

Build something great



CORRUGATED ROOFING SHEETS



- Durable and strong
- Superior corrosion resistance
- Low maintenance
- Thermal reflective
- Aesthetic appearance
- Cost effective
- Weather resistant
- Environment friendly
- Ideal for all roofing and



A Legacy of Trust

We are engaged in providing high quality **Colour Coated Roofing Sheet** that is used in different commercial places. The offered roofing sheet is manufactured by using superior quality raw material and innovative technology by our skilled professionals in sync with industry norms. Apart from this, provided roofing sheet is available in variegated sizes, colors and specifications as per the needs of our clients.

TRAPEZOIDAL PROFILE ROOFING SHEETS

Our range of Pre-Engineered Buildings, Roofing, Cladding and Rainwater Systems, made from raw materials of the highest quality in accordance with strict ASTM / JIS / AS and IS standards, offers flexibility of design to suit any construction need be at your

FACTORY

WAREHOUSE

HOTEL RESTAURANT

SCHOOL

COLLEGE

GARDEN SHED GARAGE,

ROOF TOP

FARM HOUSE

SHELTERED WALKWAYS & SECURITY GUARD SHELTER.

Our products are made to meet your aesthetic needs as well.

SUPERIOR PROCESS

Our integrated processing plant is capable of producing cold rolled steel to exacting standards. We have the advantage of very precise gauge control of the substrate owing to our most modern CR mills. We coat the CR coils with uniform thickness of zinc in our two continuous galvanizing lines.

The galvanized coils are tension levelled and skin passed for superior organic coat adhesion. For superior pre-paint properties we employ the world best two coat two bake technology. The finished steel coil is treated with chemicals in preparation for the color coating. Primer is applied on both the surfaces of the metal and is baked at optimum temperatures. The metal then receives the final color coat on both the surfaces. The color coat is again baked in Catenary ovens. The finished pre-painted coil is then roll formed to produce mechanically sound and structurally superior profiles for roofing and cladding.

SUPERIOR PERFORMANCE

CHAAN profiles are made of quality metal substrates with high performing pre-treatment, primer and topcoat all brought together in a carefully controlled manufacturing process that delivers best quality and performance. Every profile is tested and optimized for error free performance year after year. Usually, these profiles do not need a revisit for decades. Superior color adhesion and precise zinc coating ensure better corrosion resistance and cut-edge protection. Use of high performance paints like High Durable Polyester (HDP) and Poly Vinylidene Floride (PVDF) means the sheets retain their color and gloss over a long period of time.

BETTER CORROSION RESISTANCE

A uniform zinc coat on quality substrate is further coated with primers and organic color coats. The coats are baked in high performance Catenary ovens. This process provides better barrier and sacrificial coatings that resist corrosion even in highly saline environments.

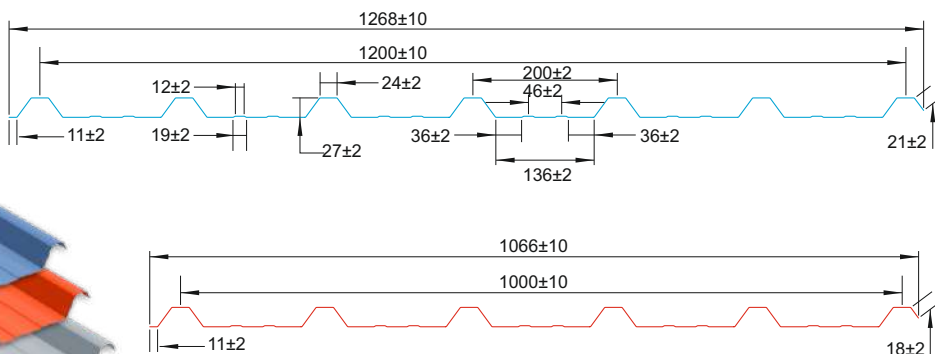
BETTER UV RESISTANCE

Most coatings fail when exposed to sunlight over prolonged period. The UV rays in the sunlight penetrate deep into the paint destroying the underlying molecular structure, which results in loss of gloss, fading, chalking, brittleness and loss of coating adhesion. Through continuous research with our paint manufacturing partners, we have been able to resist the effects of UV rays on our profiles significantly. Better coating and enhanced technologies result in **CHAAN** profiles retaining gloss, color and adhesion integrity for many years.





