



Hi-ROOF[®]

COLOR COATED ROOF & WALL SHEETS

Insulated Roofing Product | Color
Coated Sheets | Poly Carbonate
Sheet | Air ventilator | C & Z Perlins |
Deck Sheet | XLPE





About Us

Hi Roof Pvt. Ltd was established in 2011. Providing HI-ROOF brand steel roofing and cladding sheets. We offer pre painted and the metallic coated galvalume and galvanized trapezoidal profile sheets. We are pioneer in the manufacture of EPE Foam insulated steel roofing sheets with the insulation thickness of 5.00 to 10.00. The manufacturing facility located at Ahmedabad, Gujarat.

www.hiroof.in

» Quality Policy

Hi-Roof Pvt. Ltd resolves to achieve and sustain a reputation for excellence and shall strive to satisfy the needs of customer by high quality at competitive prices and delivery within the timeframe scheduled.

We shall comply with the requirements and continually improve the quality management system with the following objectives:

- E**nhanced customer satisfaction
- C**ontinual growth a vision to be leading globally.
- K**nowledge sharing leading to innovation
- E**mployee motivation and improvement
- D**etailed planning of activities to ensure completion within timeframe

» We Values

Simply, Because Hi-Roof the self explanatory word means "Able to be trusted". Hi-Roof Pvt. Ltd. engineers & the entire team is dedicated & committed to bring improvement in quality inturn satisfaction to customers.

Hi-Roof Pvt. Ltd. strive to provide customer satisfaction by various means & ways such as:

- A**dherence to technical specifications
- I**vestment for desire quality products
- H**and holding to the products sold
- I**ntroducing & practicing quality in every walk of the life
- T**imely delivery is the promise statement

» Technical Specification of Coated Material



Pre-Painted Galvanised Steel Sheets	Non Color Alu-Zinc Steel Sheets (Base Galvalume) (55% Aluminium 45% Zinc Alloy)	Pre-Painted Alu-Zinc Steel Sheets (Base Galvalume) (55% Aluminium 45% Zinc Alloy)
<p>Zinc Coating: Z120</p> <p>Primer Service Coat: 5 micron epoxy / PU on both sides</p> <p>Paint Coating: Regular Modified paints (RMP) (Option Silicon Modified Polyester & PVF₂)</p> <p>Painting Thickness: <i>Top</i> - 18-20 microns <i>Bottom</i> - 5-7 microns</p> <p>Surface paint reflection: Glossy Finish (Optional-Matt Finish)</p> <p>Confirms To: ASTM, A653, A755, 513, 14246, AS 1397</p>	<p>Alu-Zinc Coating: AZ 150</p> <p>Confirm To: ASTM A792, JIS 93321, AS 1397</p>	<p>Alu-Zinc Coating: AZ 150 (Optimal AZ 70)</p> <p>Primer Service Coat: 5 micron epoxy / PU on both sides</p> <p>Paint Coating: Regular Modified paints (RMP) (Option Silicon Modified Polyester & PVF₂)</p> <p>Painting Thickness: <i>Top</i> - 18-20 microns <i>Bottom</i> - 5-7 microns</p> <p>Surface paint reflection: Glossy Finish (Optional-Matt Finish)</p> <p>Confirms To: ASTM, A792, 755, JIS 93321, 93322, AS 1397</p> <p>Yield Strength: ASTM, A792, 755, JIS 93321, 93322, AS 1397</p>

» Technical Specification of Insufoam Insulation

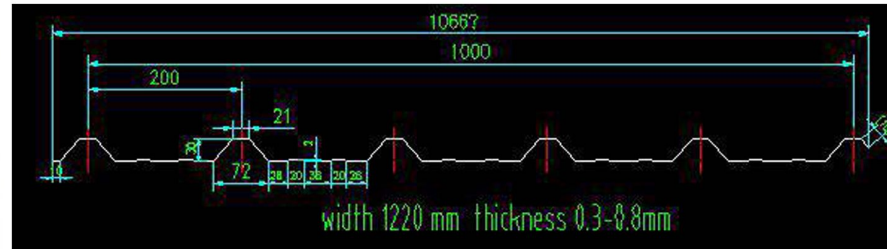
NO.	CHARACTERISTIC	TEST RESULT	METHOD
1	Density	30 - 40 Kg/m ³	ISO 845 1988 (E)
2	Reflectivity	0.97	ASTM E408
3	Emissivity Aluminium Foil	0.03	ASTM C1371
4	UV Resistance	Excellent	-
5	Chemical Resistance	Excellent with Al Foil	ASTM D-543/BS 4618
6	Temperature Range	-80 °C to + 90 °C	-
7	Flexibility	Excellent	BS 4433
8	Heat Resistance (R-Value)	3.0 m ² C/W	ASTM C236
9	Thermal Conductivity	0.030 Kcal/m ²	ASTM C-177
10	Flammability	HF-1	UL-94

