

CONSTRUCTION OF 8 NO. OF CLASSROOMS STOREY BUILDING BOQ

S/N	DESCRIPTION	UNIT	QNTY	RATE	AMOUNT
	ELEMENT NO. 1: SUBSTRUCTURE				
	<u>SURFACE PREPARATION</u>				
1	Clear site of grass, bushes, shrubs and small trees not exceeding 600mm girth including grubbing up roots, burn or cart away arisings	SM	600		
	<u>EARTHWORKS</u>				
2	Excavate oversite to remove vegetable soil average 150 mm deep ; wheel and deposit on site n.e. 100 M away in permanent spoil heaps	SM	600		
3	Bulk excavation oversite to reduce levels depth n.e. 1.5 M deep starting from existing ground level for foundation trenches	CM	170		
4	Excavate for column bases and strip footing commencing from reduced level and not exceeding 1.50m deep	CM	180		
5	E.O for excavating in hard rock irrespective of class	CM	2.8		
6	Return,fill and ram selcted excavated materials in foundations and making up levels under floor slab	CM	23		
7	Load and cart away surplus spoil from site to an approved spoil heap by the sub-county council.	CM	55		
8	Plank to uphold sides of excavations and keep excavations free from all fallen material	ITEM	10,000		
9	Keep excavations free from general water by pumping or other equal and approved means.	ITEM	10,000		
	TOTAL CARRIED FORWARD				

	TOTAL BROUGHT DOWN			
	<u>HARDCORE</u>			
10	300 mm thick selected hardcore filling of approved inert material in making up levels under floors: Hand packed, leveled, well rammed and consolidated in 150mm thick layers and well compacted.	CM	127	
	<u>BLINDING</u>			
11	50 mm thick approved murrum filling consolidated in layers to make up levels	SM	423	
	<u>ANTI-TERMITE TREATMENT</u>			
12	"Premise 200CC" or other equal and approved antitermite chemical treatment: applied by approved professional pest control specialist: applied strictly in accordance with manufactureer's instructions: 10 years guarantee to surfaces of excavations.	SM	423	
	<u>DPM</u>			
13	1000 gauge polythene black sheet or other equal and approved polythene sheeting as damp proof memmbranelaid on blinded hardcore.	SM	423	
	<u>CONCRETE</u>			
14	In-situ plain mass concrete mix Class 10 (1:4:8)			
15	50mm thick blinding: under strip foundation	CM	5.92	
16	Ditto under column bases	CM	1.82	
	In-Situ Vibrated Reinforced Concrete			
	Class 25/20mm (1:1 ½ :3) in			
17	Strip footing	CM	34.58	
18	Column bases	CM	2.55	
19	Sub-Structural Columns	CM	6.01	
	Class 20/20(1:2:4)in			
20	150 mm thick surface bed	SM	423	
	TOTAL CARRIED FORWARD			

TOTAL BROUGHT DOWN					
Fair faced Sawn Formwork to:-					
21	Sides of Strip Foundations	LM	158.34		
22	Vertical Sides of Substructural Columns	SM	95.01		
23	Sides of column bases	LM	198.75		
24	Edges: Floor bed over 75 but not exceeding 150mm	LM	190.19		
REINFORCEMENT					
Supply and fix high yield ribbed/deformed reinforcement bars to KS ISO 6935-2: 2007 including cutting,bending,tying with tying wire, hooking and placing in position including distance blacks and spacers					
25	8mm diameter bars	KG	225.68		
27	16mm diameter bars	KG	1226.7		
28	Mesh reinforcement NO. A142 weighing 2.22kg per square metre: in floor slab:including all necessary supports: allow for laps and bonding to existing slabs	SM	423		
FOUNDATION WALLING					
Bush stone; roughly square: bedded and jointed in cement sand(1:3) mortar in with hoop iron					
29	200mm thick foundation walls	SM	353.08		
PLINTH FINISHES					
30	25mm thick cement sand(1:4) rendering on concrete or stone work: wood float finished	SM	178.36		
PAINTING AND DECORATION					
<u>Prepare surfaces and apply undercoat and two finishing coats black bituminous or other equal approved water resistant paint on rendered surfaces to</u>					
31	Plinths externally	SM	178.36		
TOTAL FOR SUBSTRUCTURES CARRIED TO COLLECTION					

