

DIMENSION	QUANTITY	UNIT	DESCRIPTION
			SUB-STRUCTURE
			1. EXCAVATION & EARTH WORK
25.9			Clear and remove top soil to an average depth of 20 cm.
14.23			
	368.56	m ²	TOTAL AREA
24.9			Bulk excavation in ordinary soil to reduce levels to the designed level up to 500mm .
13.23			
0.5	164.71	m ²	TOTAL AREA
73.71			Cart away surplus excavated materials from the site as per the Engineer's instruction.
164.71			
89.55			
	327.97	m ³	
73.71			Back fill around foundation
164.71			
89.55			
	327.97	m ³	
27.73			Deduction
2.02			
7.71			
	-37.46	m ³	
	290.51	m ³	TOTAL VOLUME
23.9			45cm basaltic stone hard core under concrete floor
12.23			
	292.30	m ²	
2.02			Deduction
15.4			
	-17.42	m ²	
	274.88	m ²	TOTAL AREA
			2)CONCRETE WORK

			Reinforced concrete grade C-25 concrete (laboratory tested) cast into formworks and vibrated around rod reinforcement bars. (Steel reinforcement and formworks measured
			I) Grade beam
0.2		m ³	GB-1
0.4			
10.95			
	2.63		TOTAL VOLUME OF GB-1
0.2		m ³	GB-2
0.4			
10.45			
	2.51	m ³	TOTAL VOLUME OF GB-2
0.2		m ³	GB-3
0.4			
23.25			
	5.58	m ³	TOTAL VOLUME OF GB-3
	10.72	m ³	TOTAL VOLUME OF ALL THE GRADE BEAM
			II) Footing
0.6		m ³	F-1
1.7			
2.5			
	15.3	m ³	
0.45		m ³	F-2
1.3			
1.95			
	11.41	m ³	
0.35			F-3
1			
1.45			
	1.015	m ³	
	27.7225	m ³	TOTAL VOLUME OF ALL THE FOOTING
			III) FOUNDATION COLUMN
1.35		m ³	
0.45			
0.25			
	2.73		
	2.73	m ³	TOTAL VOLUME FOUNDATION COLUMN

			50mm lean concrete quality C-5, 150 kg of cement/m ³ : under
			under foundation pad
1.75			F-1
2.55			
	26.78	m ²	
1.35			F-2
2			
	27.00	m ²	
1.05			F-3
2			
	3.15	m ²	
	56.93	m ²	TOTAL AREA of lean concrete
			under grade beam
0.2			GB-1
10.95			
	6.57		
0.2			GB-2
10.45			
	6.27		
0.2			GB-3
23.25			
	13.95		
	26.79	m ²	TOTAL AREA of lean concrete
			3. MASONRY WORKS
			500mm thick hard trachytic roughly dressed stone masonry foundation wall below ground level bedded in cement mortar mix ratio (1:3)
23.25			
0.07			
	1.6275	m ²	
10.38			
0.7			
	7.266		

14.08		m ²	
0.7			
	9.856		
14.08		m ²	
0.7			
	9.856	m ²	
0.5		m ²	
0.7			
	0.35	m ²	
9.5		m ²	
0.7			
	6.65	m ²	
10.95		m ²	
0.7			
	7.665	m ²	
	21.64	m ²	TOTAL MASONARY WORK
	44.65	m	10mm thick expansion joint filler under grade beam
			4. Provide, cut and fix in position sawn zigba wood or steel formwork which ever appropriate.
			a)Grade beam
0.2		m ²	GB-1
0.4			
10.95			
	39.42	m ²	TOTAL AREA OF GB-1
0.2		m ²	GB-2
0.4			
10.45			
	37.62	m ²	TOTAL AREA OF GB-2
0.2		m ²	GB-3
0.4			
23.25			

	83.70	m ²	TOTAL AREA OF GB-3
	160.74	m ²	TOTAL AREA OF Grade beam
			founadtion pad
2.5			F-1
1.7			
0.65			
	30.00	m ²	
1.95			f-2
1.3			
0.5			
	32.50	m ²	
1.45			f-3
1			
0.4			
	3.12	m ²	
	65.62	m ²	TOTAL AREA
			foundation column
0.26			F-1
0.5			
0.85			
	7.80	m ²	
0.26			F-2
0.5			
1			
	15.20	m ²	
0.26			F-3
0.5			
1.1			
	3.40	m ²	
	26.40	m ²	TOTAL AREA
	9.16	m ²	STEPS
			SUPER STRUCTURE
			1)CONCRETE WORK

