

**TECHNICAL SPECIFICATIONS ANNEX-B**

**PROPOSED FABRICATION OF METAL HESCO AT CHAMAN BORDER - SIZE 30M LONG X 0.5M WIDTH X 2.53M HEIGHT**

**SPECIFICATIONS FOR HESCO AND PREFEB COVERING**

**CIVIL WORKS**

S.No	Description of Items	No	MEASUREMENT			Quantity	Unit
			L	B	H/D		
<b>FABRICATION WORKS</b>							
1	Prepare ground for installation of metal HESCOS by ramming and levelling	1	99	1.65		163.35	
						163.35	Sft
2	Fabricate and fix metal box size 30m long x 0.5m width x 2.53 height complete with painting (metal HESCO) as shown on the drawings. The metal box shall be made in 25mm x 25mm x 2mm metal tubes, 3mm metallic plate welded on the sides, 3mm thick metallic base under the box, and 0.5mm diameter hole at the base after every 1m	1	99			99	
						99	Feet
3	Supply and fill rough gravel - 0.2m high in the metal box (bottom layer) as shown on the drawings	1	99	1.65	0.66	107.811	
						107.81	Cft
4	Supply and fill graded sand - 2.1m high in the metal box (middle material) as shown on the drawings	1	99	1.65	6.93	1132.0155	
						1132.02	Cft
5	Supply and fill agricultural soil - 0.2m high in the metal box (top cover) as shown on the drawings	1	99	1.65	0.66	107.811	
						107.81	Cft

**PROPOSED COVERING OF THE EXISTING PREFAB AT CHAMAN BORDER - SIZE 7M LONG X 4M WIDTH X 3.2 HEIGHT**

**CIVIL WORKS**

S.No	Description of Items	No	MEASUREMENT			Quantity	Unit
			L	B	H/D		
<b>1 FOUNDATIONS &amp; COLUMNS</b>							
1.1	Excavation in foundation of pits size 0.7m length x 0.7m width x 1m deep including layout, dressing, refilling around structures with excavated earth, watering & ramming	12.0	2.310	2.31	3.63	232	
						232	Cft
1.11	Providing and laying plain hand mixed 1 : 4 : 8 cement concrete using sand approved source and crushed aggregate having maximum size up to 1-1/2" (38mm) & down gauge in foundation and plinth including levelling, compacting & curing.	12	2.310	2.31	0.17	11	
						11	Cft
1.12	Providing, fabricating and laying deformed Grade 60 steel reinforcement (deformed bar) for all kinds of R.C.C work in foundation, plinth and ground floor including the cost of straightening, removal of rust, cutting, bending, binding, wastage and providing such over-laps as are not shown on the drawings. The cost of binding wire and cement concrete spacer blocks or chairs for binding and holding the reinforcement in position is inclusive up to 15 ft. (5m) height						
	Foundation Bases - as per the drawings	8					
	Foundation Columns - as per the drawings	8					
						0.3	Tonnes
1.13	Providing and laying 1:2:4 cement concrete (in foundation bases) using approved coarse sand and crushed aggregate 3/4" (19mm) and down gauge in sills and Bed Plate including formwork and its removal, compacting and curing	12	2.310	2.31	0.83	53	
						53	Cft

**PROPOSED FABRICATION OF METAL HESCO AT CHAMAN BORDER - SIZE 30M LONG X 0.5M  
WIDTH X 2.53M HEIGHT**

**SPECIFICATIONS FOR HESCO AND PREFEB COVERING**

**CIVIL WORKS**

S.No	Description of Items		MEASUREMENT			Quantity	Unit
1.14	Providing and laying 1:2:4 cement concrete (in foundation columns) using approved coarse sand and crushed aggregate 3/4" (19mm) and down gauge in sills and Bed Plate including formwork and its removal, compacting and curing	12	1.320	1.32	2.48	52	
						52	Cft
1.15	Supply and fix Universal steel column size 203mm x 133mm x 30mm complete with mild steel base plate size 300mm x 200mm x 20mm thickness, 4nos. 600mm long J- anchor bolt with 4nos. anchoring holes and painting	8	10.560			84	
						84	feet
1.16	Supply and fix 75mm x 75mm x 3mm square hollow section steel columns spaced at 2m c/c - complete with painting	4	10.560			42	
						42	feet
<b>2</b>	<b>ROOF STRUCTURE</b>						
	<b>Main frame structure</b>						
2.10	Supply and fix Universal steel beam size 203mm x 133mm x 30mm complete with mild steel base plate size 300mm x 200mm x 30mm thickness, 4nos. 600mm long J- anchor bolt with 4nos. anchoring holes and painting	2	23.1			46	
		4	13.2			53	
						99	feet
2.11	Supply and fix 100mm x 50mm 2mm steel hollow section complete with painting - welded on the Universal beams	7	23.1			162	
						162	feet
2.12	Supply and fix 3mm thick mild steel sheets with painting - welded on steel hollow sections	1	23.1	13.20		305	
						305	Sft
	<b>Roof covering structure</b>						
2.13	Supply and fix 75mm x 50mm x 3mm steel hollow section as rafters welded on 203mm x 133mm x 30mm steel beam spaced at 2m c/c and purlins - complete with painting	20	3.3			66	
		18	5.0			89	
		4	6.6			26	
		2	23.1			46	
		8	8.3			66	
		8	23.1			185	
						479	feet
2.14	Supply and fix 3mm thick mild steel sheets with painting - welded on steel hollow sections around the roof for holding sand bags	2	13.2		3.30	87	
		2	23.1		3.30	152	
						240	Sft
2.15	Supply and fix Hessian - 400mm high sandbags filled with sand laid on 3mm thick mild steel sheets	1	23.1		13.2	305	
						305	Sft
2.16	Supply and fix 15mm thick marine boards fastened on 100mm x 50mm x 3mm steel purlins	2	23.1		8.3	381	
						381	Sft
2.17	Supply and fix metal sheets as roofing material to cover marine boards	2	23.1		8.3	381	
						381	Sft
2.17	Supply and fix corrugated sheets along the veranda fastened on 100mm x 50mm x 3mm steel purlins	1	23.1		6.6	152	
						152	Sft