	ELEMENT NO. 2 WALLING				
	Machine dressed stone walling in cement sand (1:3) mortar reinforced with 25mm wide 20 gauge hoop iron at every alternate course.				
32	200mm thick walling	SM	455		
	DPC				
	Horizontal bituminous hesian base to BS 743 type A: or other equally approved damp proof course: lapped 150mm at running joints: on 10mm thick levelling cement/sand (1:4) screed; to				
33	200mm wide under structural walling	LM	174.72		
	Reinforced vibrated Concrete Class 25/20mm (1:1 ½ :3)				
34	COLUMNS	CM	8.47		
35	BEAMS	CM	27.3		
	Ramp and staircase including sloping waist	SM	76.44		
	150mm thick horizontal suspended landing	SM	0		
	Reinforced vibrated Concrete Class 20/20mm (1:2:4)				
36	150 mm thick floor slab	SM	423		
	REINFORCEMENT				
	Supply and fix high yield ribbed/deformed reinforcement barsto KS ISO 6935-2: 2007 including cutting, bending, tying with tying wire, hooking and placing in position including distance blocks and spacers				
37	8 mm diameter	KG	2657.2		
38	10 mm ditto	KG	427.7		
39	12 mm ditto	KG	864.5		
	16 mm ditto	KG	3084.9		
40	20 mm ditto	KG	427.7		
	25 mm ditto	KG	1108.4		
	FORM WORK				
	Fair faced Sawn Formwork to:-				
41	Vertical Sides of Structural Columns	SM	158.34		
42	Sides and soffits of beams	SM	391.3		
43	Soffits of suspended slabs	SM	423		
44	Soffits of ramp	SM	81.9		
45	Soffits of staircase	SM	0		
	TOTAL FOR SUPERSTRUCTURE CARRIED TO COLLECTION				

ELEMENT NO. 3: DOORS

DOORS

Steel Casement Doors

Single leaf steel door overall size 1000mm by 2100mm
complete with iron mongery to architects detail

NO

5

Single leaf 50mm thick solid flush door overall size 900mm by
2400mm

NO

0

complete with locks to engineer's detail

TOTAL FOR DOORS CARRIED TO COLLECTION

ELEMENT NO.4:WINDOWS

Steel Casement Windows

Standard windows casements complete with hinges, stays, fasteners, permanent vent with mosquito gauze and sheet metal hood etc assembled and fixed to opening including cutting and pinning lugs to concrete or blockwork surround and bedding frame in cement and sand mortar (1:4) (Grille and Glazing excluded)

1500mm x 1500mm

NO 9

2250mm by 1500 windows

NO 8

GLAZING

5mm thick clear sheet glazing finished with putty

SM 38.22

TOTAL FOR WINDOWS CARRIED TO COLLECTION			
ELEMENT NO. 5: FINISHES			
INTERNAL FINISHES			
INTERNAL WALLS			
15 mm thick two coat cement sand (1:3) plaster trowelled smooth and comprising 12 mm backing and 3 mm finishing coat to Internal wall surfaces.	SM	782.6	
Vertical sides of Columns Internally	SM	39.13	
PAINTING AND DECORATION			
Prepare by carefully cleaning and skimming of plastered surfaces and apply one undercoat and two finishing coats of first grade oil paint to (Super gloss) to			
Plastered walls internally	SM	782.13	
Internal surfaces of columns	SM	39.13	
Soffits of slab	SM	423	
FLOOR FINISH,RAMP AND STAIRCASE			
38 mm thick (24mm c+s backing & 15mm thick terrazzo layer) plus skirting			
Internal floor surface	SM	495	
20 x 100 mm Skirting	LM	0	
TILES			
Cement and sand (1:3) paving			
25 mm thick paving screed to receive ceramic tiles	SM	0	
330 x 330 mm coloured/rustic ceramic tiles plus skirting	SM	0	

TOTAL FOR INTERNAL FINISHINGS CARRIED TO COLLECTION

EXTERNAL FINISHES

External Walls

Horizontal running recessed keys to external surface to wall

SM 117.39

15 mm thick two coat cement sand (1:4) plaster trowelled smooth and comprising 12mm backing and 3 mm finishing coat to:-