TRAPEZOIDAL PROFILE



COLOUR SHADES



MATERIAL SPECIFICATIONS

PPGI

Pre-Painted Galvanized Steel Sheets (GI-Base)	
Zinc coating	Z 120 GSM
Primer service coat	5 microns epoxy / PU on both sides
Paint coating	Regular Modified Polyester(RMP) (Optional -Silicon Modified Polyester & PVF 2)
Painting thickness (top)	18-20 microns
Painting thickness (bottom)	5-7 microns
Surface paint reflection	Semi Gloss / Matt finish
Conforms to	ASTM A653, A755, JIS G3302, G3312 IS277, 513, 14246, AS1397

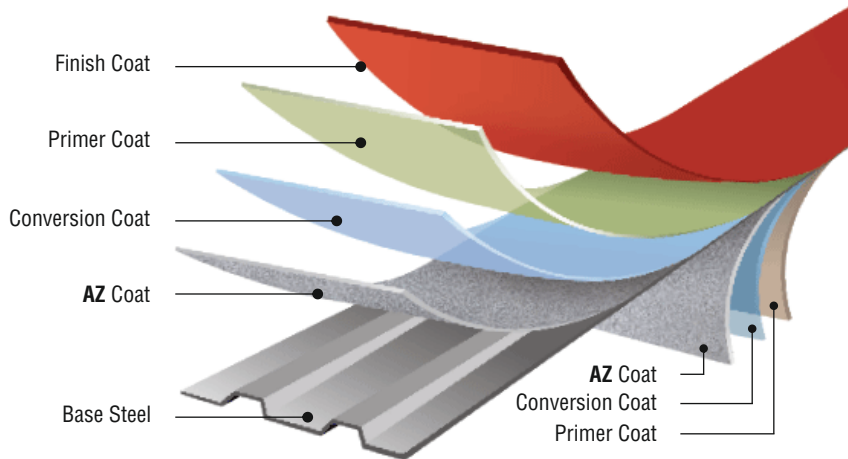
PPGL

Pre-Painted Alu-Zinc Steel Sheets (Galvalume*)	
(55% Aluminium 45% Zinc Alloy)	
Alu - Zinc Coating	AZ 150 (Optimal AZ70) GSM
Primer service coat	5 microns epoxy / PU on both sides
Paint coating	Regular Modified Polyester(RMP) (Optional -Silicon Modified Polyester & PVF 2)
Painting thickness (top)	18-20 microns
Painting thickness (bottom)	5-7 microns
Surface paint reflection	Semi Gloss / Matt finish
Conforms to	ASTM A792, A755, JIS G3321, G3322 AS1397
Yield Strength	300 - 550 Mpa

NCGL

Non-color Alu-Zinc Steel Sheets (Bare Galvalume*)	
(55% Aluminium 45% Zinc Alloy)	
Alu - Zinc Coating	AZ 150 (Optimal AZ70) GSM
Conforms to	ASTM A792, JIS G 3321, AS 1397
Yield Strength	300 - 550 Mpa

