting, propping, bolting and removal complete.	sqm	503.62	358.57	2.10	864.29	993.94	

05 05 Common Work Results for Metals								
05 05 23		Metal Fastenings	UNIT	BARE COST				TOTAL INCL OHP
				Material	Labour	Equipment	TOTAL	
10		Bolts & Hex Nuts						
	10005	Providing and fixing MS bolts upto 300 mm in length including nuts and washers, complete.	kg	41.36	13.30	-	54.66	62.86
88		Welding						
	10005	Gas welding including mobilization at site, complete, (for designed structural welding).	10 mm/m	200.00	-	-	200.00	230.00
	10010	Gas welding including mobilization at site, complete, (for non structural welding).	10 mm	2.00	-	-	2.00	2.30
	10015	Electric arc welding including mobilization at site, complete (for designed structural welding).	10 mm/m	150.00	-	-	150.00	172.50
	10020	Electric arc welding including mobilization at site, complete (for non structural welding).	10 mm	1.75	-	-	1.75	2.01
05 12 Structural Steel Framing								
05 12 23		Structural Steel for Buildings	UNIT	BARE COST				TOTAL INCL OHP
				Material	Labour	Equipment	TOTAL	
23		Structural Steel Built Up Section						
		Providing, fabricating and erecting built up steel tubular trusses, welded and bolted including special shaped washers, etc. and applying a primer coat of zinc chromate on duly prepared surfaces, complete :						
	10005	Hot finished, welded tubes	kg	47.86	11.81	-	59.67	68.61
	10010	Hot finished, seamless tubes	kg	65.67	11.81	-	77.48	89.10
	10015	Electric resistance or induction welded tubes	kg	58.99	11.81	-	70.80	81.42
	10020	Providing, fabricating and erecting bolted structural steel built up sections, trusses and frames and applying a primer coat of zinc chromate on duly prepared surfaces, complete.	kg	39.61	7.72	-	47.33	54.43
	10025	Providing, fabricating and erecting welded structural steel built up sections in trusses and frames and applying a primer coat of zinc chromate on duly prepared surfaces, complete.	kg	41.59	5.32	-	46.91	53.95
	10030	Providing and applying three finish coats of synthetic enamel paint on steel surfaces, complete.	sqm	22.77	26.28	-	49.05	56.41
81		Structural Steel Single Section						
	10005	Providing, fabricating and erecting structural steel, single sections, and applying a primer coat of zinc chromate on duly prepared surfaces, complete.	kg	44.80	4.27	-	49.07	56.43
	10010	Providing and fixing wind ties of MS section	kg	38.34	3.90	-	42.24	48.58
05 51 Metal Stairs								
05 51 16		Metal Floor Plate Stairs	UNIT	BARE COST				TOTAL INCL OHP
				Material	Labour	Equipment	TOTAL	
13		Steel Stairs						
		Providing, fabricating and erecting MS welded built up sections/ frames and applying a primer coat of zinc chromate on duly prepared surfaces, complete :						
	10005	In stringers, treads, landings, etc. of	kg	52.33	2.22	-	54.55	62.72

06 11 Wood Framing								
06 11 10	Wood Framing	UNIT	BARE COST				TOTAL INCL OHP	
			Material	Labour	Equipment	TOTAL		
12	Ceiling Framing							
	Providing, fabricating and fixing in position selected quality seasoned and chemically treated wood work in frames of false ceilings, partitions, etc., complete :							
	10005 1st class Deodar wood.	cum	43,186.21	2,187.50	-	45,373.71	52,179.77	
	10010 2nd class Deodar wood.	cum	42,339.14	2,187.50	-	44,526.64	51,205.63	
	10015 Sal wood	cum	25,147.11	2,187.50	-	27,334.61	31,434.80	
	10020 2nd class Kail wood	cum	18,943.18	2,187.50	-	21,130.68	24,300.28	
	10025 Hollock wood	cum	26,888.98	2,187.50	-	29,076.48	33,437.95	
40	Wall Framing							
	Providing and fixing wooden frame with 50 mm x 50 mm battens, fixed at 600 mm centre to centre (both ways). Allow for solignum treatment to the timber framework :							
	10005 Sal wood	sqm	236.72	67.67	-	304.39	350.05	
	10010 2nd class CP teak Wood	sqm	515.85	67.67	-	583.52	671.05	
	Providing and fixing wooden framework with 50 mm x 75 mm battens, fixed at 600 mm centre to centre(both ways). Allow for solignum treatment to the timber framework :							
	10015 Sal wood	sqm	336.52	98.48	-	435.00	500.26	
	10020 2nd class CP Teak Wood	sqm	755.21	98.48	-	853.69	981.75	
06 17 Shop-Fabricated Structural Wood								
06 17 53	Shop-Fabricated Wood Trusses	UNIT	BARE COST				TOTAL INCL OHP	
			Material	Labour	Equipment	TOTAL		
10	Roof Trusses							
	Providing, fabricating and fixing in position selected quality seasoned & chemically treated wrought wood work in trusses, rafters, runners posts, struts, walls plates etc. of size and profile in inclined roofs including anchoring to concrete members with holding down bolts, fixing accessories & all incidental works (Flat, angles, other steel sections and holding down bolts used in connections will be paid separately), complete :							
	10005 2nd class CP teak wood	cum	55,254.13	3,034.50	-	58,288.63	67,031.93	
	10010 1st class Deodar wood	cum	40,923.41	3,034.50	-	43,957.91	50,551.60	
	10015 2nd class Deodar wood	cum	39,497.87	3,034.50	-	42,532.37	48,912.23	
	10020 Sal wood	cum	22,715.91	3,034.50	-	25,750.41	29,612.98	
	10025 Hollock wood	cum	23,411.30	3,034.50	-	26,445.80	30,412.67	
06 22 Millwork								
06 22 13	Standard Pattern Wood Trim	UNIT	BARE COST				TOTAL INCL OHP	
			Material	Labour	Equipment	TOTAL		
12	Mouldings							
	Providing and fixing select quality seasoned and chemically treated wooden moulded beadings to door and window frames with mild steel screws/headless nails and a primer coat on unexposed surface, etc. complete, of beading sizes :							
	Burma teak wood :							
	10005 30 x 12 mm	m	29.16	25.10	-	54.26	62.40	