Door jambs and reveals

LM 218.4

Window jambs and reveals

LM 86.45

PAINTING AND DECORATION

Prepare by carefully cleaning and skimming of plastered surfaces and apply one undercoat and two finishing coats of first grade oil paint to (Super gloss) to

Door jambs and reveals

LM 218.4

Window jambs and reveals

LM 86.45

	TOTAL FOR EXTERNAL FINISHES CARRIED TO COLLECTION				
	COLLECTION(GROUNDFLOOR) SUBSTRUCTURE SUPER STRUCTURE DOORS WINDOWS INTERNAL FINISHES EXTERNAL FINISHES				

	TOTAL FOR GROUND FLOOR CARRIED TO SUMMARY PAGE			
	FIRST FLOOR			
	ELEMENT NO. 1: WALLING			
	Machine dressed stone walling in cement sand (1:3) mortar reinforced with 25mm wide 20 gauge hoop iron at every			
	200mm thick walling	SM	508.69	
	100mm thick walling	SM	0	
	Reinforced vibrated Concrete Class 25/20mm (1:1 ½ :3)			
34	COLUMNS	CM	10.92	
35	RING BEAMS	CM	24.57	
	Reinforced vibrated Concrete Class 20/20mm (1:2:4)			
	150 mm thick suspended slab	SM	423	
	REINFORCEMENT			
	Supply and fix high yield ribbed/deformed reinforcement barsto KS ISO 6935-2: 2007 including cutting, bending, tying with tying wire, hooking and placing in position including distance blocks and spacers			
	8 mm diameter	KG	782.6	
	10 mm ditto	KG	29190	
	12 mm ditto	KG	1247.4	
	16 mm ditto	KG	508.69	
	FORM WORK			
	Fair faced Sawn Formwork to:-			
	Sides of Ring beam	SM	195.65	
	Sides of columns	SM	156.52	
	over windows and doors	SM	19.11	

TOTAL CARRIED TO COLLECTION

DOORS

DOORS

Steel Casement Doors

Single leaf steel door overall size 1000mm by 2100mm
complete with iron mongery to architects detail

NO 5

TIMBER DOORS

Single leaf 50mm thick solid flush door overall size 1700mm by
2400mm
complete with locks to engineer's detail

NO 0

Prepare surfaces and apply undercoat and two finishing
coats of first grade oil paint (supergloss) to:-

Steel casement Door surfaces internally and externally

SM 86

Prepare surfaces and apply undercoat and two finishing
coats of first grade varnish wood paint to:-

Flush doors on both sides

SM 0

TOTAL FOR DOORS CARRIED TO COLLECTION					
<p>WINDOWS</p> <p>Steel Casement Windows</p> <p>Standard windows casements complete with hinges, stays, fasteners, permanent vent with mosquito gauze and sheet metal hoodetc assembled and fixed to opening including cutting and pinning lugs to concrete or blockwork surround and bedding frame in cement and sand mortar (1:4) (Grille and Glazing excluded)</p> <p>1500mm x 1500mm</p> <p>2250mm by 1500 windows</p> <p>GLAZING</p> <p>5mm thick clear sheet glazing finished with putty</p> <p>PAINTING AND DECORATION</p> <p>Prepare the surfaces and apply one undercoat and one finishing coat to approved oil paint(super gloss) to window frames</p>		<p>NO</p> <p>NO</p> <p>SM</p> <p>LM</p>	<p>9</p> <p>8</p> <p>43</p> <p>101.92</p>		

TOTAL FOR WINDOWS CARRIED TO COLLECTION				
ROOFING				
Prices shall include unloading, hoisting and fixing in position including requisite staging for erection.Prices to wooden members shall include treatment				
The following in hardwood trusses including hoisting and fixing in position approximately 6000mm above first floor				
100 X50mm thick rafters to structural engineer's detail as rafters	LM	626.08		
100 X50mm thick struts to structural engineer's detail.	LM	782.6		
75 X 50mm thick purlins to structural engineer's detail	LM	665.21		
100 x 50 mm Tie beam	LM	508.69		
100 x 50mm wall plate	LM	234.78		
50X50mm brading	LM	1800		
25mm X 200mm Fascia Boards(cpress wood)	LM	105.56		
12mm thick Soft board "celotex" ceiling fixing with nails	SM	445.9		
50X75mm moulded cornice	LM	234.78		
ROOF COVERING				
28G N.C 11/3" Corrugated sheets and BP760 Boxed profiled sheets(Effective 762 mm wide)	SM	637		
30G RIDGE CAPS PREPAINTED	LM	75		
TOTAL FOR ROOFING CARRIED TO COLLECTION				

RAIN WATER DISPOSAL

180mm diameter half round plastic gutter fixed to fascia board with 180mm gutter support brackets

LM

110

Plastic Click fit stop end with running outlet

No.