MATERIAL STRUCTURE



SUPERIOR QUALITY STEEL

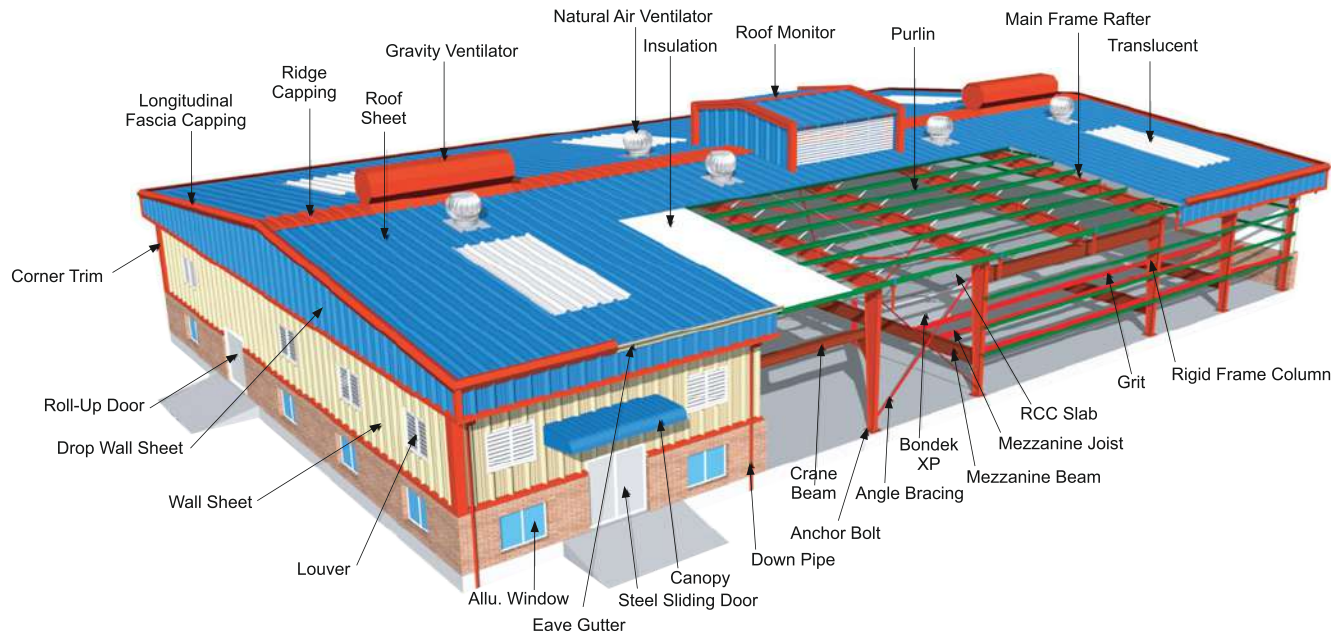
Colour Coated Al-Zinc alloy coated steel is manufactured using high quality hot metal made of most superior and environmental friendly technology. It offers several grades including high tensile steel with a yield strength of 550 mpa to meet the need of various applications.

SUPERIOR PAINT TECHNOLOGY

Colour Coated Al-Zinc alloy steel is available in a variety of paint systems like Regular Modified Polyester (RMP), Silicon Modified Polyester (SMP), Super Durable Polyester (SDP), Poly Vinylidened Fluoride (PVDF) etc. The base metal has the first layer of primer coating on both top & bottom surface for superior adhesion with the paint system. The final paint coating provides additional protection to withstand harsh weather conditions and other factors affecting longer life. The superior coating technology resists cracking and peeling even during heavy forming operations.

EXCELLENT CORROSION PROTECTION

Colour Coated is available in a wide Al-Zinc alloy coated range (70 to 200 gsm) to provide excellent corrosion protection in various climatic conditions.

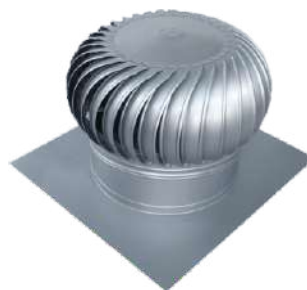


AIR VENTILATOR

Working Principal Turbo Ventilator Utilities Wind Energy to Create Airflow by Centrifugal Action. Centrifugal Action, a Centrifugal Force is Created by Rotating Vanes Which in Turn Creates a Low Pressure Zone Which Than Draws in Fresh Air From Outside And Throws Out Hot and Polluted Air From Inside the Shed. Such a Continuous Cycle Creates Air Ventilator.

PRODUCT FEATURE

- Reduces temperature, humidity & suffocation
- Double exhaust system
- No operating and maintenance cost
- Economical and 100% power saving ,
- Available in different sizes
- Available in different Material





INSULATED METAL ROOFING SHEETS

THERMAL COMFORT ALL YEAR ROUND

Insulation assists greatly in keeping heat within a building in winter and slowing the flow of heat into the building in summer. An insulated building will therefore be warmer in winter and cooler in summer, creating a more comfortable environment all year round.

REDUCED NOISE LEVELS

Insulation is an excellent sound absorber and can assist in reducing noise transmission through walls, ceilings and floors making the home or work environment quieter.