Technical Specification of Insububble Insulation

NO.	CHARACTERISTIC	TEST RESULT	METHOD
1	Density	100 GSM	ISO 845 1988 (E)
2	Reflectivity	0.97	ASTM E408
3	Emissivity	0.03	ASTM C1371
4	UV Resistance	Excellent	-
5	Chemical Resistance	Excellent with Al Foil	ASTM D-543/BS 4618
6	Temperature Range	-80 °C to 90 °C	-
7	Flexibility	Excellent	BS 4433
8	Thermal Conductivity	0.020 Kcal/m ³ hr °C	ASTM C-177
9	Tensile Strength	25 - 2.7 Kg/mtr	ASTM C-3575
10	Compression Strength	0.35 0.45 Kg/mtr	ASTM D-3575
11	Water Absortion (mg/cm3)	< 1.8% after 28 Days	ASTM D-1677



» Trapezoidal Profile Drawing

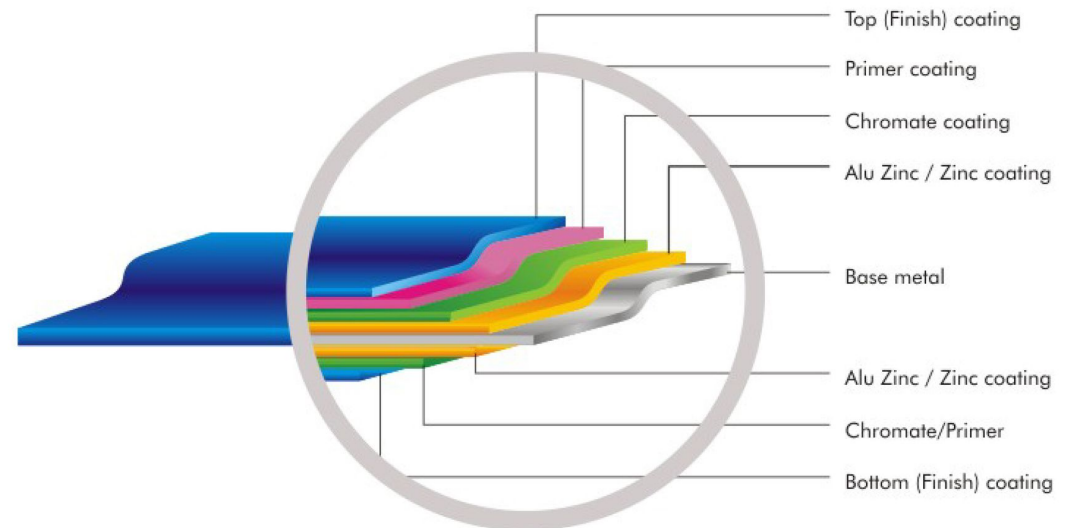


» Technical Specification of Material Dimension

Total Coating Thickness (TCT) 0.30mm, 0.35mm, 0.40mm, 0.45mm, 0.47mm, 0.50mm, 0.60				
Profile	Sheet Width	Effective Width	Pitch	Depth of Crest
Trapezoidal	1080 mm	1000 mm	200 mm	30 mm



» Structure of Pre-Painted Steel Sheets





» Sectional Properties (Zinc / Zinc-Aluminium Coated)

