

**Detailed abstract of Estimated Cost (B.O.Q) for construction of proposed Residential Building at Plot No. 26, Block -B ,Suprabha Flats, 2nd Floor, Thirukumarapuram 1st Street, Aumbakkam, Chennai 600106.**

**Owner :- Dr. RADHAKRISHNAN**

**Bill of Quantity**

<b>S.No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate</b>	<b>Amount</b>
1	Earth work in excavation by mechanical means (hydraulic excavator)/manual means over areas (exceeding 30cm in depth, 1.5m in width as well as 10sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be leveled and neatly dressed.	cum	172.58	150	25,887.00
2	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth: consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m	cum	172.58	35	6,040.30
3	Supply & laying and compacting of 150mm thick over burnt brick aggregate 90mm to 45mm including spreading in uniform thickness, applying and brooming requisite type screening / binding material to up interstices coarse aggregate watering and compacting to required density.	cum	21.19	1400	29,664.77
4	Diluting and injecting chemical emulsion for POST-CONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion) :				
	Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1 :2 (1 cement : 2 Coarse sand) to match the existing floor.				
	With Chlorpyriphos/Lindane E.C. 20% with 1% concentration.	sqm	128.41	240	30,817.58
<b>Sub-Total</b>					<b>92409.65</b>
5	Providing and laying in position cement concrete 1:4:8 of specified grade including the cost of centring and shuttering.	cum	14.46	3460.00	50,035.92
6	Centring and shuttering including strutting, propping etc. and removal of form for :				
6.1	Foundations, footings, bases of columns, etc. for mass concrete.	sqm	40.26	170	6,844.20
6.2	Suspended floors, roofs, landings, balconies and access platform.	sqm	171.99	265	45,577.35
6.3	Lintels, beams, plinth beams, girders, bressumers and cantilevers.	sqm	229.96	250	57,490.00
6.4	Columns, Pillars, Piers, Abutments, Posts and Struts.	sqm	165.08	270	44,572.41
6.5	Stairs, (excluding landings) except spiral-staircases.	sqm	11.84	290	3,433.60

7	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement- All work upto plinth level:				
7.1	1:1:2 (1cement : 1 coarse sand : 2 graded stone aggregate 20 mm nominal size)	cum	29.58	5040	1,49,083.20
8	Reinforced cement concrete work in beams, suspended floors. Roofs having slope upto 15°, landings, balconies, shelves, chhajjas, lintels, bands, alain window sills, staircases and spiral stair cases upto floor five level excluding the cost of centring shuttering finishing and reinforcement with 1:1:5:3 (1 cement: 1.5 coarse sand : 3 graded stone aggregate 20mm nominal size)	cum	64.46	4800	3,09,408.00
9	Mild steel and Medium Tensile steel bars	qtls	119.27	5640	6,72,682.80
<b>Sub-Total</b>					<b>1339127.48</b>
10	Brick work with F.P.S. bricks of class designation 150 in foundation and plinth in Cem. Mortar 1:6	cum	9.57	3920	37,514.40
11	Brick work with F.P.S. bricks of class designation 150 in superstructure above plinth level in 9" th. Walls in Cem.Mortar 1:6	cum	70.15	3785	2,65,517.75
12	Brick work with F.P.S. bricks of class designation 150 in superstructure above plinth level in 4.5" th. Walls in Cem. Mortar 1:4	sqm	105.86	430	45,519.80
12.1	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	105.86	60	6,351.60
<b>Sub-Total</b>					<b>3,54,903.55</b>
13	Providing sal wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position.	cum	1.55	70000	1,08,500.00
14	Providing and fixing ISI marked flush door shutter conforming to IS:2202 (Part - 1) 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:				
	35 mm thick including ISI marked Stainless Steel butt hinges with necessary	sqm	30.83	2600	80,158.00
15	Extra for Providing and fixing flush doors with decorative veneering				
	On one side	sqm	30.83	320	9,865.60
16	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)	sqm	30.83	250	7,707.50
17	Providing and fixing glazed shutters for doors, windows and clerestory windows using 5 mm thick float glass panes including black enamelled ISI marked MS butt hinges with necessary screws.				
	Kiln seasoned and chemically treated Hollock wood				
	30 mm thick	sqm	37.92	1500	56,880.00

