

Technical Specification for Color coated Trapezoidal Roofing sheets

TEP: BHEL: BAP: AQCS: CC SHEET: REV03

Date: 18-01-13

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Applicable standards: Color coated trapezoidal sheets as per Indian standard IS 14246 or Equivalent International Standards JIS G 3312 or ASTM A 755 or EN 10169-1 or Equivalent.

Sl.No.	Description	Design Requirement
1.0	Application: These color coated roof decking trapezoidal sheets are fixed using self-tapping screws with purlins envisaged in the Electrostatic Precipitator pent house to protect ESP roof equipment.	
2.0	Material: (Trapezoidal sheet as well as Plain Ridge sheet)	
2.1	Base Metal Nominal Thickness	0.5 mm or 0.6mm(As per Enquiry)
2.1	Material Specification	As Per IS 513- MILD STEEL or Equivalent applicable as per above referred standards. Thickness tolerance shall be as per IS 513 or Equivalent.
2.2	Yield Strength	Minimum 240 MPa (As applicable to IS 513 CR2 or Equivalent)
3.0	Roofing sheet:	
3.1	Profile of the sheet	Trapezoidal profile
3.2	Minimum Covered width required not counting the overlap length on both sides of sheet.	930 mm (without overlap)
3.3	Length of the roofing sheet	1600 mm
3.4	Minimum weight of the Trapezoidal profiled sheet (i.e. with Trapezoidal profile in shape), with base metal thickness of 0.5mm or 0.6mm, required per square meter area.	For 0.5mm --4.32 KG (Raw material weight without painting) For 0.6mm --5.30 KG (Raw material weight without painting)
3.5	Minimum overlap required between adjacent roofing sheets.(Width overlap)	75 mm over length of the sheet.
3.6	Quantity Requirement: According to the covered width offered (Clause 3.2) and maintaining the length as per Clause 3.3), total covered area indicated to be offered.	
3.6.1	Total covered area required.	As per Enquiry.
4.0	Plain Ridge sheet: Plain sheet without bending.	
4.1	Size of the Ridge sheet required.	500mm (Width) x 1250mm (Length)
4.2	No of Ridges required	As per Enquiry.
5.0	Galvanizing and Painting applicable for both Trapezoidal and Plain ridge sheet	
5.1	Galvanizing requirement	Base metal galvanised Zinc coating 275 grams / Sq. Meter of IS 277 or as applicable to Equivalent standards indicated as above.
5.2	Top side paint	20 microns (Dry Film Thickness) of Silicon Modified Polyester (with silicon content of 30% to 50%) paint or Super polyester paint over primer coat of minimum 5 microns. Color -5012 RAL Blue.
5.3	Bottom side paint	10 microns (Dry Film Thickness) Silicon Modified Paint or Super Polyester Paint over primer coat of minimum 5 microns. Color - 9002 RAL Grey.
5.4	Durability of paint	Class-2 of IS 14246 or as applicable to Equivalent standards indicated as above.
5.5	Drawing shall be submitted along with the offer	For Trapezoidal Profile sheet with dimensions.
5.6	Packing and dispatch	a) Packing should be ensured to avoid damage to roofing sheets during handling, Transit and Storage. b) Suitable packing methodology to be followed to ensure roofing sheets packing bottom is not touching the ground/earth. C) Handling marking /symbols should be incorporated in each packing to enable proper handling.