07 11 Dampproofing							
07 11 17	Damp-Proof Course	UNIT	BARE COST				TOTAL INCL OHP
			Material	Labour	Equipment	TOTAL	
10	Damp-Proof Course						
	Providing and laying damp-proof course with cement concrete 1:2:4 with graded stone aggregate 12.5 mm nominal size, including side shuttering, compacting etc., complete.						
10005	40 mm thick	sqm	134.52	45.80	5.50	185.82	213.69
10010	50 mm thick	sqm	166.78	50.73	6.10	223.61	257.15
10015	Providing and mixing waterproofing material in cement concrete work @ 1.0 kg per 50 kg bag of cement used in the mix.	kg/50kg	53.97	3.20	-	57.17	65.75
10020	Applying a coat of residual petroleum bitumen of penetration 80/100 @ 1.70 kg/sq. on damp-proof course.	sqm	54.12	7.02	-	61.14	70.31

07 13 Sheet Waterproofing							
07 13 13	Bituminous Sheet Waterproofing	UNIT	BARE COST				TOTAL INCL OHP
			Material	Labour	Equipment	TOTAL	
13	Built-Up Waterproofing						
	Providing and laying vapour barrier of low density polythene film (700 microns), laid in blown grade bitumen at 1 kg. per. sqm, over a coat of primer at 400 gms per sqm and finished with a coat of bitumen at 1 kg per sqm as per specifications, complete :						
10005	Over RCC roof surfaces.	sqm	265.02	11.10	-	276.12	317.54
10010	On external wall surfaces.	sqm	265.02	12.95	-	277.97	319.67
	Providing and laying vapour barrier of aluminium foil 0.075 mm thick, laid in blown grade bitumen at 2 kg per sqm over a coat of primer at 400 gms per sqm and finished with a coat of bitumen at 1 kg per sqm as per specifications, complete :						
10015	Over RCC roof surfaces	sqm	285.68	14.70	-	300.38	345.44
10020	On external wall surfaces	sqm	285.68	14.70	-	300.38	345.44
10025	Add for aluminum foil of thickness 0.1 mm instead of 0.075 mm	sqm	24.03	-	-	24.03	27.63
10030	Painting top of roof surface with 80 / 100 penetration bitumen @ 1.7 kg per sqm impregnated with coarse sand, 6 mm thick, including cleaning of slab surface with brush and finally with a cloth soaked in kerosene oil.	sqm	60.42	13.68	-	74.10	85.22
10035	Providing and laying damp-proofing treatment comprising a primer coat, one layer of aluminium foil 0.1 mm thick and two layers of bitumen at the rate of 2 kg per sqm per layer to ground floor/paving, complete.	sqm	367.26	14.70	-	381.96	439.25
10040	Providing and laying waterproofing treatment to roof slabs comprising of Primer coat, one layer of fibre glass RP tissue, one layer of aluminium foil 0.10 mm thickness, three layers of bitumen at the rate of 2 Kg per sqm per layer, sealing of edges and corners as called for, complete.	sqm	504.55	22.20	-	526.75	605.76
10045	Providing and laying damp-proofing treatment comprising a primer coat, one layer of fibre-glass RP tissue and two layers of bitumen at the rate 2 kg per sqm per layer in toilets and other areas	sqm	285.48	22.20	-	307.68	353.83

08 09 Metal Doors, Windows and Frames								
08 09 16		Aluminum Doors, Windows and Frames	UNIT	BARE COST				TOTAL INCL OHP
				Material	Labour	Equipment	TOTAL	
10		Aluminum Doors, Windows And Frames						
		Providing, fabricating and fixing aluminium doors, windows and ventilators with sections (IS 733 and IS 1825), 60 microns pure polyster coated, 25 microns colour nutred anodised (IS 1868), of grade AC 25, fixed with rawl plugs and screws / fixing clips / expansion hold fasteners and filling gaps with PVC / Neoprene felt along with aluminium snap beadings, CP brass/stainless steel screws for glazing / panelling complete (cost of glazing / panelling not included) (payment will be made for weight of aluminium used in the work).						
	10005	Fixed portion	kg	236.11	8.90	-	245.01	281.76
	10010	Shutters of doors, windows and ventilators including providing and fixing hinges/pivots and making provision for fixing of fittings including PVC/neoprene gasket, complete (cost of fitting not included).	kg	249.77	11.85	-	261.62	300.87
08 09 21		Steel Doors, Windows and Frames	UNIT	BARE COST				TOTAL INCL OHP
				Material	Labour	Equipment	TOTAL	
10		Steel Doors, Windows And Frames						
	10005	Providing, fabricating and fixing 1 mm thick MS sheet door with hollow MS section frame of 40 x 40 x 3 mm and 3 mm gussets at the junctions and corners with necessary fittings and three coats of synthetic enamel paint over a primer coat of zinc chromate on duly prepared surfaces, complete.	sqm	1,058.85	462.25	-	1,521.10	1,749.26
	10010	Providing, fabricating and fixing 1 mm thick MS sheet door with MS angle 40 x 40 x 6 mm frame, and 3 mm gussets at the junctions and corners with necessary fittings, three coats of synthetic enamel paint over a primer coat of zinc chromate on duly prepared surfaces, complete.	sqm	1,059.69	462.25	-	1,521.94	1,750.23
	10015	Add for MS angles 40 x 40 x 6 mm for diagonal braces.	sqm	288.00	105.36	-	393.36	452.36
	10020	Add for MS flats 30 x 6 mm for diagonal braces and central cross piece.	sqm	110.66	101.40	-	212.06	243.87
		Providing and fixing MS glazed doors, windows and ventilators of standard heavy rolled steel sections, conforming to IS 7452-1990, joints mitred and welded with 15 x 3 mm lugs, 100 mm long, embedded in cement concrete blocks 150 x 100 x 100 mm of 1:3:6 with coarse sand or with wooden plugs and screws or rawl plugs and screws/ with fixing clips/ with bolts and nuts as required, including providing and fixing of 4 mm thick glass panes with glazing clips and special metal sash putty including three coats of synthetic enamel paint over a primer coat of zinc chromate on duly prepared surfaces excluding the cost of metal beading and other fittings except necessary hinges or pivot as required, complete :						
	10025	Doors	sqm	1,555.03	151.85	0.50	1,707.38	1,963.49
	10030	Windows fixed	sqm	1,247.49	151.85	0.50	1,399.84	1,609.81

