

ITEM NO			QUANTITY	RATE	AMOUNT
SECTION NO. 1 - PRELIMINARIES AND GENERAL					
BILL NO. 1					
PRELIMINARIES					
PREAMBLES FOR TRADES					
Site establishment	Fixed	1	50,000.00	R50,000.00	
Allowance for preliminaries and general for items related to time, value and fixed	TIME	14	200,000.00	R2,800,000.00	
Subbies	Fixed	1	75,000.00	R75,000.00	
					R2,925,000.00

SECTION NO. 2 - BUILDING WORK

BILL NO. 1					
EARTHWORKS					
EXCAVATIONS					
Excavate in earth as defined not exceeding 2m deep below reduced or natural ground level and set aside for use as filling (backfilling elsewhere) for:					
36,923	Strip Footings	m ³	504	185.00	R93,323.94
	Bases	m ³	60	250.00	R15,000.00
Extra over trench and hole excavations in earth for excavation in:					
37,288	"Soft Rock" - Allowance	m ³	28	550.00	R15,522.48
Extra over all excavations for carting away or to be used as backfilling					
37,653	Surplus material from excavations for backfilling or carting away to dumping site.	m ³	564	200.00	R112,890.75
Risk of collapse of excavations					
38,018	Sides of trench and hole excavations not exceeding 1,5m deep.	m ²	1,187	20.00	R23,739.00
Keeping excavations free of water.					
38,384	Keeping excavations free of water.	No	1	10,000.00	R10,000.00
FILLING, ETC.					

Earth filling G6 supplied by the contractor compacted to 95% Mod AASHTO density

38,749	Under floors	m ³	310	625.00	R193,500.00
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Compaction of Surfaces

39,114	Compaction of ground surface under floors including ripping and scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density	m ²	1,032	20.00	R20,640.00
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TESTS

Prescribed tests to determine degree of compaction or other properties of ground or filling

39,479	Mod AASHTO Density test	No	10	650.00	R6,500.00
	Earthworks contingencies	Prov	1	50,000.00	R50,000.00

R541,116.17

BILL NO. 2

CONCRETE, FORMWORK AND REINFORCEMENT

REINFORCED CONCRETE

Class 15MPa/19mm concrete

	Blinding	m ³	19	2,300.00	R43,274.79
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Class 25MPa/19mm concrete

36,924	Cavity fill	m ³	26	2,450.00	R62,610.36
37,289	Surface beds cast in panels on waterproofing	m ³	129	2,850.00	R367,650.00
37,654	Strip Footings	m ³	101	2,550.00	R257,271.41
	Bases	m ³	40	2,650.00	R106,000.00
	Walls	m ³	15	3,850.00	R56,595.00

Class 30MPa/19mm concrete

38,019	Isolated Beams	m ³	66	3,750.00	R245,660.63
38,385	Slabs including beams and inverted beams	m ³	361	3,300.00	R1,189,980.00
	Columns	m ³	10	3,500.00	R33,442.50

TEST BLOCKS

38,750	Making and testing 150 x 150 x 150mm concrete strength test cube	No	50	250.00	R12,500.00
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CONCRETE SUNDRIES

Finishing top surfaces of concrete smooth with a wood float and brush finish

39,115	Surface beds, slabs and roof areas	m ²	2,571	45.00	R115,695.00
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SMOOTH FORMWORK (DEGREE OF ACCURACY I)

Smooth formwork to sides

	Columns	m ²	109	685.00	R74,802.00
	Beams	m ²	437	725.00	R316,629.25
	Walls	m ²	98	950.00	R93,100.00

39,480	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	404	205.00	R82,758.50
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SMOOTH FORMWORK (DEGREE OF ACCURACY I)

Smooth formwork to soffits

39,846	Slabs not exceeding 250mm thick propped up exceeding 1,5m not exceeding 3,5m high	m ²	1,539	650.00	R1,000,350.00
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Smooth formwork to soffits

40,211	Soffits of Beams propped up exceeding 1,5 and not exceeding 3,5m high	m ²	110	1,350.00	R148,635.00
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STAIRCASES PROVISIONAL

Complete staircase including form work, concrete and reinforcement (Finish to staircase elsewhere)

40,941	Stairs	No	2	85,000.00	R170,000.00
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MOVEMENT JOINTS ETC

Two layers of 375 micron DPC membrane as slip joint between horizontal concrete and brick surfaces including cement mortar bed

41,307	Not exceeding 300mm wide	m	395	50.00	R19,750.00
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Expansion joints with 'Jointex' or similar and approved between vertical concrete and brick surfaces including sealing

41,672	10mm Joints not exceeding 300mm high or wide	m	777	155.00	R120,435.00
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Saw cut joints

42,037	3 x 30mm Saw cut joints sealed with Sika Loadflex, in top of concrete	m	701	135.00	R94,635.00
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REINFORCEMENT

High tensile steel reinforcement to structural concrete work

42,402	To raft inc beams	t	60.97	20,000.00	R1,219,431.30
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Fabric reinforcement

43,133	Type 245 fabric reinforcement in surface beds, slabs, etc.	m ²	1,032	76.74	R79,195.68
	Concrete contingencies	Prov	1	250,000.00	R250,000.00

R6,160,401.42**BILL NO. 3****MASONRY****FOUNDATIONS**

	220mm One brick walls	m ²	127	722.00	R91,441.30
36,925	280mm Walls of two half brick skins	m ²	352	738.00	R260,109.95

SUPERSTRUCTURE**Brickwork of clay NFX bricks (14 MPa nominal compressive strength)
in class II mortar**

38,020	110mm Half brick walls	m ²	261	385.00	R100,429.56
38,386	220mm One brick walls	m ²	501	722.00	R361,397.10
38,751	280mm Hollow walls of two half brick skins including wire ties	m ²	1,402	738.00	R1,034,707.37