SAVING ON ENERGY COSTS

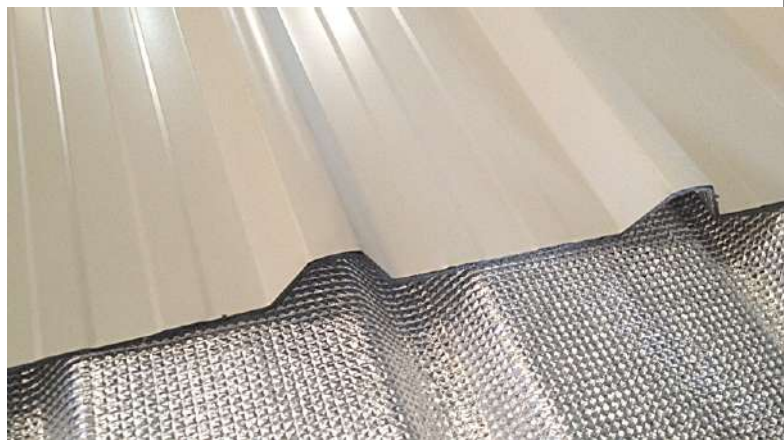
Insulating can cut the cost of heating and cooling by over 40%. Insulating the ceiling of a house has the potential to save 20-30% on heating and cooling bills. Heating and air conditioning units don't have to run as hard or as long to achieve the desired temperature in the building.

HELPING THE ENVIRONMENT

Insulation is an acknowledged way to reduce the consumption of fossil fuels which add to the greenhouse effect. Golden Fleece insulation products are environmentally friendly.

CONDENSATION CONTROL

Condensation can occur on the inside surface of a roof or ceiling at any time when the temperature of the surface is at or below the dew-point of the air in contact with it. Golden Fleece insulation raises the temperature on the insulated surface above the dew-point temperature.



TECHNICAL SPECI. OF INSULFOAM INSULATION

NO.	CHARACTERISTIC	TEST RESULT	METHOD
1	Density	30 - 40 Kg. / m ³	ISO 945 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	3.0 m ² C/W	ASTM C236
9	Thermal Conductivity	0.030 Kcal / m ³	ASTM C-177
10	Flammability	HF - 1	UL-94

TECHNICAL SPECI. OF INSUBUBBLE INSULATION

NO.	CHARACTERISTIC	TEST RESULT	METHOD
1	Density	30 - 40 Kg. / m ³	ISO 945 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 - 27 Kg/mtr	ASTM C-3575
10	Compression Strength	0.35 0.45 Kg/mtr	ASTM D-3575
11	Water Absorption (mg/cm ³)	< 1.8% after 28 days	ASTM D-1677

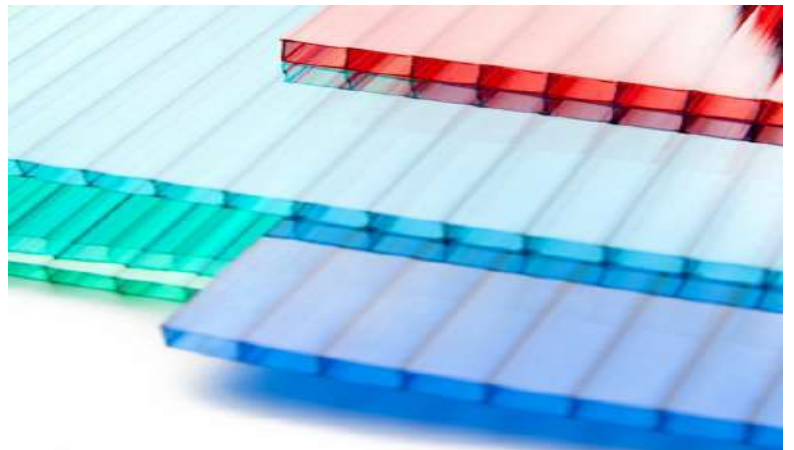


CRIMPING

POLYCARBONATE SHEET

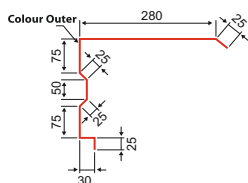


POLYCARBONATE MULTIWALL SHEET

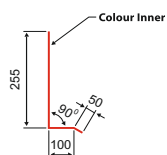


ACCESSORIES

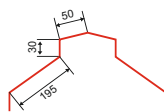
Barge Cap (610)



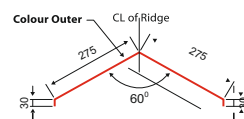
Drip Trim (405)



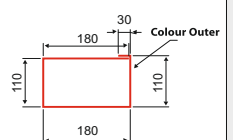
Commercial Ridge (610)



