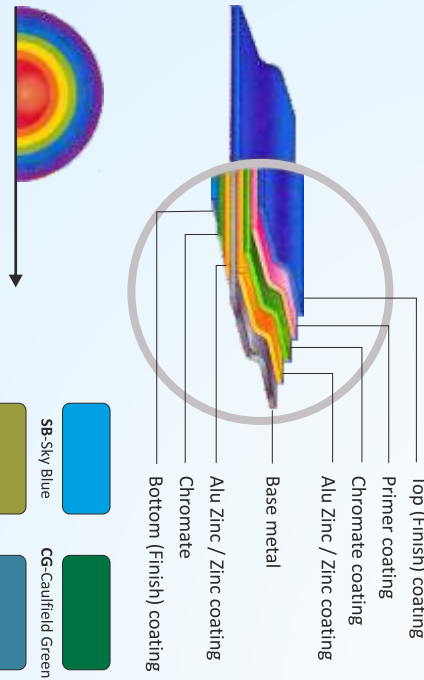


Color Range	
Backside colours :	
G-Grey	LGR-Light Grey
Customised Colors	
SG Sky Blue	BC Blue
CG Calicut Green	AB Autumn Red
OW Off White	TD Tones Blue
BE Beige	GD Goldstone
MG Mint Green	NR Neon Red
GG Grass Green	BP Blue Purple
WB Water Blue	BR Butter Yellow
MG Moon Green	GR Grey
LM Light Magenta	LD Light Orange
CB Chocolate Brown	ME Metallic Grey
JG Jungle Green	BL Black

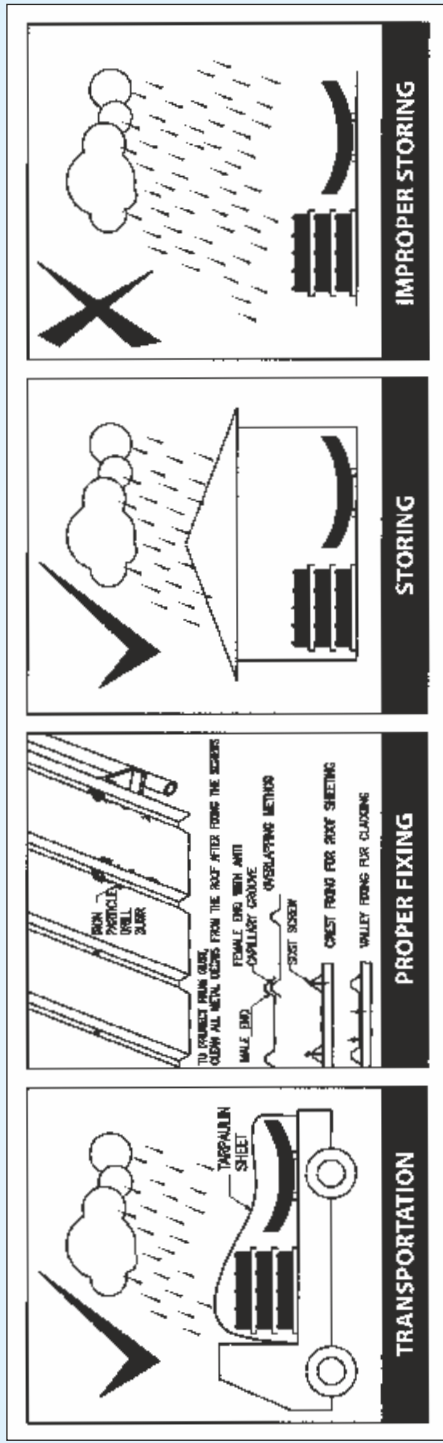


GANGA Roofing

Structure of Pre-Painted Steel Sheet



UNLOADING, STORAGE, INSTALLATION & MAINTENANCE INSTRUCTIONS



Centurywells is the producer of leading GANGA brand GANGA Coated Steel Roofing Systems is a premium brand which truly represents quality in steel buildings. We design, manufacture and supply GANGA Coated Steel Roofing Systems to meet a variety of construction needs. Established in 2002, GANGA Coated Steel Roofing Systems is a time-tested brand with production facilities in Chennai, Bangalore, Coimbatore, Vijayawada & Pune catering to all regions in India. Centurywells is owned by Shanbaga Infrastructure Materials Limited.

