

**Bharat Heavy Electricals Limited**  
**High Pressure Boiler Plant**  
**Tiruchirappalli – 620 014. India**  
**Civil Engineering Department (Factory)**

**TENDER DOCUMENT (PRICE BID)**

**Name of work** : Supplying & fixing of Aluminium zinc alloy coated high tensile steel sheets for roofing and side sheeting to replace existing AC sheets in Factory Buildings of HPBP, SSTP and allied areas in BHEL, Trichy Complex.

**Value of work** : Rs.200/- Lakh

**Tender Notice No.** : 02/11-12

**Tender Schedule No.** : 11/11-12

**Period of Contract** : 12 (Twelve) Months

**Issued to M/s / S/Shri** :

**SCHEDULE 'A'**

**LIST OF WORKS AND PRICES**

**NAME OF WORK:** **Supplying & fixing of Aluminium zinc alloy coated high tensile steel sheets for roofing and side sheeting to replace existing AC sheets in Factory Buildings of HPBP, SSTP and allied areas in BHEL, Trichy Complex.**

DETAILS & QUANTITIES of each item of work shown in the BILL OF QUANTITIES are only approximate. They are given as a guide for the purpose of tendering only and are liable to variation and alteration of the Competent Authority. The work under each item as executed shall be measured and priced at the corresponding rate quoted by the contractor in the BILL OF QUANTITIES

Sl.No.	Description of work / supplied	Total amount of work / supplies (in figures and words)		Period of contract
		Rs.	Ps.	
1.	<b>Supplying &amp; fixing of Aluminium zinc alloy coated high tensile steel sheets for roofing and side sheeting to replace existing AC sheets in Factory Buildings of HPBP, SSTP and allied areas in BHEL, Trichy Complex.</b>	<b>200,00,000/-</b>		<b>TWELVE (12) MONTHS</b>

**BILL OF QUANTITIES**

Sl. No.	Appx. Qty.	Description of work	TNBP No.	Rate (Both in Unit fig & Words)	Amount	
					Rs.	Ps.

AS PER SEPARATE SHEETS ATTACHED CONTAINING **4** PAGES

FROM SERIAL No. **3** to **6**

CONTRACTOR

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ACCEPTING OFFICER

BHARAT HEAVY ELECTRICALS LIMITED  
TIRUCHIRAPPALLI - 14

BILL OF QUANTITIES

**NAME OF WORK: Supplying & fixing of Aluminium zinc alloy coated high tensile steel sheets for roofing and side sheeting to replace existing AC sheets in Factory Buildings of HPBP, SSTP and allied areas in BHEL, Trichy Complex.**

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Total Rs. P.
1	40750.00	Dismantling / removing / demolishing as the case may be of the following by manually / mechanical means and carefully stacking the serviceable materials at site of work or conveying and handing over the same at BHEL stores and disposal of unserviceable materials by transporting and dumping in the near by low level areas within a lead of 300 metres. All as per instructions of Engineer-in-charge. <b>A.C sheets from roofs and side cladding including ridges, valleys, gutters etc</b>		SQM	
2	33000.00	Supplying at site of work , hoisting and fixing in position of 0.47 to 0.50mm thick colour coated Aluminium zinc alloy coated high tensile steel rib profile sheets with accessories such as ridge pieces, barge boards, North light curves, end curves, etc., as per technical specifications given in note below <b>for roofing at all heights up to +24.00 metres</b> with necessary xylon coated self tapping / self drilling screws with EPDM washers at every ribs etc., complete. All as per drawings, manufacturers specifications and instructions of Engineer-in-charge .Rate includes cost of all materials like colour coated Aluminium zinc alloy coated high tensile steel rib profile sheets with accessories such as ridge pieces, barge boards, curves, etc., wherever required self tapping / self drilling screws with EPDM washers at every ribs etc., and labour charges for fixing, hire charges for tools and plants like drilling machines, providing lifeline and other provisions for safety, and all other incidental charges etc., complete. The payment will be made for the actual laid area only.		SQM	