Thickness mm	Area mm ²	Moment of Inertia LXX mm ⁴	Section Modulus Type Top mm ³	Section Modulus Type Bottom mm ³	Span for Deflection w/m ² =70kg		UDL (kg/m ²) For Span		
					L/100 (cm)	L/200 (cm)	1 meter	1.4 meter	2 meter
0.30	336.82	42115	1740.09	5404.51	210.53	166.99	314.36	114.24	38.85
0.40	449.25	56155.6	2320.38	7206.45	231.77	183.85	372.58	135.46	46.13
0.45	505.47	63176.6	2610.55	8107.51	241.07	191.23	419.24	152.46	51.96
0.50	561.69	70198.1	2900.74	9008.63	249.71	198.09	465.88	169.46	57.79
0.50	617.91	77220.2	3190.96	9909.83	257.79	204.50	512.52	186.46	63.62
0.60	674.13	84242.9	3481.20	10811.10	265.39	210.54	599.16	203.45	69.45
0.70	786.57	98290.4	4061.77	12613.90	279.42	221.67	652.44	237.45	81.11
0.80	899.01	112341	4642.47	14417.20	292.16	231.79	745.74	271.45	92.78
0.90	1011.45	126395	5223.32	16220.90	303.89	241.10	839.01	305.44	104.43
1.00	1123.89	140454	5804.35	18025.10	314.78	249.74	932.27	339.43	116.09
1.20	1348.76	168585	6966.98	21635.40	334.57	265.44	1118.80	407.40	139.41

» Allowable Uniform Load Kg/M²

DLLL: Dead Load + Line Load (Deflection Limitation : Span/180)

UDL-Wind: Uniform distributed load - wind (Deflection Limitation : Span/180)

Material Confirming to ASTM A792/M Grade 80 (Yield strength 550 Mpa) or equivalent.

Sheet TK mm	Load Case	Purlin Spacing Meter										
		1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
0.35	Udi - DLLL	306.4	230.2	177.3	139.5	111.7	90.8	74.8	62.4	52.5	44.7	38.3
	udi - wind	574.6	431.7	332.5	261.5	209.4	170.2	140.3	116.9	98.5	83.8	71.8
0.4	Udi - DLLL	395.7	297.3	229	180.1	144.2	117.2	96.6	80.5	67.8	57.7	49.5
	udi - wind	741.8	557.4	429.3	337.7	270.4	219.8	181.1	151	127.2	108.2	92.7
0.47	Udi - DLLL	521.6	391.9	301.9	237.4	190.1	154.6	127.4	106.2	89.4	76.1	65.2
	udi - wind	978.1	734.8	566	445.2	356.4	289.8	238.8	199.1	167.7	142.6	122.3
0.5	Udi - DLLL	574.4	432.3	333	261.9	209.7	170.5	140.5	117.1	98.7	83.9	71.9
	udi - wind	1078.9	810.6	624.4	491.1	393.2	319.7	263.4	219.4	185	157.3	134.9
0.6	Udi - DLLL	736.8	553.6	426.4	335.4	268.5	218.3	179.9	150	126.3	107.4	92.1
	udi - wind	1381.6	1038	799.5	628.8	503.5	409.4	337.3	281.2	236.9	201.4	172.7

Disclaimer:

The sectional properties above are for general information only.
Kindly consult your structural engineer for your decisions.

» Utility: Segment/Industries

- » Architects . Contractors
- » Building contractors & Structural contractors

Fabricators

- » Structural Fabricators • Structural Engineers • PEB manufacturers
- » PEB suppliers
- » Project Consultants
- Structural Consultants • Proj consultants.

- » SEZs
- » Apparels
- » Iron & Steel Merchants
- » Textile Industries
- » Chemical Industries
- » Food Processing Industries
- » Steel Industries
- » Cement Industries
- » Mining Industries
- » Petroleum Industries
- » Software Industries
- » Automobile Industries
- » Aviation Industries
- » Pharmaceutical Industries
- » Telecom industries
- » Power Plants
- » OEMs (Original Equipment Manufacturers)
- » Amusement parks
- » Aquaculture Industry
- » Airports
- » Auditoriums
- » Commercial Complex
- » Cargo & Freight Stations
- » Civil Engineers
- » Dairy Farms
- » Defense & Establishment
- » Fuel Storage Depots
- » Hotels
- » Holiday Inns
- » Hardware Dealers
- » Industrial Parks
- » Libraries
- » LPG Bottling Plants
- » Manufacturing Units
- » Minor/Major Ports
- » Museums
- » Poultry Farms
- » Projects
- » Petrol Bunks
- » Publishing Houses
- » Petro Chemical Complexes
- » Public Work Departments
- » Resorts
- » Railways
- » Schools & Colleges
- » Transport Corporation
- » Warehouses & Depots
- » Worship Places
- » Wood & Timber