- Unloading & storing Steel Roofing Sheets & Accessories :**
- While unloading, please check the quantity of material with our invoice.
 - Use Crane or Fork Lift Truck with proper Polyester Web Slings to unload material.
 - To avoid paint scratches, please do not drag the sheets.
 - Store the sheets by putting wooden sleepers, 150 mm above the ground level, preferably with a slanting slope.
 - Wrap the steel roofing sheets and accessories with cover (Tarpaulin or Polyester Sheets) to prevent from water & dust.
 - Do no carryout welding or grinding work near the steel roofing sheets.
 - Our Company will not take responsibility for any color change, blistering or rusting of the sheets, if not stored as per the above specifications.

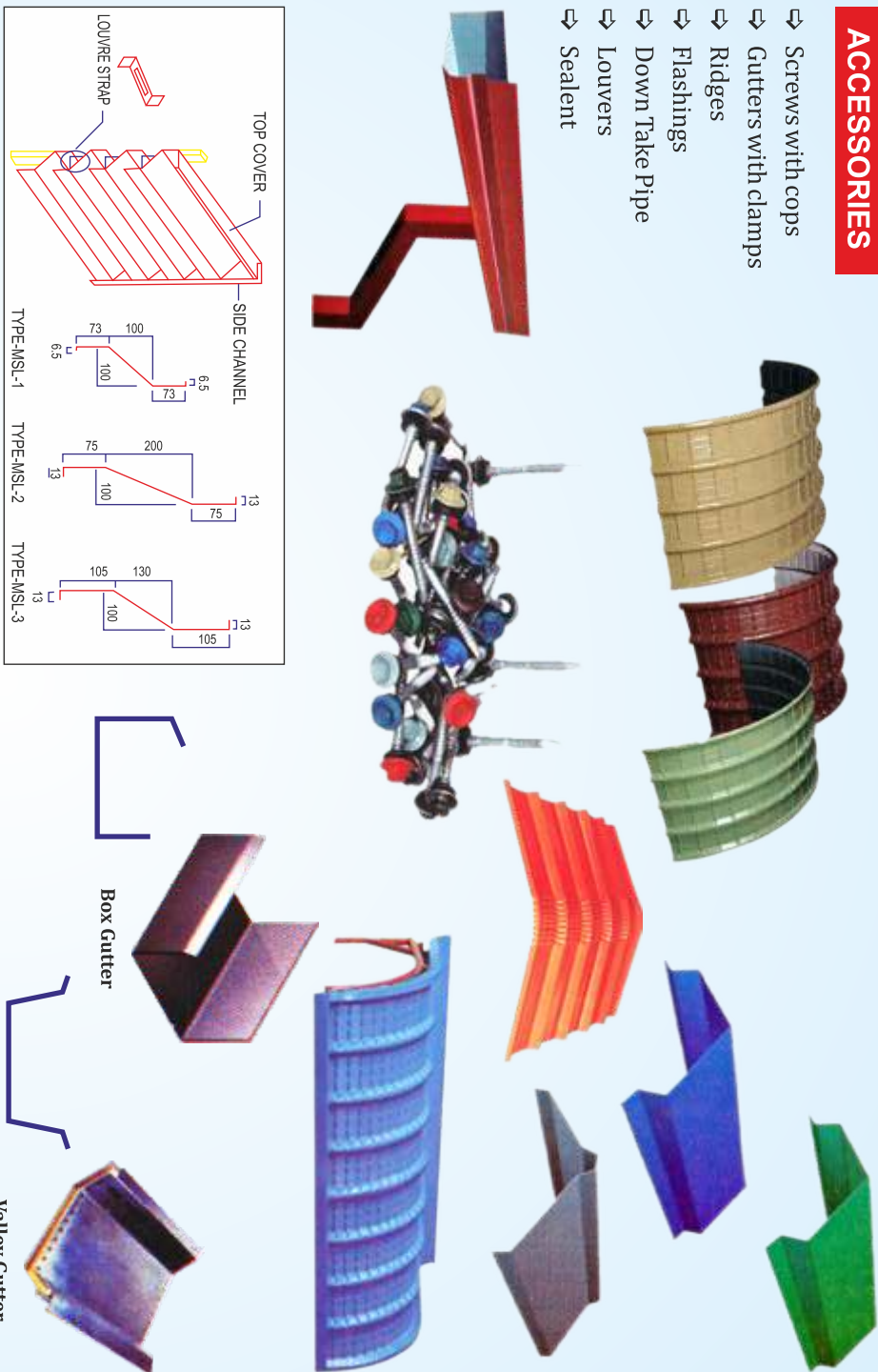
- Installation :**
- Always use Torque adjustable screwgun and proper tools for installations.
 - SDF screws should be tightened using the right torque, if not tightened properly, leakage can occur.
 - Screwgun torque to be adjusted such that the EPDM washer compresses to 1 mm wider than the steel washer at the head of the screw.
 - Debris and ferrous objects should be removed by a soft nylon brush or else sheets will be corroded.
 - Always lift Crimping Sheets from the centre using nylon rope or polyester web sling.
 - To avoid rain water leakage, use Anabond or Silicone sealants.
 - Use nibbler or snipper to cut the sheets and do not use grinding wheel for cutting.
 - We recommend a roof slope of minimum 20 degrees for tile sheet and 10 degrees for trapezoidal and corrugation sheet.
 - Please provide purlin for every alternate tile and for other roofing products, maintain a purlin spacing of 1 to 1.5 meter.
 - Always use SDF screws conforming to AS 3566 standard. Do not use 'U' or 'J' bolts and other dissimilar materials.
 - We recommend CREST fixing for roofing sheets and VALLEY fixing for cladding sheets.

