

**BEML LIMITED BANGALORE**

TENDER Ref:- 6300038494

Date: 01.08.2023

ISSUED TO:	Period of contract:	04 Months
	EMD :	Rs. 50,000/-

**Sub: Construction of lean to shed roof at Eastern side of Track no 25, Bangalore Complex, BEML Limited, Bangalore-75.**

**SCHEDULE 'A' - BILL OF QUANTITIES**

Sl. No	Description	Unit	Qty	Rate/unit in fig. & in words Rs.	Amount (Rs)
1	Providing and constructing 230mm thick/required thickness burnt brick masonry in cement mortar of mix proportion 1:6 using first class table moulded bricks for superstructure at required heights including tools & tackles, curing etc., complete all as specified & directed by Engineer in charge. <b>Note:</b> The rate quoted is deemed to include for providing & removal of scaffolding, staging/ladder wherever necessary and protective measures etc.	Cu.M	15.00		
2	Rendering/Plastering 15mm thick in Cement Mortar 1:4 on fair faces of brick or concrete surfaces including curing, tools & tackles etc., complete all as specified and directed by Engineer-in-charge.	Sq.M	200.00		
3	Supplying, Fabricating, hoisting and erecting in position MS Structural steel for roof truss, purlins & cladding work using MS Structural steel sections viz., channels, plates, angles, cleats, flats, fixing to correct line & level including cutting, welding, bending to required shape, cleaning the rust and scales, shims & packing pieces required for erection at all elevation heights & levels etc., complete all as specified and as directed by Engineer in charge. <b>Note:</b> a) The rate quoted is deemed to include for labour, welding machine, welding rods, gas etc. b) The rate quoted is deemed to include for scaffolding, staging/ladder & providing safety nets wherever necessary and protective measures etc.	Kgs.	9000.00		
4	Supplying ,fixing in position 16mm diameter MS foundation bolts of minimum 450mm length including threading of required length, drilling /fixing the MS bolts over the existing concrete surfaces suitably including necessary hardware items , bolts, nuts, washers welding, lead and lift etc., complete all specified and directed by the Engineer in charge . <b>Note:</b> The rate quoted is demed to include for loosening the existing concrete surface for placing of MS Plates including making good the surfaces after drilling of MS bolts.	Kgs.	150.00		
5	Preparing the new/old Plastered surface of external walls by water washing, sand papering/wire brushing including providing necessary repairs to cracks, and cleaning the surface from dust, dirt and filling/closing the cracks with suitable crack filling compound and applying two coats of exterior emulsion paint of first quality approved brand and colour manufactured by M/s.Asian Paints (ACE)/Berger Paints (Wall Masta) after successively drying each coat over a coat of primer and touch up putty wherever necessary etc., complete all as specified and directed by engineer in charge. <b>Note:</b> The rate quoted is deemed to include for providing and removal of scaffolding, staging/ladder wherever necessary and protective measures etc.	Sq.M	200.00		

Sl. No	Description	Unit	Qty	Rate/unit in fig. & in words Rs.	Amount (Rs)
6	<p>Providing, straightening, cutting, fabricating erecting, placing in position in required slope, Trapezoidal GI gutter of 1.5mm GI sheet fabricated &amp; supported by 50X6mm MS flat at 600mm c/c and make provision for down take pipe mouth of required size and shape, the cross sectional length for eaves gutter shall not exceed 0.60m including painting structural work with two coats synthetic enamel paint over a coat of zinc chromate primer etc., Complete all as specified &amp; directed by Engineer in Charge.</p> <p><b>Note.</b>1) The rate quoted is deemed to include for providing and removal of scaffolding, staging/ladder wherever necessary and protective measures etc.</p>	Rmt	20.00		
7	<p>Supplying &amp; fixing 0.6mm thick galvalume single skin HI-Rib trapezoidal/approved profile PPGL colour coated sheet for roof of approved color &amp; shade, 1060mm supply width, 975mm-1000mm covered width 29mm-30mm crest height, 24mm crest width with min. 195mm-200mm pitch minimum 0.50mm thick TCT, Galvalume(55% aluminum-43%Zinc Coating), 150 GSM with minimum yield strength of 550 Mpa. The sheet shall have wide pans with stiffening ribs manufactured by M/s JSW/TATA. The sheet shall be fixed by means of anticorrosive self drilling self tapping mechanically galvanised fasteners with integral EPDM washers. The scope shall include all sealing of joints, curves, edges or other accessories with silicon sealant. The sheet shall be laid with a minimum lap of 150mm at the ends and special male &amp; female lapping at each side. The minimum lap of sheets with ridges, hips &amp; valleys shall be 200mm. The sheets shall be secured to purlins by means of self driven screws or GI J or L hook bolts and nuts with bitumen and GI limpet washer as per the requirement of site and as directed, etc , complete all as specified and as directed by Engineer in charge.</p> <p><b>Note:-</b> 1) The finished/Covered area of roof sheet excluding lap length shall be measured for payment. 2) The rate quoted is deemed to include for providing and removal of scaffolding, staging/ladder wherever necessary and protective measures etc.</p>	Sq.m	170.00		