18	Providing 40x5mm flat iron hold fast 40cm long including fixing to frame with 10mm dia bolts, nuts and wooden plugs and embedding in cement concrete block 30x10x15cm 1:3:6 mix (1cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size)	No	139.00	90	12,510.00
19	M.S work in grills, frames, guard bar, ladders, railings, brackets, gates & similar works.	kg	879.55	90	79,159.50
20	Providing and fixing stainless steel railing in stair case etc complete in all respect.	Rm	7.90	1500	11,850.00
<b>Sub-Total</b>					<b>3,66,630.60</b>
21	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.				
	Granite work.				
	Area of slab over 0.50sqm	sqm	9.45	2600	24,570.00
22	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.				
	Granite work.	Rm	19.35	180	3,483.00
23	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	3	250	750.00
24	Mirror polishing on marble work/Granite work/stone work where ever required to give high gloss finish complete.	sqm	9.45	150	1,417.50
25	Marble Stone (Raj Nagar Plain) slab with 18mm thick marble flooring over 20mm thick base laid over and jointed with white cement slurry including rubbing and polishing complete with base of 1:4 (1 cement: 4 Coarse sand)	sqm	109.55	1250	1,36,937.50
26	Kota slab flooring over 20mm average thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete with base of cement mortar 1:4 (1cement : 4 coarse sand):				
	25mm thick	sqm	30.67	950	29,140.07

27	Kota stone slab 25mm thick in risers of steps, skirting and dado laid on 12mm 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	6.01	940	5,651.28
28	Providing and laying Antiskid Ceramic glazed floor tiles 300 x 300mm of 1 <sup>st</sup> quality conforming to IS: 13755 of NITCO, ORIENT, SOMANY, KAJARIA laid on 20mm thick cem. Mortar 1:4 including pointing the joints with white cement and matching pigment etc., complete.	sqm	55.51	827	45,906.77
29	Providing and laying Ceramic glazed wall tiles 300 x 300mm of 1 <sup>st</sup> quality conforming to IS: 13755 of NITCO, ORIENT, SOMANY, KAJARIA laid on 20mm thick cem. Mortar 1:4 including pointing the joints with white cement and matching pigment etc., complete.	sqm	85.07	850	72,309.50
<b>Sub-Total</b>					<b>320165.62</b>
30	12mm thick cement plaster of mix 1:5 (1 cement: 5 Coarse sand) on walls.	sqm	821.72	140	1,15,040.80
31	6mm thick cement plaster of mix 1:4 (1 cement: 4 Coarse sand) on ceiling.	sqm	171.99	160	27,518.40
32	OBD on ceiling in 3 coats to give an even shade complete works.	sqm	171.99	130	22,358.70
33	Painting on walls in 3 coats to give an even shade complete works including base coats and wall putty etc.	sqm	410.86	180	73,954.80
34	Finishing walls with textured exterior paint of required shade:				
	New work ( two or more coats applied @3.28ltr/10sqm) over and including base coat of water proofing cement paint applied @ 2.20kg/10 sqm.	sqm	287.61	209	60,110.49
35	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade of required shade				
	New work (Two or more coat applied @ 1.43 ltr/10 sqm over and including base coat of water proofing cement paint applied @ 2.20 kg/10 sqm)	sqm	123.26	143	17,626.18
36	Painting/ Polishing over doors/ windows/ ventilators including priming coat/ rubbing etc. complete job.	sqm	75.84	114	8,645.76
<b>Sub-Total</b>					<b>325255.13</b>
37	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 :				
	In 75x75mm deep chase	Rm	54.37	84	4,567.08
38	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 1mx 1mx 400 micron, finished with 12mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement rounding the edge and making and finishing the outlet complete.	each	4.00	270	1,080.00

39	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:				
	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.				
	Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 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				
	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.				
	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.				
	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 :				
	With average thickness of 120mm and minimum thickness at khurra as 65 mm.	sqm	84.61	670	56,688.70
<b>Sub-Total</b>					<b>62335.78</b>
<b>40</b>	<b>Extrenal Development</b>	<b>sqm</b>	<b>32.75</b>	<b>1600</b>	52,400.00
<b>41</b>	<b>Boundary Wall</b>	<b>Rm</b>	<b>43.8</b>	<b>3250</b>	1,42,350.00
<b>42</b>	<b>Entrance gate</b>	<b>No</b>	<b>1</b>	<b>30000</b>	30,000.00
<b>Sub-Total</b>					<b>2,24,750.00</b>
<b>43</b>	<b>Total Cost of Civil Works</b>				<b>30,85,577.81</b>