- Maintenance and Safety Notes :**
- It is mandatory to inspect and maintain the roof once in 03 months to have long life for our Steel Roofing Sheets.
 - Caution should be taken when working on roofs.
 - Use professional staff for maintenance works
 - Ladder to be placed secured to the building, firm base, and one meter above the step off point.
 - Do not step on skylights.
 - While walking on the roof, step on the valleys of the panel, and not on the ribs. If possible, walk on the purlin line, (Screw line).
 - Frequent access of roof to be avoided by temporary or permanent walkways.

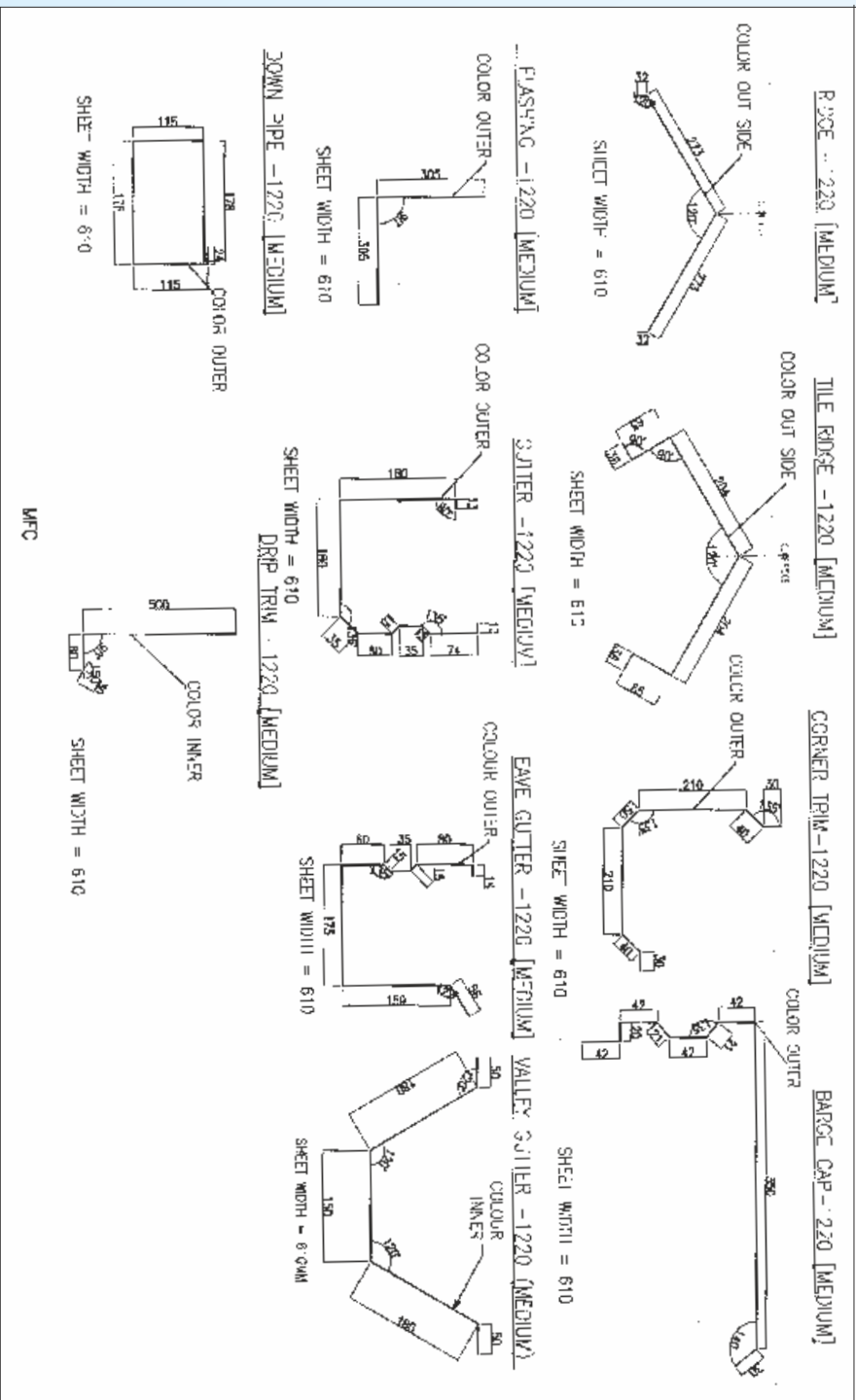


ACCESSORIES

- ⇒ Screws with caps
- ⇒ Gutters with clamps
- ⇒ Ridges
- ⇒ Flashings
- ⇒ Down Take Pipe
- ⇒ Louvers
- ⇒ Sealant



ACCESSORIES FOR 1220 COIL - MEDIUM (ONLY 1000 mm EFFECTIVE WIDTH PROFILE)



GANGA : A BLEND OF GOOD DESIGN AND VERSATILITY

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, SHELTRED WALKWAYS & SECURITY GUARD SHELTER. Our products are made to meet your aesthetic needs as well.

Why choose GANGA ?

Attractive Colors and Flexible Design

With Ganga color material products you can explore your creativity when designing and constructing your building. You get to choose from a range of attractive colors and the flexibility of design gives you the opportunity to model your dream structure.

Convenient and Quick Solutions

Ganga's range of Pre-Engineered Building products offer quick, convenient ready-made building solutions to industrial and domestic building needs.

Economical Products

Ganga's range of products are economical and very durable, thus saving on construction and maintenance costs in comparison with related traditional products.

Resistance to Extremities of Weather

Ganga's Color material products are engineered to withstand the extreme weather conditions of the south Asian region. They are robust and designed to resist rough weather conditions.