Sl. No	Description	Unit	Qty	Rate/unit in fig. & in words Rs.	Amount (Rs)
8	<p>Supplying &amp; fixing 0.6mm thick galvalume single skin HI-Rib trapezoidal/approved profile PPGL colour coated sheet for cladding of approved color &amp; shade, 1060mm supply width, 975mm-1000mm covered width 29mm-30mm crest height, 24mm crest width with min. 195mm-200mm pitch minimum 0.50mm thick TCT, Galvalume(55% aluminum-43%Zinc Coating), 150 GSM with minimum yield strength of 550 Mpa. The sheet shall have wide pans with stiffening ribs manufactured by M/s JSW/TATA. The sheet shall be fixed by means of anticorrosive self drilling self tapping mechanically galvanised fasteners with integral EPDM washers. The scope shall include all sealing of joints, curves, edges or other accessories with silicon sealant. The sheet shall be laid with a minimum lap of 150mm at the ends and special male &amp; female lapping at each side. The minimum lap of sheets with ridges, hips &amp; valleys shall be 200mm. The sheets shall be secured to purlins by means of self driven screws or GI J or L hook bolts and nuts with bitumen and GI limpet washer as per the requirement of site and as directed, etc , complete all as specified and as directed by Engineer in charge.</p> <p><b>Note:-</b> 1) The finished/Covered area of roof sheet excluding lap length shall be measured for payment. 2) The rate quoted is deemed to include for providing and removal of scaffolding, staging/ladder wherever necessaryand protective measures etc.</p>	Sq.m	100.00		
9	<p>Supplying and fixing 2mm uniform thickness corrugated polycarbonate sheet manufactured by M/s.Tuflite/Lexon/Equivalent make for roof conforming to relevant IS with necessary hardware screws/ washers and sealant, sheets fixed to suit the existing galvalume roof sheet profile such that no leakage occurs etc., complete all as specified and directed by Engineer in charge. <b>Note:</b> The rate quoted is deemed to include for providing and removal of scaffolding, staging/ladder wherever necessaryand protective measures etc.</p>	Sqm	25.00		
10	<p>Preparing the steel surfaces by scrapping &amp; applying two coats of synthetic enamel paint of first quality, approved brand and colour, Manufactured by M/s Asian paints/Berger over a coat of yellow/red oxide zinc chromate primer etc., Complete all as specified and directed by Engineer in charge. <b>Note:</b> The rate quoted is deemed to include for providing and removal of scaffolding, staging/ladder wherever necessaryand protective measures etc.</p>	Sq.m	250.00		
11	<p>Providing and laying in Position Plain cement concrete M15 grade 1:2:4 150mm average thick using 20mm graded down size granite aggregate, machine mixed, laid in layers for hard standing concrete including finishing the top surface even, well compacted including curing, compacting etc.,complete all as specified and directed by Engineer in charge. <b>Note:</b> The rate quoted by the Contractor for the item is deemed to include for providing and removal of form work/centering/shuttering wherever necessary.</p>	Sq.M	25.00		

Sl. No	Description	Unit	Qty	Rate/unit in fig. & in words Rs.	Amount (Rs)
12	Providing & fixing 110mm diameter 6kg/cm <sup>2</sup> PVC pipes manufactured by M/s.Supreme/ Astral or equivalent conforming to relevant IS for rain water pipe, laid in gradient in walls including all standard PVC fittings like elbows, bends, Tee, PVC Shoe & fixtures such as pipe clips, PVC clamps wooden plug, screws, washers etc fixed/ secured firmly etc.,complete all as specified and directed by Engineer in charge. <b>Note:</b> The rate quoted is deemed to include for providing and removal of scaffolding/staging wherever necessary.	Rmt	20.00		
13	Supplying and fixing 0.50mm thick Gal valume ridge sheet, fixed to the existing MS structural steel members etc including all hardware/ fixtures like nylon head self tapping corrosion protected mechanically galvanised fasteners with integral washer etc , complete all as specified and as directed by Engineer in charge. <b>Note:-</b> The rate quoted for the item is deemed to include for Providing & removal of scaffolding, staging/safetynets wherever necessary.	Rmt	20.00		
14	Supplying fabricating and fixing MS brackets to support for Gutter/ down take pipes using MS structural steel angles, plate, channels etc including welding to the existing MS members, tools, tackles, screws etc., complete all as specified & directed by Engineer in charge. <b>Note:-</b> The rate quoted for the item is deemed to include for Providing & removal of scaffolding, staging/safetynets wherever necessary.	Kgs.	100.00		
15	Supplying and installation of GI Weld mesh of size 50x50x2.50mm for ventilation, weld mesh to be supported to cladding sheets & welded to steel members with corrected line and level etc., complete all as specified and directed by Engineer in charge. <b>Note:-</b> The rate quoted for the item is deemed to include for Providing & removal of scaffolding, staging/safetynets wherever necessary.	Sq.m	20.00		
16	Supply & Installation of High Bay LED Light Fixtures 100 Watts.	Nos	8.00		
17	Supply & Installation of Wall Mounted Type Air Circulators of Size 18" 450mm	Nos	3.00		
18	Supply & Installation of MCB TPN Metal Distribution Board (DB) 4 Way, Single Door Consisting of Incoming :32A MCB Outgoing: 12 Nos 6ANPS MCB.	Nos	1.00		
19	Supply & Installation of Metal Clad Box with 01No 220Volt, 10AMPS Socket.	Nos	6.00		
20	Supply & Installation of Power and Lighting Circuit wiring in PVC Conduit.	job	1.00		
	<b>Total value of work excluding GST (Rs).</b>				
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(Total Amount in words Rupees.....  
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Signature of the Contractor with seal