09 21 Plaster and Gypsum Board Assemblies							
09 21 13	Plaster Assemblies	UNIT	BARE COST				TOTAL INCL OHP
			Material	Labour	Equipment	TOTAL	
13	Expansion Control With Chicken Mesh						
10005	Providing and fixing galvanized chicken wire mesh (24 gauge 12 mm size) to junctions of concrete and masonry work and other locations including cutting to required sizes, side laps of minimum 75 mm and fixing in position with galvanized iron wire nails, complete.	sqm	79.71	70.00	-	149.71	172.16

09 22 Supports for Plaster and Gypsum Board							
09 22 26	Suspension Systems	UNIT	BARE COST				TOTAL INCL OHP
			Material	Labour	Equipment	TOTAL	
14	Aluminium Frame Work						
	Providing and fixing frame work for suspended ceiling with anodised aluminium 15 microns coating/Polyester pre-coated (50 microns), main runner T-sections 35 x 35 x 1.5 mm thick suspended from ceiling with 6 mm dia MS adjustable hangers, fixed to ceiling with MS cleat 25 x 25 x 5 mm and 50 mm long, fixed to RCC surface with expandable fasteners 12.5 x 40 mm, intermediate T-section 23.5 x 19 x 1.5 mm thick fixed to main runner and perimeter angle 35 x 15 x 1.5 mm thick fixed to wall/beam with cadmium plated steel screws with rawl plug @ 450 mm etc., all complete, for panel sizes (cost of hangers with cleat to be paid for separately) :						
10005	1220 x 610 mm	sqm	353.14	87.83	-	440.97	507.12
10010	610 x 610 mm	sqm	396.98	87.83	-	484.81	557.53
10015	Add for providing and making arrangement for fixing light, fixture grills and diffusers in the frame work.	sqm	319.98	87.75	-	407.73	468.89
15	MS Frame Work						
	Providing and fixing frame work for suspended ceiling, made from 0.55 mm thick GS sheet section consisting of GS channel main runner suspended from ceiling with 6 mm dia MS adjustable hanger fixed to ceiling with MS angle of 25 x 25 x 5 mm thick and 50 mm long with expandable fasteners 12.5 x 40 mm, intermediate T - sections fixed to main runner, and perimeter channel section fixed to wall with cadmium plated steel screw with rawl plug @ 450 mm centre to centre, complete, for panel size (cost of hangers with cleat to be paid for separately).						
10005	1220 x 610 mm	sqm	374.28	87.83	-	462.11	531.42
10010	610 x 610 mm	sqm	441.90	87.83	-	529.73	609.18
10015	Add for providing and making arrangement for fixing light fixture grills and diffusers in the frame work.	sqm	441.90	87.75	-	529.65	609.09
16	Ceiling Supports, Suspension						
10005	Providing and fixing level adjusting hangers of 6 mm dia. MS Rods fixed to roof slabs by means of MS angle ceiling cleats 40 x 40 x 5 mm size, 40 mm long and expansion hold fasteners 12.5 mm dia. 40 mm long including applying a primer coat of zinc chromate, complete.	Each	39.32	5.73	-	45.05	51.81

10 14 Signage								
10 14 53		Traffic Signage	UNIT	BARE COST				TOTAL INCL OHP
				Material	Labour	Equipment	TOTAL	
20		Traffic Signs						
	10005	Providing and fixing Cats Eye (Glow studs), heavy duty integral stem, reflective, aluminium dia cast with elegant finish, of size 100 x 100 mm and 20 mm high, having a stem of 50 mm screwed / nailed with 12 mm dia 90 mm long nail to fix into the road surface or at the nosing of the central verge. The road studs should have reflectors fitted on one side of the studs, complete.	Each	426.55	11.66	-	438.21	503.94
10 28 Toilet, Bath, and Laundry Accessories								
10 28 16		Bath Accessories	UNIT	BARE COST				TOTAL INCL OHP
				Material	Labour	Equipment	TOTAL	
10		Bath Accessories						
		Providing and fixing stainless steel curtain rods with stainless steel brackets, complete, of size :						
	10005	25 mm outer dia	m	193.81	78.00	-	271.81	312.58
	10010	32 mm outer dia	m	341.40	78.00	-	419.40	482.31
	10015	Providing and fixing CP brass curtain rod with CP brass brackets 25 mm outer dia, complete.	m	883.12	78.00	-	961.12	1,105.29
	10020	Providing and fixing CP brass brackets for curtain rods 25 mm outer dia, complete.	Set	385.10	58.46	-	443.56	510.10
		Providing and fixing angular/bent grab bars fabricated from 32 mm dia. seamless stainless steel tubes with peened non-slip gripping surface, polished flanges firmly fixed, to be fully safe, with heavy duty anchor fastener having finish/capping similar to the grab bar, complete, including cutting and making good the walls/floors for :						
	10025	Wall-mounted /floor-mounted for European type water closet - 830 mm high	Each	789.34	117.12	-	906.46	1,042.43
	10030	Bath tub - 1320 mm long	Each	914.70	117.12	-	1,031.82	1,186.59
	10035	Wash basin and shower - 610 mm long	Each	1,040.07	117.12	-	1,157.19	1,330.76
	10040	Providing and fixing fully automatic "NO TOUCH" hand driers of stainless steel body suitable to operate on 230 V, single ph 50 Hz, AC power supply including brackets for fixing on wall including cutting and making good the walls, etc., complete.	Each	11,021.10	117.12	-	11,138.22	12,808.95
	10045	Providing and fixing bevelled edge mirrors 5.5 mm thick of float glass, complete with 6 mm thick marine ply board backing, fixed with CP brass screws and washers, complete, of size 450 x 600 mm.	Each	416.38	136.38	-	552.76	635.68
		Providing and fixing float glass mirror 5.5 mm thick with plastic moulded frame and 6 mm thick marine ply board backing, complete, of outer dimensions :						
	10050	Circular shape 450 mm dia	Each	374.20	136.38	-	510.58	587.18
	10055	Rectangular shape 453 x 357 mm	Each	292.47	136.38	-	428.85	493.18
	10060	Oval shape 450 x 350 mm	Each	293.08	136.38	-	429.46	493.88
	10065	Rectangular shape 1500 x 450 mm	Each	807.21	175.70	-	982.91	1,130.34
	10070	Providing and fixing rectangular float glass mirror 5.5 mm thick of any size with 6 mm	sqm	648.61	195.00	-	843.61	970.16