» Benefits / Key Feathers:

- Replaces fiber bats and building blanket in most applications and helps achieve MINIMUM 5 to 7 Degree cooler inside.
- To resist moisture and reduce condensation and it prevents the conflict of temperature level differences.
- Thermalon insulated Metal Sheet prevents rain impact and other sound at 50 decible.
- The stable heat performance even in high humidity environments.

- Enhanced corrosion protection.
- It is no toxic and environment friendly.
- Reduce the electricity consumption especially in cold storage and many more storage area.
- It gives aesthetic look to quality industrial and commercial buildings.
- Very low maintenance and excellent durability.

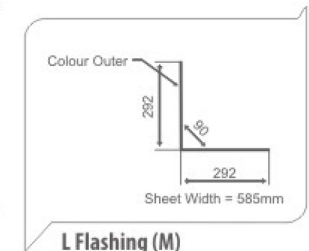
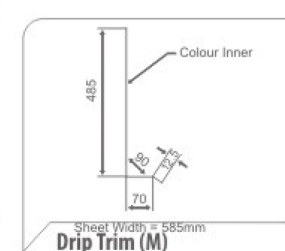
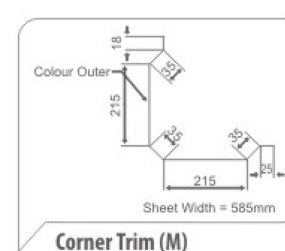
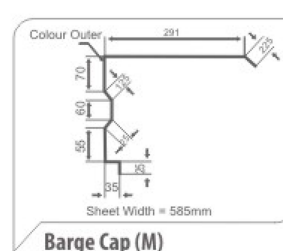
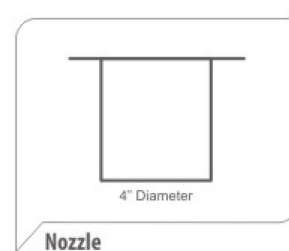
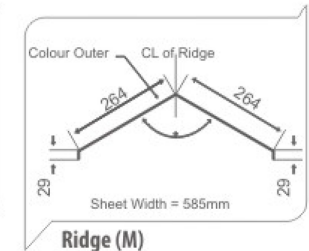
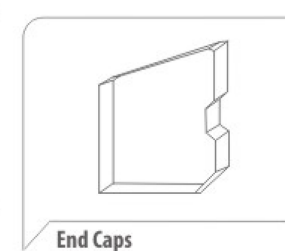
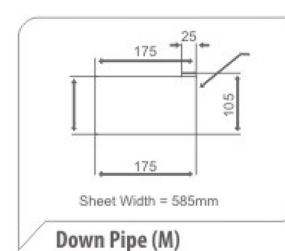
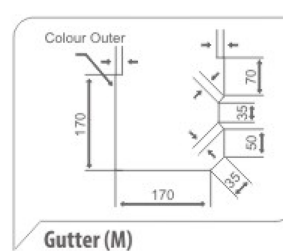
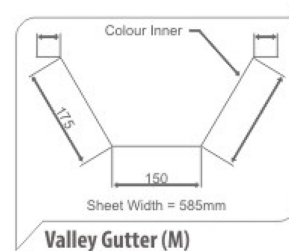
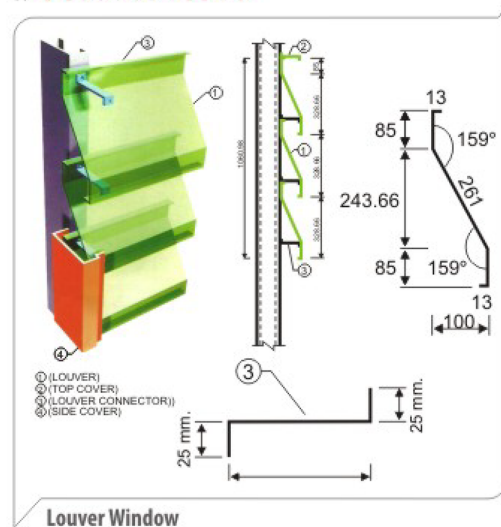
» Regular Color