			Reinforced concrete grade C-25 concrete (laboratory tested) cast into formworks and vibrated around rod reinforcement bars. (Steel reinforcement and formworks measured
			I) First floor beam
0.2		m ³	FB-1
0.4			
10.95			
	2.63		TOTAL VOLUME OF FB-1
0.2		m ³	FB-2
0.4			
10.45			
	2.51	m ³	TOTAL VOLUME OF FB-2
0.2		m ³	FB-3
0.4			
23.25			
	5.58	m ³	TOTAL VOLUME OF FB-3
	10.72	m ³	TOTAL VOLUME OF ALL THE FIRST BEAM
			II) Top tie beam
0.2		m ³	TB-1
0.4			
10.95			
	2.63		TOTAL VOLUME OF TB-1
0.2		m ³	TB-2
0.4			
10.45			
	2.51	m ³	TOTAL VOLUME OF TB-2
0.2		m ³	TB-3
0.4			
23.25			
	5.58	m ³	TOTAL VOLUME OF TB-3
	10.72	m ³	TOTAL VOLUME OF ALL THE TOP TIE BEAM
			III) STAIR BEAM
0.2		m ³	STB1 AND STB2
0.4		m ³	

2.75		m ³	
	0.44	m ³	VOLUME OF STB1
		m ³	B) COLUMN Reinforced concrete grade C-25 concrete (laboratory tested) cast into formworks and vibrated around rod reinforcement bars. (Steel reinforcement and formworks measured separately).
0.25		m ³	C1
0.45			
6.9			
	6.21	m ³	VOLUME OF C1
0.25		m ³	C2
0.45			
9.4			
	4.23	m ³	VOLUME OF C2
0.25		m ³	C3
0.45			
6.9			
	0.78	m ³	VOLUME OF C3
3.14		m ³	C4 (circular column area= πR^2)
0.04			
6.9			
	2.60	m ³	VOLUME OF C4
	13.82	m ³	TOTAL VOLUME OF COLUMNS
			VI) Slab
			Reinforced concrete grade C-25 concrete (laboratory tested) cast into formworks and vibrated around rod reinforcement bars. (Steel reinforcement and formworks measured separately).
			a) Ground slab
6.23			b/n axis 1-2, 2-3 & A-B
4.5			

0.15			
	8.41	m ³	VOLUME
4.73			b/n axis 1-2, 2-3 & B-C
4.73			
0.15			
	6.71	m ³	VOLUME
5.73			b/n axis 3-4 & A-B
2.5			
0.15			
	14.33	m ³	VOLUME
4.73			b/n axis 3-4 & B-C
2.5			
0.15			
	11.83	m ³	VOLUME
5.73			b/n axis 4-5 & A-B
5.5			
0.15			
	4.73	m ³	VOLUME
4.73			b/n axis 4-5 & B-C
5.5			
0.15			
	3.90	m ³	VOLUME
5.73			b/n axis 5-6 & A-B
4.5			
0.15			
	3.87	m ³	VOLUME
4.73			b/n axis 5-6 & B-C
4.5			
0.15			
	3.19	m ³	VOLUME
10.44			under axis 6 (balcony)
1.65			
0.15			
	2.58	m ³	VOLUME

	59.55	m ³	TOTAL VOLUME OF GROUND FLOOR
			b) Floor slab
6.23			b/n axis 1-2, 2-3 & A-B
4.5			
0.15			
	8.41	m ³	VOLUME
4.73			b/n axis 1-2, 2-3 & B-C
4.73			
0.15			
	6.71	m ³	VOLUME
5.73			b/n axis 3-4 & A-B
2.5			
0.15			
	14.33	m ³	VOLUME
4.73			b/n axis 3-4 & B-C
2.5			
0.15			
	11.83	m ³	VOLUME
5.73			b/n axis 4-5 & A-B
5.5			
0.15			
	4.73	m ³	VOLUME
4.73			b/n axis 4-5 & B-C
5.5			
0.15			
	3.90	m ³	VOLUME
5.73			b/n axis 5-6 & A-B
4.5			
0.15			
	3.87	m ³	VOLUME
4.73			b/n axis 5-6 & B-C
4.5			
0.15			
	3.19	m ³	VOLUME