8

75mm diameter plastic downpipe bend jointed

No.

50

110mm diameter plastic down pipe with clips

LM

40

75mm plastic down pipe shoe

No.

16

TOTAL FOR RAINWATER GOODS CARRIED TO COLLECTION

METAL RAILING**Ramp,Staircase,Terraces and Balcony Railing to approved details**

The following in unframed structural steel framework, including all necessary welds, site welds, cleats, plates and sundry fixings, priming with red oxide primer, painting of exposed steelwork with two coats gloss oil paint, delivered to site in fixing position.

1000mm high balustrading comprising 50mm diamete CHS handrail, 25 by 25 by 3mm thick SHS balusters grouted into fllor slab and 25X25mmX2mm SHS intermediate rails, all to architect's detail to ramp and staircase

LM 179.27

1400 to terraces and balcony

LM 257.53

Prepare and apply one primer coat to metal surfaces

Approved Acrylic metal coating to all metal railing of balcony, ramp and terraces

LM 437.71

TOTAL FOR METAL RAILING CARRIED TO COLLECTION

FINISHES**INTERNAL FINISHES**

15 mm thick two coat cement sand (1:4) plaster trowelled smooth and comprising 12 mm backing and 3 mm finishing coat to

Internal wall surfaces.

SM 782.6

Vertical sides of columns internally

SM 39.13

Prepare by carefully cleaning and skimming of plastered surfaces and apply one undercoat and two finishing coats of first grade oil paint to (Super gloss) to

Internal wall surfaces.

SM 782.6

Vertical sides of columns internally

SM 39.13

FLOOR FINISH

38 mm thick (24mm c+s backing & 15mm thick terrazzo layer) plus skirting

Internal and external floor surface

SM 345.8

225mm skirting internally

LM 0

TILES PAVING

Cement and sand (1:3) paving

25 mm thick paving screed to receive ceramic tiles

Internal floor surface

SM 0

330 x 330 mm coloured/rustic ceramic tiles plus skirting

SM 0

TOTAL FOR INTERNAL FINISHES CARRIED TO COLLECTION

EXTERNAL FINISHES

15 mm thick two coat cement sand (1:4) plaster trowelled smooth and comprising 12mm backing and 3 mm finishing coat to door and window reveals and jambs externally

SM 304.85

Horizontal running recessed keys to external surface to wall

SM **117.39**

FLOOR FINISH

15 mm thick cement sand (1:3) screeding to receive floor tiles finish

SM 0

Ditto for 225mm skirting externally

LM 0

Tiles Paving

300X300mm tiles

External verandahs

SM 0

225mm Skirting externally

LM 0

TOTAL FOR EXTERNAL FINISHES CARRIED TO COLLECTION

**COLLECTION PAGE(FIRST FLOOR
WALLING**

DOORS
WINDOWS
ROOFING
RAINWATER DISPOSAL
METAL RAILING
INTERNAL FINISHES
EXTERNAL FINISHES

TOTAL FOR FIRST FLOOR CARRIED TO SUMMARY

SUMMARY PAGE

TOTAL FOR PRELIMINARIES

TOTAL FOR GROUND FLOOR

TOTAL FOR FIRST FLOOR

TOTAL FOR BUILDER'S WORKS

PROVISIONAL SUMS

Allow for provisional sum of kshs 440,000 for project administration

440,000

Allow for provisional of kshs 440,000 for project supervision

440,000

Provide a provisional sum of kshs 350,000 for electrical installation

350,000

Allow for provisional sum of kshs 500,0000 of project sum for contingencies

500,000

Allow a provisional sum of ksh 3,000 for branding

3,000

TOTAL PROVISIONAL SUM

1,733,000

GRAND SUMMARY

PRELIMINARIES

TOTAL FOR BUILDER'S WORK

P.C SUMS

1733000

GRAND TOTAL INCLUSIVE OF TAX					
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