Prepared

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Checked

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Approved

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1. All the above minimum design requirements are to be met by the vendor and the sheets are to be supplied as per Indian standard IS 14246 or Equivalent International Standards JIS G 3312 or ASTM A 755 or EN 10169-1 or Equivalent.
2. The vendor should confirm while quote in their offer that the supplied Trapezoidal profile roofing sheet will meet the minimum weight requirement as mentioned in Clause 3.4.
3. Taking care of the minimum overlap required between the sheets as mentioned, the vendor should indicate the number of roofing sheets required to meet the covered area mentioned in our enquiry. The vendor should confirm in their offer that the supplied number of sheets will be adequate for the covered area indicated in our specification without which offer will not be evaluated and will be rejected. In the event of discrepancy between number of sheets quoted by the vendor and the total covered area specified, the total covered area will be binding on the vendor.
4. The vendor should quote the rate for the total covered area only as indicated in our enquiry for the Trapezoidal profiled roofing sheet, without which offer will not be evaluated.
5. For the Ridge sheet the vendor should quote the rate per one number of ridge sheet as per the above specification, without which offer will not be evaluated. The evaluation criteria will be based on rate quoted per ridge sheet.
6. The vendor's offer shall have the following details without fail for offer evaluation:

6.1 Color Coated Trapezoidal Roofing sheet

Enq sl no	Offered Thickness in mm	Length of the sheet in mm	Total offered covered Area in Sq Mtr	Covered width of the offered sheet in mm	Total no of sheet offered to meet total covered area	Weight of sheet per Sq.Mtr of Covered Area in KG	Total Weight offered in MT on considering all Variations viz weight & Qty.
		1600					

6.2 Ridge Sheet

Enq sl no	Offered Thickness in mm	Width in mm	Length of the sheet in mm	Total no of sheets offered	Weight per Ridge sheet in KG	Total Weight offered in MT on considering all Variations viz weight
		500	1250	As per Enquiry		

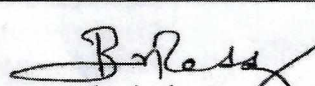
7. The vendor should furnish storage instructions in each packing to enable personnel at receiving end to follow to avoid damage of roofing sheets due to improper storage, mishandling, etc.

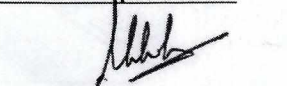
Rev:01:: Date:19-12-14==1) Clause 3.4—Thickness corrected 2)Packing & Dispatch added.

Rev:02:: Date:24-12-14==1) Clause 2.1 & 3.4—Both 0.5 & 0.6mm Thickness indicated as part of standard specification.

Rev:03:: Date:09-12-19==1) Clause 5.2 & 5.3—Painting and coating details changed based on tender requirement.


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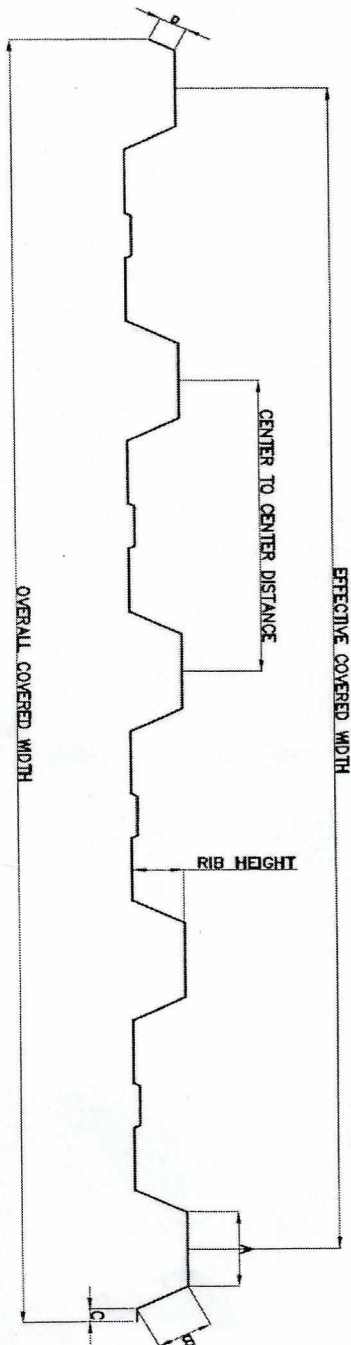
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COLOR COATED SHEET DIMENSION REQUIREMENT DETAILS



NOTES :

- * VENDOR SHALL FURNISH ALL THE ABOVE MENTIONED DIMENSIONS
- * WIDTH OVERLAP = $A+B+C+D$



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