10.44			under axis 6 (balcony)
1.65			
0.15			
	2.58	m ³	VOLUME
	59.55	m ³	Volume of floor slab
			c) Flat roof
5.73			b/n axis 3-4 & A-B
2.5			
0.15			
	14.33	m ³	VOLUME
4.73			b/n axis 3-4 & B-C
2.5			
0.15			
	11.83	m ³	VOLUME
5.73			b/n axis 4-5 & A-B
5.5			
0.15			
	4.73	m ³	VOLUME
4.73			b/n axis 4-5 & B-C
5.5			
0.15			
	3.90	m ³	VOLUME
5.73			b/n axis 5-6 & A-B
4.5			
0.15			
	3.87	m ³	VOLUME
4.73			b/n axis 5-6 & B-C
4.5			
0.15			
	3.19	m ³	VOLUME
10.44			under axis 6 (balcony)
1.65			
0.15			
	2.58	m ³	VOLUME
	44.42	m ³	TOTAL FLAT SLAB VOLUME

			VII) Stairs
		m ³	Reinforced concrete grade C-25 concrete (laboratory tested) cast into formworks and vibrated around rod reinforcement bars. (Steel reinforcement and formworks measured separately).
			b/n axis B&C and 3&4
3.35			1) Soffit
1.1			
0.15			
	2.21	m ³	VOLUME
0.15			2) Tread and riser
0.15			
1.1			
	0.99	m ³	VOLUME
2.4			3) Landing
1.3			
0.15			
	0.94	m ³	VOLUME
	4.14		TOTAL VOLUME
			b/n 3&4 left of axis A
1.4			1) Soffit
2.6			
0.15			
	0.55	m ³	VOLUME
0.15			2) Tread and riser
0.15			
2.6			
	0.23	m ³	VOLUME
			b/n B&C below of axis 6
1.4			1) Soffit
3			
0.15			
	0.63	m ³	VOLUME
0.15			2) Tread and riser

0.15			
3			
	0.27	m ³	VOLUME
	9.95	m ³	TOTAL STAIR VOLUME
2.74		m ³	VIII) Water tank slab
4.3			
0.15			
	1.77	m ³	TOTAL WATER SLAB VOLUME
0.35		m ³	VIII) Gutter
0.15			
9.25			
	0.97	m ³	
0.6			
0.15			
9.25			
	1.67		
	4.40	m ³	TOTAL VOLUME OF GUTTER CONCRETE
		m ²	2)FORMWORK Provide, cut and fix in position sawn zigba, steel, panel wood or appropriate formwork thereto.Forms shall be constructed to fare faced, the exact sizes, shapes lines and dimensions shown and as required to obtain accurate alignment, location grade, level and plumb work in finished structures. Provision shall be made for openings offset
		m ²	a) To elevation columns /The form shall be made chamfered at internal edges to create nosing in the concrete column edges/.
0.25		m ²	C1
0.45			
6.9			
	77.28	m ²	TOTAL AREA OF C1
0.25		m ²	C2
0.45			
9.25			
	51.8	m ²	TOTAL AREA OF C2

0.25		m ²	C3
0.45			
6.9			
	9.66	m ²	TOTAL AREA OF C3
2		m ²	C4 Circular column $P=2\pi r$
3.14			
0.2			
	3.77		
	142.508	m ²	TOTAL AREA OF COLUMN FORMWORK
			b) First floor beam
0.05		m ²	FB-1
0.4			
10.95			
	29.57	m ²	TOTAL AREA OF FB-1
0.05		m ²	FB-2
0.4			
10.45			
	28.22	m ²	TOTAL AREA OF FB-2
0.05		m ²	FB-3
0.4			
23.25			
	62.78	m ²	TOTAL AREA OF FB-3
	120.56	m ²	TOTAL AREA OF first floor beam
			c) Top tie beam
0.2		m ²	TB-1
0.4			
10.95			
	13.14	m ²	TOTAL AREA OF TB-1
0.05		m ²	TB-2
0.4			
10.45			
	28.22	m ²	TOTAL AREA OF TB-2
0.2		m ²	TB-3
0.4			
9.25			
	33.30	m ²	