21 12 Fire-Suppression Standpipes								
21 12 13		Fire-Suppression Hoses and Nozzles	UNIT	BARE COST				TOTAL INCL OHP
				Material	Labour	Equipment	TOTAL	
52		Fire Hose And Equipment						
	10005	Providing and fixing stand post fire hydrants Type A, conforming to IS:908, with 63 mm dia. outlet fitted with gunmetal instantaneous type coupling, 80 mm dia. inlet, one number cast iron double flanged sluice valve, CI duck foot bends and flanged riser, painting with one coat of ready mixed red oxide primer and two coats of synthetic enamel paint of fire red colour, finished to an even shade, complete, excluding the cost of brick chamber.	Each	12,677.77	243.50	-	12,921.27	14,859.46
	10010	Providing and fixing gun metal, under ground type fire hydrants, conforming to IS-909, with control valve and 63 mm dia single outlet fitted with instantaneous type coupling, conforming to IS-901 for connection to hose and 80 mm dia inlet and chained cap, complete, excluding the cost of brick chamber.	Each	17,572.82	117.12	-	17,689.94	20,343.43
		Providing and fixing gunmetal, hand wheel operated fire hydrant valves Type A, conforming to IS:5290, with 63 mm dia outlet fitted with instantaneous female coupling, conforming to IS:901, and 80 mm dia inlet, complete, with blank caps and chains with :						
	10015	Single outlet	Each	5,962.05	39.00	-	6,001.05	6,901.21
	10020	Double outlet	Each	11,525.64	46.80	-	11,572.44	13,308.31
	10025	Providing and fixing first aid hose reels, of heavy duty mild steel construction, with CI brackets, wall mounted, swinging type, fitted with 19 mm dia., 36.5 m long high pressure hose, conforming to IS-5132, with 5 mm dia outlet gunmetal nozzle and shut off valve, conforming to IS 884-1967, complete.	Each	12,460.08	172.00	-	12,632.08	14,526.90
	10030	Providing and fixing 63 mm dia, 15 m long reinforced rubber lined hoses, conforming to IS:636, including gunmetal male and female instantaneous type coupling, conforming to IS: 903, machine wound with galvanised steel wire, complete.	Each	5,176.96	11.50	-	5,188.46	5,966.73
	10035	Providing and fixing standard short size gunmetal branch pipes, conforming to IS-903, with 16 mm dia. outlet gunmetal nozzle, suitable to fit with standard instantaneous type 63 mm coupling along with nozzle spanner, complete.	Each	2,227.45	11.50	-	2,238.95	2,574.79
	10040	Providing and fixing standard firemans axes with heavy insulated rubber handle, conforming to IS:926, complete.	Each	503.03	11.50	-	514.53	591.71
		Providing and fixing gunmetal fire brigade connections, conforming to IS-905, with 63 mm dia. instantaneous type inlet and 150 mm dia flanged outlet with built in check valves for fire risers complete in all respects :						
	10045	Two-way	Each	7,861.62	58.46	-	7,920.08	9,108.10
	10050	Three-way	Each	12,095.43	66.34	-	12,161.77	13,986.03
	10055	Providing and fixing 25 mm size single acting air valves with SCR inlet, conforming to IS-12992, complete.	Each	390.25	78.00	-	468.25	538.48

22 05 Common Work Results for Plumbing								
22 05 23	General-Duty Valves for Plumbing Piping	UNIT	BARE COST				TOTAL INCL OHP	
			Material	Labour	Equipment	TOTAL		
10	Valve, Brass							
	Providing, fixing and testing brass ball valve, SCR lever operated, complete, of size:							
	10005 8 mm	Each	207.82	19.50	-	227.32	261.42	
	10010 10 mm	Each	207.82	27.30	-	235.12	270.39	
	Providing, fixing and testing brass stop cocks conforming to IS:8931, for water supply, complete, of nominal size :							
	10015 15 mm	Each	288.40	19.50	-	307.90	354.08	
	10020 20 mm	Each	362.88	23.40	-	386.28	444.22	
	10025 25 mm	Each	548.14	31.20	-	579.34	666.24	
	10030 32 mm	Each	575.10	39.00	-	614.10	706.21	
	Providing, fixing and testing brass gate valves with CI Wheel, conforming to IS:778, screwed ends, complete, of nominal size :							
	10035 25 mm	Each	505.94	19.50	-	525.44	604.26	
	10040 32 mm	Each	644.50	19.50	-	664.00	763.60	
	10045 40 mm	Each	992.12	19.50	-	1,011.62	1,163.36	
	10050 50 mm	Each	1,359.32	19.50	-	1,378.82	1,585.64	
	10055 65 mm	Each	2,760.18	23.40	-	2,783.58	3,201.11	
	10060 80 mm	Each	3,527.86	23.40	-	3,551.26	4,083.95	
	Providing, fixing and testing brass float valves with copper floats, complete, of nominal size :							
	10065 15 mm	Each	310.80	46.80	-	357.60	411.24	
	10070 20 mm	Each	392.34	46.80	-	439.14	505.01	
	10075 25 mm	Each	457.25	58.46	-	515.71	593.06	
	Providing, fixing and testing brass float valves with plastic floats, complete, of nominal size :							
	10080 15 mm	Each	115.20	46.80	-	162.00	186.30	
	10085 20 mm	Each	159.88	46.80	-	206.68	237.69	
	10090 25 mm	Each	204.47	58.46	-	262.93	302.37	
	Providing, fixing and testing brass ball valves with carbon steel lever, complete of size :							
	10095 15 mm	Each	296.06	27.30	-	323.36	371.86	
	10100 20 mm	Each	831.51	27.30	-	858.81	987.63	
	10105 25 mm	Each	1,318.68	31.20	-	1,349.88	1,552.36	
	10110 32 mm	Each	1,820.31	31.20	-	1,851.51	2,129.24	
	10115 40 mm	Each	1,973.14	39.00	-	2,012.14	2,313.96	
	10120 50 mm	Each	2,488.89	39.00	-	2,527.89	2,907.07	
	Providing, fixing and testing brass ball valves with aluminium alloy lever of size :							
	10125 15 mm	Each	375.73	27.30	-	403.03	463.48	
	10130 20 mm	Each	570.01	27.30	-	597.31	686.90	
	10135 25 mm	Each	711.78	31.20	-	742.98	854.42	
	10140 32 mm	Each	1,384.09	31.20	-	1,415.29	1,627.58	
	10145 40 mm	Each	1,965.03	39.00	-	2,004.03	2,304.64	
	10150 50 mm	Each	3,094.08	39.00	-	3,133.08	3,603.04	
11	Valve, Gunmetal							
	Providing, fixing and testing G/Met gate valve, non-rising stem SCR, conforming to IS:778, complete, of size:							
	10005 15 mm	Each	464.81	7.80	-	472.61	543.51	
	10010 20 mm	Each	603.51	9.75	-	613.26	705.25	
	10015 25 mm	Each	1,044.33	10.92	-	1,055.25	1,213.54	
	10020 32 mm	Each	1,470.16	12.48	-	1,482.64	1,705.04	