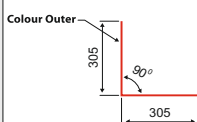
Ridge (610)



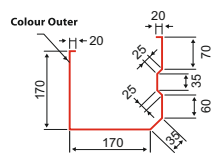
Down Pipe (610)



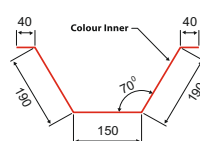
L - Flashing (610)



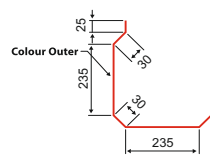
Commercial Gutter (610)



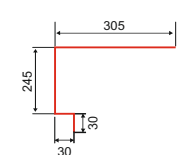
Valley Gutter (610)



Corner Trim (610)



Global Flashing (610)



Comperision Polythelene Insulation V/s Fiber Glass

Sr. No.	Parameters	Closed Cell Chemically Cross Linked PolyetheleneSupreme - XLC	Fiber Glass Wool
1	Cell Structure	Cells are cross linked tri-dimensionally so gives good compression, tearing & tensile strength & bonding between the cells is permanent. Cell sizes are from 0.2mm to 0.8mm making it more densa cells. Being fine cell structure material is long lasting & because of high comressive strength air bubbles can with stand load & pressure for longer period.	open cell, loose fiber and can be health hazards to the resiratory system, skin & eyes
2	Density	33 ± 3 Kg/m3	16 - 32Kg/m3
3	Thermal Conductivity (K)	0.032 W/m²K	0.04 W/m²K
4	Fire characteristics	self Class 1 & Class O available	FR
5	Water vapour resistance factor(μ)	> 14000 with Al. Foil one side	Zero
6	Eco Friengly	Self anti fungus material and not generated particles.	not anti fingus and generate particle over period of time.
7	Life of Product	Very Long	limited
8	Water Absorption	<2 % by Weight	very high as loose fibre
9	Tensile Strength	Excellent	No tensile strength as it loose fibre
10	Compressive Stregth	Excellent, can withstand load & pressure for longer period.	poor as it loose fibre
11	Tearing Strength	Excellent	poor
12	Flexibility & Elasticity	Excellent	limited
13	Surface finish	smoth & uniform	saggy
14	Installation	easy	time consuming and self itching material

Load Chart

Allowable Uniform Load kg / m2												
Sheet TCT (MM)	Load Case	Purline 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	117.3	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	229.0	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	566.0	445.2	356.4	289.8	238.8	199.1	167.7	142.6	122.3
0.5	udi-DLLL	574.4	432.3	333.0	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	185.0	157.3	134.9
0.6	udi-DLLL	736.8	553.6	426.4	335.4	268.5	218.3	179.9	150.0	126.3	107.4	92.1
	udi-WIND	1381.6	1038.0	799.5	628.8	503.5	409.4	337.3	281.2	236.9	201.4	172.7

Section Weight

Per Piece Weight in Kg. 0.50mm Average							Meter	0.3048 x (Feet)	Per Piece Weight in Kg. 0.60mm Average						
							Sq. Meter	0.093 x (Sq. Feet)							
8 Ft.	10 Ft.	12 Ft.	14 Ft.	16 Ft.	18 Ft.	20 Ft.	Feet	3.28 x (Meter)	8 Ft.	10 Ft.	12 Ft.	14 Ft.	16 Ft.	18 Ft.	20 Ft.
11.20	14.00	16.80	19.60	22.40	25.20	28.00	Sq. Feet	10.76 x (Sq. Meter)	13.60	17.00	20.40	23.80	27.20	30.60	34.00

Weight Calculation system in Meter (Thickness x Width x Length x 7.80)

DISCLAIMER

- The sectional properties above are for general information only.

KEY FEATURES



Choice of Colours
and Designs



Durability and
Total Safety



Weather
Resistance



Maintenance
Proof



Environmental
and Economical



Provide more
Space



Perfect Fitting
for any roof



550 mpA
Super Strength



Fire Proof



High Corrosion
Resistance

AUTHO. DEALER:

CAPTAIN STEEL

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Nr. Markwell Spining Mill, Sadak Pipliya,
N.H. 27, Tal. Gondal, Dist. Rajkot.
Contact: +91 98791 09091/ 89803 92009/
98791 09121 / 75748 79091
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