0.05		m ²	`TB-3
0.4			
1.4			
	3.78	m ²	
	78.44	m ²	TOTAL AREA OF Top tie beam
			d) Slab
			First floor slab
10.95			fond b/n axis A-C & 1-3
9.2			
	100.74	m ²	
0.25			deduct column size (0.25m*0.45m)
0.45			
	-0.68	m ²	
	100.07	m ²	TOTAL AREA OF fond b/n axis A-C & 1-3
14			fond b/n axis A-C & 3-6 and below axis-6
10.45			
	146.30	m ²	
0.25			deduct column size (0.25m*0.45m)
0.45			
	-0.45	m ²	
3.14			deduct column size of diameter=0.4m
0.04			
	-0.38	m ²	
	145.47	m ²	TOTAL AREA OF fond b/n axis A-C & 3-6 and belowaxis-6
			Side formwork
9.65			left side of axis A
0.15			
	1.45	m ²	
23.24			
0.15			on axis C
	3.49	m ²	
14			on axis A b/n axis 3-6

0.15			
	2.10	m ²	
10.45			on axis-1
0.15			
	1.57	m ²	
10.4			below axis-6
0.15			
	1.56	m ²	
	10.16	m ²	TOTAL SIDE FORMWORK
			flat roof
10.45			fond b/n axis A-C & 3-6
14			
	146.30	m ²	
31.5			deduct stair opening
2.75			
	-86.63		
	59.68	m ²	TOTAL AREA OF fond b/n axis A-C & 3-6 a
35.7			Side formwork on flat roof
0.15			
	5.36	m ²	
			e) Gutter & toptie beam on axis A & C
2.45			
9.25			
	45.33	m ²	
			f) stair
			b/n 3&4 left of axis A
1.1			1) Soffit
3.35			
	14.74	m ²	AREA
0.3			2) Side stair formwork
3.35			
	8.04	m ²	AREA
1.1			2) Tread and riser

0.15			
	3.30	m ²	AREA
	26.08		TOTAL AREA OF FORMWORK OF STAIR
			g) Water tank formwork
10.45			fond
14			
	146.30	m ²	
			Side formwork
10.45			
14			
0.15			
	7.34	m ²	
			3)BLOCK WORK
			20cm thick Class B external HCB wall which can satisfy the designed strength , bedded in cement mortar (1:3).Price shall include mortar bedding.
			Ground floor
7.8			BEDROOM 1
2.6			
	18.10	m ²	AREA
7.37			BEDROOM 2
2.6			
	17.00	m ²	AREA
3			BEDROOM 3
2.6			
	5.63	m ²	AREA
3.62			BEDROOM 4
2.6			
	7.20	m ²	AREA
4.33			HALLWAY
2.6			
	9.76	m ²	AREA
11.75			CAFÉ
2.6			

	20.00	m ²	AREA
12.91			SHOPS
2.6			
	25.00	m ²	AREA
	102.69		TOTAL AREA
			First floor
8.63			BEDROOM 1
2.6			
	20.12	m ²	AREA
8.24			BEDROOM 2
2.6			
	19.17	m ²	AREA
3			BEDROOM 3
2.6			
	5.63	m ²	AREA
3.77			BEDROOM 4
2.6			
	7.55	m ²	AREA
2.28			HALLWAY
2.6			
	4.43	m ²	AREA
27.51			RESTAURANT
2.6			
	49.93	m ²	AREA
	106.83	m ²	TOTAL AREA OF HCB ON FIRST FLOOR
			Flat roof
49.05			TERRACE
1.2			
	58.86	m ²	
7.2			TANKER
1.2			
	8.64		
	67.5	m ²	TOTAL AREA OF HCB ON FLAT ROOF
	277.0	m ²	TOTAL 20 HCB ON BUILDING