23 07		HVAC Insulation						
23 07 13	Duct Insulation	UNIT	BARE COST				TOTAL INCL OHP	
			Material	Labour	Equipment	TOTAL		
11	Duct Insulation							
	Providing and fixing, fiber-glass insulation, bonded by resin conforming to IS:8183, for ducts, etc., with 0.5 mm thick aluminium sheet cladding having 50 mm overlap at joints etc., complete, of following thickness and density:							
	10005	25 mm thick 16kg per cum	sqm	679.16	93.56	-	772.72	888.62
	10010	25 mm thick 24 kg per cum	sqm	706.09	93.56	-	799.65	919.59
	10015	25 mm thick 32 kg per cum	sqm	734.10	93.56	-	827.66	951.80
	10020	50 mm thick 16 kg per cum	sqm	769.99	93.56	-	863.55	993.07
	10025	50 mm thick 24 kg per cum	sqm	826.00	93.56	-	919.56	1,057.49
	10030	50 mm thick 32 kg per cum	sqm	880.94	93.56	-	974.50	1,120.67
	Providing and fixing, rigid polyurethane foam (PUF) slab for thermal insulation, conforming to IS:12436, paper laminated/ unfaced, complete, of following thickness and density:							
	10035	15 mm thick 32 kg per cum	sqm	611.27	71.50	-	682.77	785.18
	10040	20 mm thick 32 kg per cum	sqm	698.26	71.50	-	769.76	885.23
	10045	25 mm thick 32 kg per cum	sqm	803.59	71.50	-	875.09	1,006.35
	10050	30 mm thick 32 kg per cum	sqm	889.29	71.50	-	960.79	1,104.91
	10055	40 mm thick 32 kg per cum	sqm	1,067.73	71.50	-	1,139.23	1,310.12
	10060	50 mm thick 32 kg per cum	sqm	1,288.59	71.50	-	1,360.09	1,564.11
	Providing and fixing, polyurethane rigid foam insulation pipe section, conforming to IS:12436 and density 36 kg per m3 with 0.5 mm thick aluminium sheet cladding having 50 mm overlap on joints and supports, complete, of following thickness and nominal bo							
	25 mm thickness :							
	10065	20 mm	m	213.60	11.00	-	224.60	258.29
	10070	25 mm	m	244.30	11.00	-	255.30	293.60
	10075	32 mm	m	280.01	11.00	-	291.01	334.67
	10080	40 mm	m	314.77	11.00	-	325.77	374.64
	10085	50 mm	m	360.09	11.00	-	371.09	426.75
	10090	65 mm	m	423.11	11.00	-	434.11	499.22
	10095	80 mm	m	482.24	16.50	-	498.74	573.55
	10100	100 mm	m	572.42	16.50	-	588.92	677.25
	10105	125 mm	m	696.85	16.50	-	713.35	820.35
	10110	150 mm	m	789.10	16.50	-	805.60	926.44
	10115	200 mm	m	1,020.98	16.50	-	1,037.48	1,193.11
	10120	250 mm	m	1,269.76	16.50	-	1,286.26	1,479.20
	10125	300 mm	m	1,474.30	22.00	-	1,496.30	1,720.74
	10130	350 mm	m	1,853.11	22.00	-	1,875.11	2,156.38
	10135	400 mm	m	2,122.58	22.00	-	2,144.58	2,466.26
	30 mm thickness :							
	10140	20 mm	m	245.15	11.00	-	256.15	294.57
	10145	25 mm	m	277.96	11.00	-	288.96	332.30
	10150	32 mm	m	320.18	11.00	-	331.18	380.85
	10155	40 mm	m	356.32	11.00	-	367.32	422.41
	10160	50 mm	m	409.42	11.00	-	420.42	483.48
	10165	65 mm	m	469.85	11.00	-	480.85	552.97
	10170	80 mm	m	525.20	16.50	-	541.70	622.96
	10175	100 mm	m	637.42	16.50	-	653.92	752.01
	10180	125 mm	m	764.44	16.50	-	780.94	898.09