» Customized Color



» Accessories

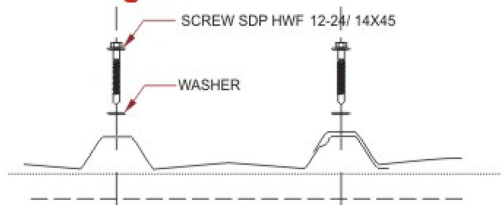




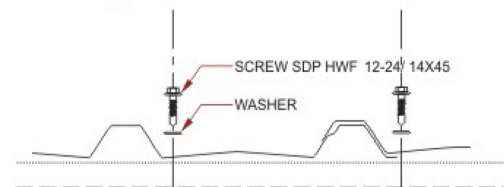
» Installation

Fixing to Steel Support					
Location	Type of Fixing	Detail	Type of Fastener	Drilling Capacity	Thickness = T(mm.)
Roof	Crest Fixing		CTEKS 12-14 X 55 HGS CTEKS 12-14 X 68 HGS	6.5 mm. 6.5 mm.	maximum 40 mm. maximum 53 mm.
Wall	Valley Fixing		CTEKD 10-16 X 16 HGS CTEKD 12-14 X 20 HGS	6.5 mm. 6.5 mm.	< 5 mm. < 6 mm.
	Side Lap Fixing		CTEKS 10-12 X 19 HGS CTEKS 14-14 X 22 HGS	4.5 mm. 4.5 mm.	12 - 4.5 mm. 12 - 4.5 mm.

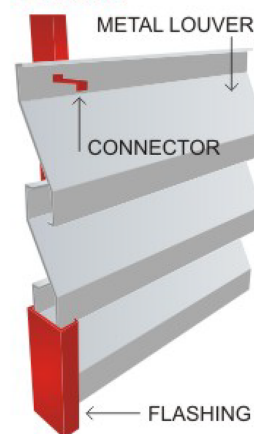
Roofing



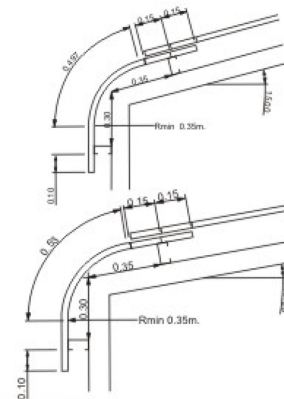
Siding



Louwer



Crimp Curve



» Handling

- » Use recommended personal protective equipment (helmet, goggles, shoes, hand gloves & high visibility vests) while handling and installing the sheets.
- » Always wear smooth, soft-soles shoes.
- » Cut materials on the ground and not on other materials where hot particles can fall and cause damage to the finish of the sheet.
- » Remove all metal scrap, drill particles, pop rivet Mandrels and excess fasteners from the roof to avoid rust stains.
- » Fixing of SDS screws recommended with Torque adjustable guns, for roof work, fix screws on the crest. For wall cladding, fix on the crest or on the valley. Fasteners to conform to AS 3566 Class 3-4 for external application.
- » Don't keep color coated sheets in contact with cement, dirt and chemicals like paint thinner.
- » Don't leave metal articles on the roof.

» Storage

- » Store indoor and away from access to open areas. If left in the open, protect them with water proof covers.
- » If material is not required for immediate use, stack them neatly and clear off the ground. Maintain a clear gap of 30cm between sheet package and ground.
- » Store off the ground and with a minimum 60° slope (1:10) so that if rain penetrates the covering, water will drain away and not penetrate the stock.
- » Inspect the storage site regularly to ensure that moisture has not penetrated the stock.
- » If stacked or bundled products become wet, separate it without delay, wipe it with a clean cloth and stack it to dry thoroughly.
- » The sheet should be kept gently to ensure that it is not damaged.
- » Don't place sheets vertically without proper support.
- » Don't keep sheets in direct contact with soil.
- » Don't let the surface get wet.
- » Don't use metal chain for lifting sheets.



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GET IN TOUCH



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