Low Maintenance

Ganga's range of products consist of Trapezoidal profile, Shela tile profile, Mandarin tile, Wall cladding, Corrugation profile, Curvings, Crimpings and variety of accessories like flashings, Ridges, barccaps, Louvers, gutters, down pipes etc. We can also offer double & single skin, FRP Poly Carbonate, Wind ties, SDF, Screws, Insulation etc.

Pre-Engineered Buildings

Ganga Pre-engineered building structure offers a wide range of ready-made building solutions which are convenient and economical for both factory and domestic building needs. Ganga PBs saves you the hassle and headache of having to find material, labour and the related costs that come with it. Simply contact us and we will provide you the Total Solution for any of your building needs.

GANGA KEY FEATURES

- ATTRACTIVE COLOURS & FLEXIBLE DESIGN
- RESISTANCE TO EXTREMITIES OF WEATHER
- VERY LOW MAINTENANCE
- EXCELLENT CORROSION RESISTANCE
- UNIQUE PROFILE HAVING HIGH STRENGTH TO WEIGHT RATIO
- ENVIRONMENT FRIENDLY AND FIRE PROOF
- CAN WITHSTAND WIND SPEED OF APPROX 200 KMPH FIXED WITH SDF SCREWS
- EXCELLENT COVERAGE OF SPACE
- STRONG, DURABLE AND TOTAL SAFETY
- ANTI-CAPILARY GROOVE ENSURES LEAK-PROOF ROOF
- MINIMUM YIELD STRENGTH OF 550 MPA ENSURES REQUIRED STRENGTH FOR ROOFING APPLICATION
- ACCURATE THICKNESS, WIDTH & LENGTH HELPS GIVE THE PERFECT FIT FOR ANY ROOF
- WIDER VALLEY ENSURES HIGHER WATER DISCHARGE IN CASE OF HEAVY RAINS

SANDWICH PUFF PANELS :

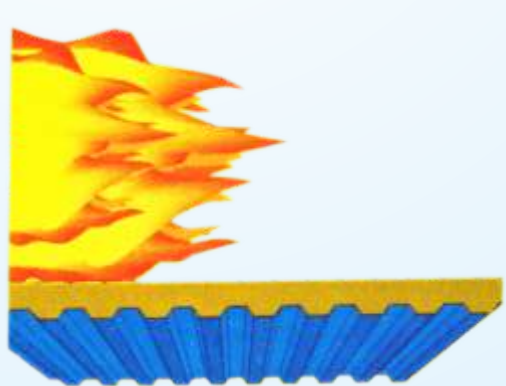
Sandwich puff panels are used for insulation of roofing and walling in the building industry. They are extensively used for cold storages. The insulated panel consists of two facings of relatively thin metal sheet profiles preferably and of high strength enclosing a core which is relatively thick and light but has adequate stiffness in a direction normal to face of the panel. The facings are of steel and aluminum. The core is made of polyurethane which is the best insulation material in the world. The thickness ranges from 30 to 120 mm. They come in a standard width of 1060 mm and maximum length of the panel will be 15 meter. Colour available are Terracotta Red, Brick Red, Wine Red, Dark Green, Off White, Blue, Mist Green, Yellow.

ROOF PANEL : are roofing sheets with self supporting polyurethane insulation material for pitched roofs with a minimum slope of 7 degree.



