

Prototype Covered Assembly 320 Pupils (Painted Steel Option)

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**Prototype Covered Assembly
320 Pupils (Painted Steel Option)**

					R	4 919.00
	Brought Forward					
	<u>Extra over excavations for removing surplus material</u>					
2/5	Surplus material from excavations and/or stock piles to an area where directed on site or adjacent site, spread and levelled	m3	62	95.00		5 890.00
	<u>Risk of collapse of excavations</u>					
2/6	Sides of trench and hole excavations not exceeding 1.5m deep	m2	23	5.00		115.00
	<u>Keeping excavations free of water</u>					
2/7	Allow for keeping excavations free of water other than subterranean water		Item			500.00
	<u>Compaction of surfaces</u>					
2/8	Compaction of ground surface under floors etc., including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 98% Mod. ASSTO density	m2	181	15.00		2 715.00
	<u>FILLING, ETC.:</u>					
	<u>Imported G5 material obtained from commercial sources supplied by the contactor compacted to 95% Mod AASHTO density</u>					
2/9	Under floors	m3	27	285.00		7 695.00
	<u>TESTS</u>					
	<u>Prescribed density tests on filling</u>					
2/10	Allow for the execution of all the prescribed density tests on filling, etc., as pointed out by the Engineer on site to the approval of the Project Manager.	No	2.00	275.00		550.00
	<u>SOIL POISONING</u>					
	<u>Approved brand of anti-termite soil poison applied by a registered pest control company and guaranteed against termite infestation for ten years</u>					
2/11	Under floors etc., including forming and poisoning shallow furrows against foundation walls etc., filling in furrows and ramming	m2	181	12.00		2 172.00
	Carried to Summary				R	24 556.00
	Bill No. 2					
	Earthworks					

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Item No	Quantity	Rate	Amount
<u>BILL NO. 6</u>			
<u>STRUCTURAL STEELWORK</u>			
<u>PREAMBLES</u>			
Tenderers are advised to refer to the Model Preambles for trades before pricing these provisional Bill of Quantities.			
<u>SUPPLEMENTARY PREAMBLES</u>			
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 dending, 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.			
Structural steelwork shall comply with the requirements of SABS 1200H and the relevant project specifications.			
<u>Steekwork</u>			
All steelwork			
a) All structural steelwork shall be fabricated and erected in accordance with SABS 1200H			
b) Welds shall conform to SABS 0167 - 1984 and 044 specifications			
c) All Dimensions shall be checked on site before shop drawings commence. All Engineers drawings to be read in conjunction with Architects drawings. Any discrepancies shall be bought to the attention of the Engineer.			
d) A complete set of shop drawings shall be submitted to the Engineer for approval before fabrication commences.			
e) All structural steelwork shall be grade S355JR			
f) All structural bolts shall be Grade 4.8 unless otherwise stated.			
g) Where temporary bracing or propping is necessary, the contractor shall be responsible for the design, erection, maintenance and removal (where necessary) of such supports.			
Carried Forward		R	
Bill No. 6			
Structural Steel			

<p style="text-align: right;">Brought Forward</p> <p>If splices in trusses are required because of transport, proposal of this shall be submitted to the Engineer at an early stage for written approval.</p> <p><u>Corrosion Protection</u></p> <p>Corrosion Protection shall consist of:</p> <p>a) Remove all slag from welded joints to expose the steelwork.</p> <p>b) Brush steelwork with a rotary wire brush to S.I.S 3.5 standard.</p> <p>c) Apply one coat (30 Micron) red lead primer in accordance with SABS 681.</p> <p>d) Apply one coat (30 Micron minimum) multi purpose undercoat in accordance with SABS 681. Use type II if paint is applied within 16 hours of application of red lead primer, otherwise use type I.</p> <p>e) Apply one coat of Alkyd base enamel (30 Micron) to Architects colour specification. Damaged areas of paint shall be made good on site in accordance with SABS 0120.</p> <p>f) Where applicable, grout shall be provided under base plates before any primary loads applied to the structure</p> <p>g) The angle iron supporting the brick walls must be painted as follows:</p> <p>Remove all slag from welded joints to expose the steelwork.</p> <p>Brush steelwork with a rotary wire brush to S.I.S 3.5</p> <p>Apply one coat PA 10 etch primer, one coat Alkyd undercoat and one coat Alkyd topcoat.</p> <p><u>Traceability of steel</u></p> <p>All steel to be marked with manufacturer's test certificate number to ensure full traceability and to facilitate re-use of the steel members.</p>		R	
<p>Carried Forward</p> <p>Bill No. 6 Structural Steel</p>		R	

Brought Forward			R	
<u>Marking steelwork</u>				
Completed components shall be marked with a durable and distinguishing erection mark, section size, steel grade and manufacturer`s test certificate number in such a way as not to damage the component. Marking shall be in a discrete location. Hardstamping may be used unless noted otherwise.				
<u>Testing of welds</u>				
10% of all fillet welds and 100% of butt welds to be subjected to non destructive testing.				
Fabricate, supply, deliver and erect including shop and site painting as described.				
<u>STEEL COLUMNS AND BEAMS</u>				
<u>Welded columns in single lengths with flat base, cap, bearer and connection plates cast into concrete base with and including fishtail lugs etc</u>				
200 x 100 x 4.0 Rectangular hollow section	kg	905.00	27.00	24 435.00
152.4 x 3.0 Circular hollow column	kg	286.16	27.00	7 726.32
<u>PURLINS, GIRTHS, BRACING, ETC</u>				
<u>Cold formed lipped channel with connection plates welded to rafters. (Steel rafters elsewhere measured)</u>				
150 x 75 x 2.0 x 2.0 Galvanized CFLC purlins	kg	621.18	27.00	16 771.86
50 x 50 x 4mm Bracings including cleats, bolts, welding etc	kg	68	27.00	1 836.00
<u>TRUSSES, GIRDERS, ETC</u>				
<u>Rafters and beams with flat bearer gusset and connection plates:</u>				
Girder formed of 90 x 90 x 8mm thick top chord, 80 x 80 x 8mm thick bottom chord, 50 x 50 x 4mm thick diagonal, vertical and general bracing, 80 x 80 x 8mm thick vertical bracing as detailed on drawing no. AFR 171C-PD-003 Rev.C annexured to these Bills of Quantities	kg	1 020	27.00	27 540.00
Carried Forward			R	78 309.18
Bill No. 6 Structural Steel				

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<u>FINAL SUMMARY</u>			
Bill No		Page No	Amount
1/1	Preliminaries	-1-	30 271.78
1/2	Earthworks	-3-	24 556.00
1/3	Concrete, Formwork & Reinforcement	-4-	22 915.00
1/4	Precast Concrete	-5-	81 392.50
1/5	Roof Coverings	-6-	43 263.00
1/6	Structural Steel	-10-	97 791.58
1/7	Provisional Sums	-11-	5 280.00
	Sub-Total		R 305 469.86
	<u>Contingencies</u>		
	Add : Contingencies (@ 10%)		R 30 546.99
	Sub-Total		R 336 016.85
	Value Added Tax (15%)		R 50 402.53
	Carried to Form of Tender		R 386 419.38