26 05		Common Work Results for Electrical						
26 05 13		Medium -Voltage Cables	UNIT	BARE COST				TOTAL INCL OHP
				Material	Labour	Equipment	TOTAL	
20		Cable End Terminations with Compression Glands						
		Providing and making end termination with single compression brass gland and aluminium lugs for PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 kV grade, complete, of size :						
	10005	1 core 300 sqmm	Set	190.81	102.50	-	293.31	337.31
	10010	1 core 400 sqmm	Set	323.83	102.50	-	426.33	490.28
	10015	1 core 500 sqmm	Set	353.37	123.12	-	476.49	547.96
	10020	1 core 630 sqmm	Set	410.91	123.12	-	534.03	614.14
	10025	2 core 6 sqmm	Set	40.29	41.00	-	81.29	93.48
	10030	2 core 10 sqmm	Set	41.16	49.20	-	90.36	103.91
	10035	2 core 16 sqmm	Set	56.31	49.20	-	105.51	121.33
	10040	2 core 25 sqmm	Set	93.50	49.20	-	142.70	164.10
	10045	2 core 35 sqmm	Set	95.14	49.20	-	144.34	165.99
	10050	2 core 50 sqmm	Set	98.64	49.20	-	147.84	170.01
	10055	2 core 70 sqmm	Set	118.43	49.20	-	167.63	192.77
	10060	3 core 10 sqmm	Set	57.32	49.20	-	106.52	122.50
	10065	3 core 16 sqmm	Set	94.50	49.20	-	143.70	165.26
	10070	3 core 25 sqmm	Set	96.07	49.20	-	145.27	167.06
	10075	3 core 35 sqmm	Set	98.53	49.20	-	147.73	169.89
	10080	3 core 50 sqmm	Set	103.78	49.20	-	152.98	175.93
	10085	3 core 70 sqmm	Set	167.69	65.60	-	233.29	268.29
	10090	3 core 95 sqmm	Set	170.10	65.60	-	235.70	271.06
	10095	3 core 120 sqmm	Set	292.75	102.50	-	395.25	454.54
	10100	3 core 150 sqmm	Set	303.28	102.50	-	405.78	466.65
	10105	3 core 185 sqmm	Set	342.96	102.50	-	445.46	512.28
	10110	3 core 240 sqmm	Set	496.36	102.50	-	598.86	688.69
	10115	3 core 300 sqmm	Set	536.29	102.50	-	638.79	734.61
	10120	3 core 400 sqmm	Set	682.32	135.30	-	817.62	940.26
	10125	3½ core 25 sq. mm	Set	98.12	49.20	-	147.32	169.41
	10130	3½ core 35 sqmm	Set	100.57	65.60	-	166.17	191.10
	10135	3½ core 50 sqmm	Set	106.35	65.60	-	171.95	197.74
	10140	3½ core 70 sqmm	Set	171.08	65.60	-	236.68	272.19
	10145	3½ core 95 sqmm	Set	175.25	102.50	-	277.75	319.41
	10150	3½ core 120 sqmm	Set	300.46	102.50	-	402.96	463.40
	10155	3½ core 150 sqmm	Set	339.10	102.50	-	441.60	507.84
	10160	3½ core 185 sqmm	Set	351.47	102.50	-	453.97	522.07
	10165	3½ core 240 sqmm	Set	508.26	102.50	-	610.76	702.38
	10170	3½ core 300 sqmm	Set	636.05	135.30	-	771.35	887.05
	10175	3½ core 400 sqmm	Set	822.08	135.30	-	957.38	1,100.98
	10180	4 core 10 sq. mm	Set	59.02	49.20	-	108.22	124.46
	10185	4 core 16 sqmm	Set	96.55	49.20	-	145.75	167.61
	10190	4 core 25 sqmm	Set	98.64	65.60	-	164.24	188.87
	10195	4 core 35 sqmm	Set	101.92	65.60	-	167.52	192.64
	10200	4 core 50 sqmm	Set	165.15	65.60	-	230.75	265.36
	10205	4 core 70 sqmm	Set	187.89	102.50	-	290.39	333.95
	10210	4 core 95 sqmm	Set	215.59	102.50	-	318.09	365.80
	10215	4 core 120 sqmm	Set	294.46	102.50	-	396.96	456.50
22		Cable End Termination Kit, Cast Resin Compound						

27 15 Communications Horizontal Cabling								
27 15 10		Special Communications Cabling	UNIT	BARE COST				TOTAL INCL OHP
				Material	Labour	Equipment	TOTAL	
25		Cable, Telephone						
		Providing and drawing PVC insulated, PVC sheathed, tinned copper conductor telephone cable in the existing surface/recessed, PVC/steel conduit/PVC casing and capping, of size :						
		0.51 mm dia,						
	10005	1 pair	m	4.14	14.40	-	18.54	21.32
	10010	2 pair	m	7.86	14.40	-	22.26	25.60
	10015	3 pair	m	11.06	14.40	-	25.46	29.27
	10020	5 pair	m	17.64	14.40	-	32.04	36.84
	10025	10 pair	m	34.22	14.40	-	48.62	55.92
	10030	20 pair	m	66.26	14.40	-	80.66	92.76
	10035	50 pair	m	162.46	16.20	-	178.66	205.46
		0.61 mm dia,						
	10040	1 pair	m	5.18	14.40	-	19.58	22.52
	10045	2 pair	m	10.61	14.40	-	25.01	28.76
	10050	3 pair	m	15.14	14.40	-	29.54	33.97
	10055	5 pair	m	24.37	14.40	-	38.77	44.58
	10060	10 pair	m	47.58	14.40	-	61.98	71.27
	10065	20 pair	m	92.76	14.40	-	107.16	123.23
	10070	50 pair	m	227.20	16.20	-	243.40	279.90
		0.71 mm dia,						
	10075	1 pair	m	7.03	14.40	-	21.43	24.65
	10080	2 pair	m	15.17	14.40	-	29.57	34.00
	10085	3 pair	m	23.13	14.40	-	37.53	43.16
	10090	5 pair	m	37.79	14.40	-	52.19	60.01
	10095	10 pair	m	75.48	14.40	-	89.88	103.36
	10100	20 pair	m	149.87	14.40	-	164.27	188.92
	10105	50 pair	m	382.49	16.20	-	398.69	458.49