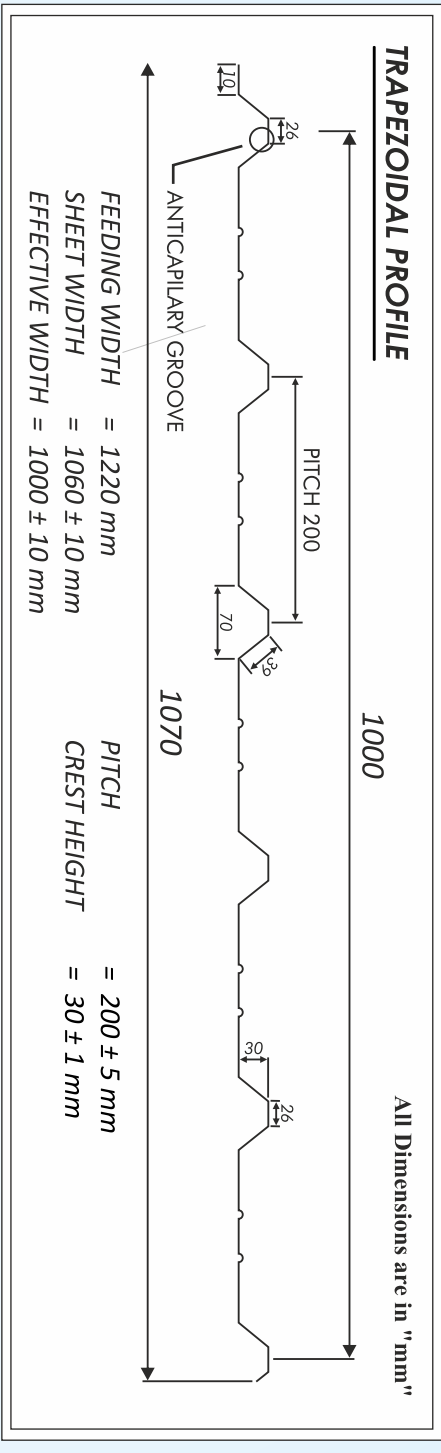
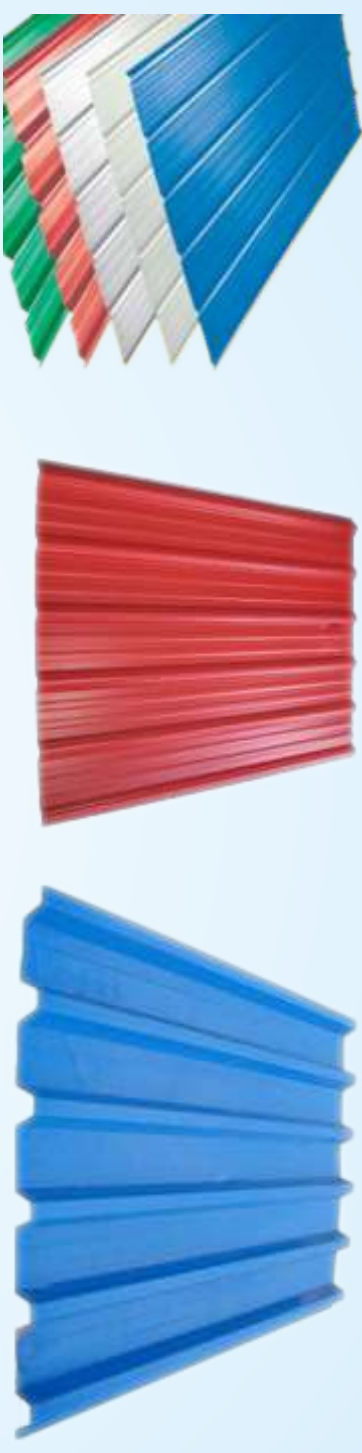
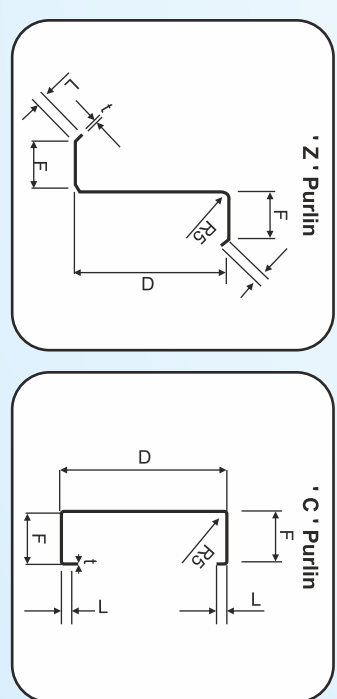
The advantages are :

- ⇒ Excellent and durable thermal insulation.
- ⇒ Good sound insulation.
- ⇒ High load bearing capacity at low weight.
- ⇒ Absolute water and vapour barrier.
- ⇒ Excellent energy saver.
- ⇒ Provides resistance to weather and aggressive environments.
- ⇒ Capacity for rapid erection without lifting equipments, easier installation in hostile weather conditions.
- ⇒ Easy repair and replacement in case of damage.
- ⇒ Long life and very low maintenance cost.
- ⇒ Reasonable fire reaction and resistance.