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Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Total Rs. P.
3	2400.00	Carrying, hoisting and fixing in position of 0.47 to 0.50mm thick colour coated / bare Aluminium zinc alloy coated high tensile steel rib profile sheets with accessories such as ridge pieces, barge boards, curves, etc., as per technical specifications given in note below <b>for roofing at all heights upto +24.00 metres</b> with necessary xylon coated self tapping / self drilling screws with EPDM washers at every ribs etc., complete .All as per drawings, manufacturers specifications and instructions of Engineer-in-charge .Rate includes cost of self tapping/ self drilling screws with EPDM washers at every ribs, etc., and labour charges for fixing, hire charges for tools and plants like drilling machines, cost of providing lifeline and other provisions for safety, and all other incidental charges etc., complete but excluding cost of Aluminium zinc alloy coated high tensile steel sheets and its accessories such as ridge pieces, barge boards, curves, etc., which will be supplied by BHEL Stores at free of cost. The payment will be made for the actual laid area only.		SQM	
4	3600.00	Supplying at site of work , hoisting and fixing in position of 0.47 to 0.50mm thick colour coated Aluminium zinc alloy coated high tensile steel rib profile sheets with accessories such as ridge pieces, barge boards, curves, etc., as per technical specifications given in note below <b>for side sheeting at all heights upto +24.00 metres</b> with necessary xylon coated self tapping / self drilling screws with EPDM washers at every valleys, etc., complete .All as per drawings, manufacturers specifications and instructions of Engineer-in-charge .Rate includes cost of all materials like colour coated Aluminium zinc alloy coated high tensile steel rib profile sheets with accessories such as ridge pieces, barge boards, curves, self tapping / self drilling screws with EPDM washers at every valleys, etc., and labour charges for fixing, hire charges for tools and plants like drilling machines, providing lifeline and other provisions for safety, and all other incidental charges etc., complete. The payment will be made for the actual laid area only.		SQM	

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Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Total Rs. P.
5	1000.00	Carrying, hoisting and fixing in position of 0.47 to 0.50mm thick colour coated / bare Aluminium zinc alloy coated high tensile steel rib profile sheets with accessories such as ridge pieces, barge boards, curves, etc., as per technical specifications given in note below <b>for side sheeting at all heights upto +24.00 metres</b> with necessary xylon coated self tapping / self drilling screws with EPDM washers etc., complete. All as per drawings, manufacturers specifications and instructions of Engineer-in-charge. Rate includes cost of self tapping/ self drilling screws with EPDM washers at every valleys, etc., and labour charges for fixing, hire charges for tools and plants like drilling machines, cost of providing lifeline and other provisions for safety, scaffolding and all other incidental charges etc., complete but excluding cost of Aluminium zinc alloy coated high tensile steel sheets and its accessories such as ridge pieces, barge boards, curves, etc., which will be supplied by BHEL Stores at free of cost. The payment will be made for the actual laid area only.		SQM	
6	750.00	Supplying at site of work, hoisting and fixing in position of 2mm thick embossed clear poly carbonate roof light sheets in specified locations and at heights up to (+) 24.00 metres with necessary xylon coated self tapping / self drilling screws with EPDM washers at every ribs, etc., complete to match the profile of Aluminium zinc alloy coated high tensile steel roof sheets, as per instructions of Engineer-in-charge. The rate includes cost of poly carbonate sheets ,self tapping / self drilling screws with EPDM washer, at every ribs, and labour charges, all scaffolding charges, tools and plants and all other incidental charges etc., complete .		SQM	

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ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Total Rs. P.
7	100.00	Removing existing roof extractors ( Turbo Air Ventilators ) of dia 600mm or thereabouts from existing AC sheet roof of Industrial steel structures of height up to (+) 24.00 metres and fixing in position on AC / Aluminium zinc alloy coated high tensile steel sheet roofs at heights up to (+) 24.00 metres with necessary screws,, bolts etc., and finishing to match with existing roof. Rate to include cost of all labour charges for removing the ventilators without any damage, re-fixing with necessary cutting of sheets to the required size , drilling to suit the screws/ bolts, and finishing to match the existing profile but excludes cost of roof ventilators/ extractors. All as per manufacturers specifications and as directed by the Engineer in charge.		Each	
8		Conveyance of debris generated by dismantling and other modification works including AC materials, and all other debris and waste materials from where they are stacked,/ accumulated and transporting the same by contractors own lorry and disposing off at the specified places all as per the instructions of Engineer-in-charge. Rate includes labour for collection of the said debris from various places loading, leading, unloading, stacking or spreading , levelling etc., complete. Payment will be made on trip basis with a lorry load of 300 cft / trip.			
a)	30.00	0 - 1 km.		Trip	
b)	30.00	1 - 2 km		Trip	
<b>NOTE</b>	1	The Aluminium zinc alloy coated high tensile steel sheets and specials shall be 0.47 to 0.50mm thick (TCT) Aluminium (around 55%, Zinc around 43%) alloy coated high tensile sheets (Yield strength 550 MPA) colour coated rib profile sheets as per ASTM A792M, coating standard as per AS 1397-1933 having cover width of 1000 plus or minus 10mm and over all width of 1060mm of any length to suit site conditions.			
	2	About 90% area of the Aluminium zinc alloy coated high tensile steel sheets and specials shall be colour coated with Light Blue RAI 5012 and 10% of the covered area is of with off white.			
<b>TOTAL .. ..</b>					_____
( RUPEES..... )					

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