			Ditto as Item 2.01 but for 150mm HCB guard wall
			Ground slab
3.75			BEDROOM 1
2.85			
	10.67	m ²	
3.75			BEDROOM 2
2.85			
	10.67	m ²	
4			BEDROOM 3
2.85			
	11.54	m ²	
4			BEDROOM 4
2.85			
	11.54	m ²	
14.14			HALLWAY
2.85			
	10.67	m ²	
7.35			RECEPTION AREA
2.85			
	20.95	m ²	
9.2			STAIR AREA
2.85			
	26.22	m ²	
4.74			CAFÉ REST ROOM
2.85			
	13.51	m ²	
5.38			SHOP 1
2.85			
	15.33	m ²	
3.95			TOILET 2
2.85			

	10.82	m ²	
4.07			TOILET 3
2.85			
	11.20	m ²	
4			TOILET 4
2.85			
	10.77	m ²	
	163.89	m ²	TOTAL AREA ON GROUND FLOOR
			First floor slab
3.75			BEDROOM 1
2.85			
	10.67	m ²	
3.75			BEDROOM 2
2.85			
	10.67	m ²	
4			BEDROOM 3
2.85			
	11.54	m ²	
4			BEDROOM 4
2.85			
	11.54	m ²	
14.14			HALLWAY
2.85			
	10.23	m ²	
3.85			TOILET 1
2.85			
	10.53	m ²	
3.95			TOILET 2
2.85			
	10.82	m ²	
4			TOILET 3
2.85			

	11.20	m ²	
3.92			TOILET 4
2.85			
	10.77	m ²	
7.35			RECEPTION AREA
2.85			
	20.95	m ²	
9.2			STAIR AREA
2.85			
	26.22	m ²	
5.25			RESTRAURANT KITCHEN
2.85			
	14.96	m ²	
10.39			RESTRAURANT TOILET
2.85			
	29.61	m ²	
	189.71	m ²	TOTAL AREA ON FLOOR FLOOR
	353.60		TOTAL 15 HCB ON BUILDING
			4) Roof
			All structural truss members shall be in seasoned Eucalyptus wood and coated with wood preservative solution and firmly fixed with nails and band iron. Truss shall be tied with Dia. 6mm plain bar to top tie beam.
22.9	68.70	m	A.500*400mm LOWER CORED
11.85	71.10	m	B.100*70 mm upper chord/rafter/
10.67	64.02	m	C.VERTICAL TRUSS MEMBER
12.57	75.42	m	D.INCLINED TRUSS MEMBER
18	360.00	m	E. 70*50 zigba purlin c/c 90mm
	2980.00	pcs	F, washer
	2980.00	pcs	G , dome headed nail
	42.00	m	h, Down pipe
	84.00	pcs	J , metal bracket 2pcs/m
	39.60	m	k, fascia board with 10% wastage
	42.86	m	l. flashing
22.9			1.38m ² corrugated iron sheet

18			
	412.20	m ²	
			5) Aluminium work
			Aluminium framed windows, top windows, window doors and doors As per iso standard aluminium frame profile thickness should be 2mm anodized thickness 15-25 micro unit , & all fixing accessories should be of same standard as that of the profile . Complete work according to suppliers instruction. Price includes 6mm thick non reflective clear glass
			Windows
	14	no	W-1 1500mm x1500mm
	6	no	W-2 1000mm x 400mm
	2	no	W-3 1000mm x 1500
	4	no	W-4 2500mm x 2600mm
			Doors
	12	no	D-1 850mm x 2600mm
	16	no	D-2 700mm x 2600mm
	2	no	D-3 1300mm x 2600mm
	2	no	D-4 1250mm x 2600mm
	8	no	D-5 850mm x 2600mm
	24.33	m	Supply and fix Ø50mm CHS hand rail(2mm thick) of 40x40x2mm RHS Post Anchored to the slab, 40X40X2mm RHS handrail in two rows horizontally and 30X20X2mm Vertical C/C spacing 228mm price shall include one coats of antirest paint two coats of synthatic enamel paint and necessary works and material to full fill the jobs.
			6) finishing
			Finishing work shall includes all surface pre cleaning, preparation of finish, polishing and cleaning at the end of finishing work. Apply two coats of plaster in cement mortar to