28 31 Fire Detection and Alarm								
28 31 23	Fire Detection and Alarm Annunciation Panels and Fire Stations	UNIT	BARE COST				TOTAL INCL OHP	
			Material	Labour	Equipment	TOTAL		
10	Fire Detection and Fire Alarm System							
	Providing, installing, testing and commissioning of standard fire detection and alarm control panel in 16 SWG sheet steel enclosure duly painted, consisting of power supply, automatic control battery charger, control and zone cards, duplex talk back facility etc (but without PA system) for operation on 24 V, DC, complete with 2 numbers 12 V Lead Acid storage batteries of suitable capacity, for :							
	10005 2 zones	Each	12,230.33	585.15	-	12,815.48	14,737.81	
	10010 4 zones	Each	14,980.06	602.61	-	15,582.67	17,920.07	
	10015 6 zones	Each	17,729.78	621.17	-	18,350.95	21,103.59	
	10020 8 zones	Each	20,479.51	656.52	-	21,136.03	24,306.42	
	10025 10 zones	Each	23,229.23	672.92	-	23,902.15	27,487.47	
	10030 12 zones	Each	25,978.96	690.18	-	26,669.14	30,669.51	
	Providing and fixing heat detector, conforming to IS:2175, including making connections, of type :							
	10035 Rate of rise (ROR)	Each	1,256.03	21.60	-	1,277.63	1,469.27	
	10040 Fixed temperature	Each	1,123.86	21.60	-	1,145.46	1,317.28	
	10045 Rate of rise - cum - fixed temperature	Each	1,256.03	21.60	-	1,277.63	1,469.27	
	Providing and fixing smoke detector, conforming to IS:11360, including making connections, of type :							
	10050 Ionisation	Each	1,454.28	21.60	-	1,475.88	1,697.26	
	10055 Photo-electric/optical	Each	1,389.59	43.20	-	1,432.79	1,647.71	
	10060 Providing and fixing spot (response) indicator including making connection.	Each	79.79	49.80	-	129.59	149.03	
	Providing and fixing sounder including making connections, of intensity :							
	10065 Low	Each	689.25	18.00	-	707.25	813.34	
	10070 High	Each	1,033.53	18.00	-	1,051.53	1,209.26	
	10075 Providing and fixing manual call box, complete with cover, switch including making connections.	Each	794.19	49.80	-	843.99	970.59	
	Providing, installing, testing and commissioning addressable fire detection and alarm control panel in 16 SWG sheet steel enclosures, duly painted, consisting of power supply, automatic control battery charger, loop cards, fire / fault event recorder, duplex talk back facility etc. (but without PA system), suitable for operation on 24V, DC, complete with 2 numbers 12 V Lead Acid storage batteries of suitable capacity, for :							
	10080 2 loop	Each	206,773.38	672.92	-	207,446.30	238,563.24	
	10085 4 loop	Each	309,888.06	761.78	-	310,649.84	357,247.32	
	10090 6 loop	Each	447,374.31	850.01	-	448,224.32	515,457.97	
	10095 8 loop	Each	550,489.00	950.00	-	551,439.00	634,154.84	
	10100 10 loop	Each	687,975.25	1,035.25	-	689,010.50	792,362.08	
	10105 12 loop	Each	825,461.50	1,121.53	-	826,583.03	950,570.48	
	Providing and fixing, addressable heat detector, conforming to IS:2175, including making connections, of type :							

31 11 Clearing and Grubbing								
31 11 10		Clearing and Grubbing	UNIT	BARE COST				TOTAL INCL OHP
				Material	Labour	Equipment	TOTAL	
10		Clear And Grub						
	10005	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth upto 300 mm (measured at a height of 1.0 m above GL) and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared, complete.	100 sqm	-	266.67	-	266.67	306.67
		Felling trees including cutting of trunks and branches, removing the roots, stacking of serviceable materials and disposal of unserviceable materials within a 50 m lead, complete, of girths (measured at a height of 1.0 m above GL.) :						
	10010	over 300 mm and upto 600 mm	Each	-	80.00	-	80.00	92.00
	10015	over 600 mm and upto 1200 mm	Each	-	363.63	-	363.63	418.18
	10020	over 1200 mm and upto 2400 mm	Each	-	1,600.00	-	1,600.00	1,840.00
	10025	over 2400 mm	Each	-	3,200.00	-	3,200.00	3,680.00
11		Clearing						
	10005	Clearing grass and removal of the rubbish upto a distance of 50 m outside the periphery of the area cleared, complete.	100 sqm	-	135.60	-	135.60	155.94

31 14 Earth Stripping and Stockpiling								
31 14 13		Soil Stripping and Stockpiling	UNIT	BARE COST				TOTAL INCL OHP
				Material	Labour	Equipment	TOTAL	
24		Stripping						
	10005	Surface dressing of the ground including removing vegetation and inequalities not exceeding 150 mm deep, in all types of soil and disposal of rubbish upto a lead of 50 m, complete.	100 sqm	-	516.13	-	516.13	593.55

31 22 Grading								
31 22 16		Fine Grading	UNIT	BARE COST				TOTAL INCL OHP
				Material	Labour	Equipment	TOTAL	
11		Topsoil						
	10005	Earth work in surface excavation not exceeding 300 mm in depth but exceeding 1.5 m in width as well as 10 sqm on plan, in all types of soil including disposal of excavated earth up to 50 m and lift up to 1.5 m, disposed soil to be leveled and neatly dressed, complete.	100 sqm	-	2,000.00	-	2,000.00	2,300.00

31 23 Excavation and Fill								
31 23 16		Excavation	UNIT	BARE COST				TOTAL INCL OHP
				Material	Labour	Equipment	TOTAL	
13		Excavating, Trench						
		Earth work in excavation in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated earth as directed, within a lead of 50 m, complete :						
	10005	All types of soil	cum	-	145.53	-	145.53	167.36