BRICKWORK SUNDRIES

39,116	Splayed mortar fillet one course high in 50mm cavity	m	301	25.00	R7,516.25
39,481	Closing 50mm cavity of hollow wall horizontally and vertically with one course of brickwork	m	267	85.00	R22,695.00

Brickwork reinforcement

39,847	75mm Wide reinforcement built in horizontally	m	17,654	5.00	R88,268.42
40,212	150mm Wide reinforcement built in horizontally	m	3,021	5.00	R15,107.25

Standard prestressed fabricated lintels

40,577	110 x 75mm Lintels in lengths not exceeding 3m	m	129	95.00	R12,255.00
40,942	150 x 75mm Lintels in lengths not exceeding 3m	m	118	95.00	R11,210.00

Galvanized hoop iron cramps, ties, etc

41,308	30 x 1,6mm Wall tie 500mm long with one end fixed to timber frame and other end built into brickwork	No	671	42.50	R28,517.50
	Masonry contingencies	Prov	1	150,000.00	R150,000.00

R2,183,654.70**BILL NO. 4****WATERPROOFING**

DAMP PROOFING OF WALLS AND FLOORS

One layer of 375 micron "SABS approved" embossed damp proof course

36,926	DPC in window cills	m	118	20.00	R2,360.00
37,291	In walls	m ²	185	45.00	R8,325.00

One layer of 250 micron "SABS approved" waterproof sheeting sealed at laps

37,656	Under surface beds	m ²	1,187	20.00	R23,736.00
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Two coats 'Cemflex' waterproofing slurry mixed with Portland cement and water

38,021	On plastered shower walls and floors	m ²	185	415.00	R76,775.00
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WATERPROOFING TO ROOFS ALLOWANCE

PROV	1	1,200,000.00	R1,200,000.00
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R1,311,196.00

BILL NO. 10**STRUCTURAL STEELWORK****PREAMBLES**

For preambles refer to "Model Preambles for Trades"

SUPPLEMENTARY PREAMBLES**Descriptions**

Descriptions of bolts shall be deemed to include nuts and washers

Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete

Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete

Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete. Where anchor bolts are described as embedded in sides or soffits of concrete it shall be deemed to include holes through formwork.

Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete.

All Structural Steelwork shall be fabricated and erected in accordance with SANA 1200H

All Structural Steelwork shall be manufactured subject to a set of approved Shop Drawings that will be submitted to the project Engineer for reviewing, commenting and approval

All Structural Steelwork shall be of Grade 300W steel except cold formed hollow sections which shall be commercial grade

All Structural Steelwork, unless described as Galvanised, shall be factory primed with two coats self etching primer

All Structural bolts shall be grade 8.8

STEEL COLUMNS AND BEAMS PROVISIONAL

Galvanised welded columns in single lengths with flat section base, top, bearer and connection plates bolted to concrete

36,932	100 x 100 x 4.5mm 12.9kg/m SHS columns	t	0.89	94,600.00	R84,194.00
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Galvanised welded beams in single lengths with flat section bearer and connection plates bolted to concrete

37,297	254 x 146mm x 31,3kg/m I-beam	t	1.38	71,500.00	R98,670.00
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R182,864.00

BILL NO. 12

PLASTERING

PREAMBLES

For preambles refer to "Model Preambles for Trades"

SCREEDS

Screeds on concrete

36,934	Average 35mm thick on shower floors to falls and currents to outlets	m ²	40	250.00	R10,000.00
37,299	25mm Thick on floors	m ²	1,381	155.00	R214,055.00
	Average 60mm Thick to roofs to falls	m ²	1,162	195.00	R226,590.00

INTERNAL PLASTER

One coat cement plaster on brickwork

37,664	On narrow widths	m ²	175	350.00	R61,421.94
38,029	On walls	m ²	2,925	140.00	R409,479.63

One coat cement plaster on concrete

38,395	On concrete soffits of slabs	m ²		250.00	
38,760	On concrete soffits and sides of beams	m ²		325.00	

EXTERNAL PLASTER

One coat cement plaster on brickwork

39,125	On narrow widths	m ²	105	350.00	R36,803.62
39,490	On walls	m ²	1,402	140.00	R196,285.95
					R1,154,636.14

SECTION NO. 3 - EXTERNAL WORK**GENERAL SITE WORKS****BILL NO. 1****PREAMBLES**

For preambles refer to "Model Preambles for Trades"

SUPPLEMENTARY PREAMBLES**Nature of ground**

The nature of the ground is assumed to be a pickable material, therefore "earth", but possibly interspersed with "soft rock" builders not exceeding 0,3m³ in volume

NOTE : All excavations are measured as being in "earth" and/or filling compacted to 98% modified AASHTO density Descriptions of excavations shall be deemed to include for setting aside surplus excavated material in spoil heaps for use as filling or for depositing within 150m of the perimeter of the excavations and spreading and roughly levelling as directed, as well as for increase in bulk and multiple handling of excavated material caused by the contractor's method of operation. Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site and for bulking.

Compaction tests on filling

The rates of filling shall be deemed to include all compaction tests necessary for the contractor to acquaint himself of the compaction, etc. The contractor must carry out sufficient tests in accordance with SABS 1200 DA-1988 page 10 in order to satisfy himself about the consistency and compaction of materials Separate tests measured are for the engineers sole use to establish the compaction and Mod AASHTO by an independant laboratory should it be necessary

Carting away of excavated material

Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site.

SITE ALTERATIONS AND DEMOLITIONS, ETC.

36,951	Provisional allowance for site alterations and demolitions to accommodate new build	Prov	1	350,000.00	R350,000.00
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R350,000.00