			External exposed concrete & concrete block wall surface
	102.13	m ²	Ground floor
	106.89	m ²	First floor
	67.50	m ²	Flat roof
	276.52	m ²	TOTAL AREA
			Internal exposed concrete & concrete block wall surface
	198.58	m ²	Ground floor
	197.59	m ²	First floor
	396.17	m ²	TOTAL AREA
			Concrete ceiling surface
10.38			Ground & First Floor
14.12			
	293.13	m ²	
9.00			stair
10.95			
	197.10	m ²	
2.30			Landing
1.30			
	5.98	m ²	
			water tanker concrete ceiling
2.50			
4.50			
	11.25	m ²	
2.30			deduction
4.70			
	-21.62	m ²	
	485.84	m ²	
	501.92	m ²	total area
			Apply fine coat of fine cement sand plaster to internal plastered surface
	198.58	m ²	Ground floor

	197.59	m ²	First floor
	396.17	m ²	TOTAL AREA
			Gypsum plastering to all internal plastered surface
	198.58	m ²	Ground floor
	197.59	m ²	First Floor
	396.17	m ²	TOTAL AREA
			Gypsum board suspended ceiling nailed on & including 4x4cm zigba batten at c/c60cm both ways price includes corner list & all suspension material complete work
11.45			roof on axis 1-3 b/n A-C
9.25			
	105.91	m ²	
			6mm thick glazed ceramic wall tile bedded on & including cement mortar backing and joints grouted in white cement.
29.36			Total bathwork
1.7			
	99.82	m ²	
8.43			kitchen
1.7			
	14.33	m ²	
10.03			toliet
1.7			
	34.10	m ²	
	148.26	m ²	TOTAL cermaic wall area
			9mm thick non slippery ceramic floor tile bedded on and including 41mm thick cement sand screed and joints grouted .
1.40			
1.48			

	2.07	m ²	
1.30			
1.48			
	1.92	m ²	
1.20			
3.35			
	8.04	m ²	
1.27			
3.35			
	8.51	m ²	
1.20			
3.25			
	7.80	m ²	
1.27			
3.25			
	8.26	m ²	
1.93			
3.05			
	-11.77	m ²	Deduct rest room
2.00			
3.05			
	-6.10	m ²	Deduct WC
	18.73	m ²	Total area
	155.10	m	Ceramic tile skirting stuck to wall with cement mortar
	149.55	m	3cm thick marble floor for landing on and including 20mm thick cement mortar bed and joints grouted in cement mortar.
	117.84	m	Perquet skirting

			3cm thick marble floor for landing on and including 20mm thick cement mortar bed and joints grouted in cement mortar.
1.50			
10.38			
	31.14	m ²	Corridor
1.55			Corridor
12.40			
	38.44	m ²	
2.30			Corridor
4.00			
	18.40	m ²	
1.00			Corridor
9.23			
	18.46	m ²	
1.20			Balcony
1.28			
	3.07	m ²	
1.15			
1.28			
	2.94	m ²	Balcony
6.70			
8.45			
	56.62	m ²	Restaurant
3.00			
3.88			
	11.64	m ²	Shop
3.00			
4.37			
	13.11	m ²	Shop
0.15			
1.10			

	1.98	m ²	Riser
0.30			
1.10			
	3.63	m ²	trade
1.30			landing
3.20			
	4.16	m ²	
1.40			
1.48			
	2.07	m ²	Deduct rest room
1.30			
1.48			
	1.92	m ²	Deduct WC
1.93			
3.05			
	-11.77	m ²	Deduct rest room
2.00			
3.05			
	-6.10	m ²	Deduct WC
	189.71	m ²	TOTAL AREA
			7) Painted
			Quartz
	396.17	m ²	External plastered wall surface
			Prepare and apply by brush three coats of synthetic enamel paint to:-
	209.02	m ²	Internal plastered wall surface
	293.13	m ²	plastered ceiling surface
	197.10	m ²	plastered stair case belly & sides surface
	293.13	m ²	Gypsum board ceiling surface
			8) Glazing
			Windows
2.28	31.92	m ²	W-1 1500mm x1500mm
0.6	3.60	m ²	W-2 1000mm x 400mm

1	2.00	m ²	W-3 1000mm x 1500
2	8.00	m ²	W-4 2500mm x 2600mm
			Doors
1.2	9.60	m ²	D-1 850mm x 2600mm
1	1.00	m ²	D-2 700mm x 2600mm
	56.12	m ²	TOTAL GLAZING