32 11 Base Courses								
32 11 23		Aggregate Base Courses	UNIT	BARE COST				TOTAL INCL OHP
				Material	Labour	Equipment	TOTAL	
10		Aggregate Base Courses						
		Providing and laying water bound macadam with stone aggregate, stone screening and blinding material including screening, sorting, spreading to template and consolidation with power road roller of 8 to 10 t capacity etc., complete, of courses :						
	10005	Sub-base with stone aggregate 90 to 45 mm including stone screening 13.2 mm size	cum	1,252.24	161.68	59.25	1,473.17	1,694.14
	10010	Base course with 63 to 45 mm size including stone screening 13.2 mm size	cum	1,271.21	135.00	49.50	1,455.71	1,674.06
	10015	Base course with 53 to 22.4 mm size including stone screening 11.2 mm size	cum	1,431.06	135.00	49.50	1,615.56	1,857.89
		Laying water bound macadam with stone aggregate, stone screening and blinding material including screening, sorting, spreading to template and consolidation with power road roller of 8 to 10 t capacity etc. complete (payment for stone aggregate, screenings, kankar, moorum and red bajri etc. to be made separately) of courses:						
	10020	Sub-base with stone aggregate 90 to 45 mm including stone screening 13.2 mm size.	cum	15.13	161.68	59.25	236.06	271.47
	10025	Base course with 63 to 45 mm size including stone screening 13.2 mm size.	cum	20.66	135.00	49.50	205.16	235.93
	10030	Base course with 53 to 22.4 mm size including stone screening 11.2 mm size.	cum	20.66	135.00	49.50	205.16	235.93
	10035	Scarifying metalled (water-bound) road surface including disposal of rubbish, lead upto 50 m and consolidation of the aggregate received from scarifying with power road roller of 8 to 10 t capacity, complete.	100 sqm	8.40	410.26	192.30	610.96	702.60
	10040	Providing and edging with bricks of class 75 in full brick width and half brick depth including excavation, refilling and disposal of surplus earth, lead up to 50 m.	m	41.40	14.46	-	55.86	64.24
	10045	Providing and edging 70 mm wide, 114 mm deep to plinth protection with bricks of class 75 including excavation, re-filling and disposal of surplus earth upto lead of 50 m and grouting with cement mortar 1:4 with fine sand, complete.	m	19.86	4.28	0.20	24.34	27.99
11		Subgrade						
	10005	Preparation of subgrade by excavating or filling with available earth to an average of 225 mm depth, dressing to camber, watering and consolidating with road roller of 8-10 t capacity including making good the undulations etc. and disposal of surplus earth / bringing earth from borrow pits within a lead of 50 m, complete.	100 sqm	33.97	3,250.00	80.40	3,364.37	3,869.02
	10010	Consolidation of sub-grade with road roller of 8 to 10t capacity including making good the undulations, etc. with earth or quarry spoils, etc. and rerolling the sub-grade, complete.	100 sqm	33.97	8.64	81.00	123.61	142.15
	10015	Add for compaction of earth work in embankment under optimum moisture conditions to give at least 95% of the maximum dry density (Proctor density)	100 cm	50.42	318.76	121.35	490.53	564.12

33 11 Water Utility Distribution Piping								
33 11 13	Public Water Utility Distribution Piping	UNIT	BARE COST				TOTAL INCL OHP	
			Material	Labour	Equipment	TOTAL		
50	Water Supply Chamber, Brick Masonry							
	Constructing brick masonry chambers with class 75 bricks in cement mortar 1:5 with fine sand, RCC top slab 1:2:4 of avg. thickness 150 mm, including reinforcement, excavation, refilling, 100 mm thick foundation concrete 1:5:10 with coarse sand, 12 mm thick inside plastering with cement mortar 1:3 with coarse sand, finished with a floating coat of neat cement, and 15 mm thick outside plastering in cement mortar 1:4 with fine sand, complete with one brick thick wall, of size :							
10005	600 x 600 x 750 mm deep inside, with CI surface box 100 mm top dia., 160 mm bottom dia. and 180 mm deep inside, with chained lid.	Each	3,421.84	886.50	27.30	4,335.64	4,985.98	
10010	900 x 900 x 1000 mm deep inside, with CI surface box 100 mm. top dia., 160 mm bottom dia. and 180 mm deep inside, with chained lid.	Each	5,352.54	1,417.66	43.70	6,813.90	7,835.98	
10015	1200 x 1200 x 1000 mm deep inside, with CI surface box 100 mm. top dia., 160 mm bottom dia. and 180 mm deep inside, with chained lid.	Each	6,513.00	2,143.61	53.20	8,709.81	10,016.28	
10020	600 x 600 x 750 mm deep inside, with CI surface box 350 x 350 mm and 165 mm deep inside, with chained lid, for fire hydrant.	Each	3,707.39	877.78	27.00	4,612.17	5,303.99	
10025	600 x 450 x 500 mm, deep inside with CI double flap surface box 400 x 200 x 200 mm. inside, with locking arrangement, for water meter.	Each	3,178.47	658.54	21.70	3,858.71	4,437.51	
60	Piping, Water Distribution Systems							
	Providing, laying, jointing and testing double flanged ductile iron pipes having screwed flanges, conforming to IS:8329, including compressed neoprene washers, galvanised steel fasteners, complete, excluding trenching and back filling, of nominal dia.:							
10005	80 mm	m	1,480.98	13.80	-	1,494.78	1,719.00	
10010	100 mm	m	2,451.57	24.15	-	2,475.72	2,847.08	
10015	150 mm	m	2,467.01	24.15	-	2,491.16	2,864.84	
10020	200 mm	m	3,653.36	27.60	-	3,680.96	4,233.10	
10025	250 mm	m	4,337.98	37.95	-	4,375.93	5,032.32	
10030	300 mm	m	5,653.65	43.15	-	5,696.80	6,551.32	
10035	350 mm	m	7,020.27	55.20	-	7,075.47	8,136.79	
10040	400 mm	m	9,255.46	58.65	-	9,314.11	10,711.22	
10045	450 mm	m	11,270.69	74.21	-	11,344.90	13,046.64	
10050	600 mm	m	18,639.43	110.40	-	18,749.83	21,562.31	
	Providing, laying, jointing and testing S&S ductile iron pipes, conforming to IS:8329, with pre-moulded rubber (IS:5382 and dimensions as per IS:12820) joints complete, excluding trenching and back filling, of nominal dia.:							
10055	80 mm	m	962.58	13.80	-	976.38	1,122.84	
10060	100 mm	m	1,321.67	15.50	-	1,337.17	1,537.75	
10065	150 mm	m	1,945.94	24.15	-	1,970.09	2,265.61	
10070	200 mm	m	2,476.99	27.60	-	2,504.59	2,880.28	
10075	250 mm	m	3,269.37	37.95	-	3,307.32	3,803.42	