C & Z PURLINS

- ⇒ Up to 40% savings in steel.
- ⇒ Up to 30% savings in construction cost.
- ⇒ Light Weight.
- ⇒ Easy to Transport & handle.
- ⇒ Supplied in exact length & pre-punched holes.
- ⇒ Reduced fabrication cost.
- ⇒ Ability to span long lengths.
- ⇒ Close tolerances on sectional dimensions due to process of cold roll forming.
- ⇒ Fast erection.
- ⇒ No site drilling or cutting required.



CORRUGATION PROFILE

GANGA Corrugation Profiles are available in wide range of colors and thickness. It can be supplied in standard or customized lengths as per client's requirement and need. This profile is cost effective, economical and can be supplied from PPGL (Pre painted Galvanized Iron), Bare Galvalume and Pre-painted Galvalume materials.

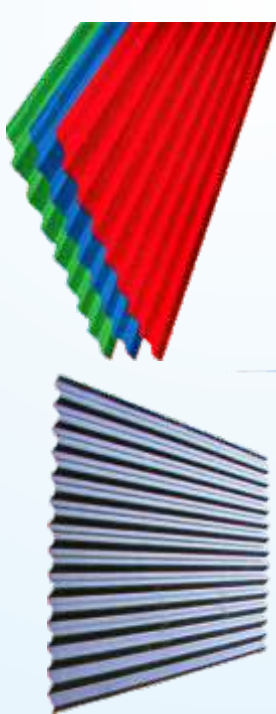
Material Specifications

Pre-Painted Galvanized Steel Sheets (GI-Base)

- Zinc coating : Z 120/90/70 GSI
- 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) : 5 - 7 microns
- Painting thickness (bottom) : 18 - 20 microns
- Surface paint reflection : Semi Gloss / Matt Finish
- Conforms to : ASTM A653, A755, JIS G3302, G3312, IS277, 513, 4246, AS 1397

Non-color Alu-Zinc Steel Sheets (Bare Galvalume)

- Alu-Zinc coating (55% Aluminium 45% Zinc Alloy) : AZ 150 / AZ 70
- Conforms to : ASTM A792, JIS G 3321, AS 1397
- Yield Strength : 300 Mpa



Pre-Painted Alu-Zinc Steel Sheets (Galvalume)

- (55% Aluminium 45% Zinc Alloy)
- Alu-Zinc coating : AZ 150 (Optional AZ 70)
- 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) : 5 - 7 microns
- Painting thickness (bottom) : 18 - 20 microns
- Surface paint reflection : Semi Gloss / Matt Finish
- Conforms to : ASTM A792, A755, JIS G3302, G3322, AS 1397

Material Dimensions - Technical Specifications

Total Coated Thickness (TCT)				
0.30mm, 0.35mm, 0.40mm, 0.47mm, 0.50mm, 0.60mm				
Profile	Effective Width	Pitch	Depth	Sheet Width
Corrugation	988 mm	76 mm	18 mm	1130 mm

*Galvalume - Generic name

PPGI (Pre Painted Galvanised Sheets)

PPGI & PPGL sheets which are made up of world class raw material complying to international standards. Because of its excellent corrosion resistance, these sheets have become the most preferred material for various construction purposes, particularly roofing and walling.

Material Specifications

Pre-Painted Galvanized Steel Sheets (GI-Base)

Zinc coating : Z 100/90/70 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, IS2777, 513, 4246, AS1397

Coated steel sheet is a unique building material that combines the strength of steel with excellent corrosion protection of Zinc or Zinc/Aluminium alloy coatings. It can be punched, pressed, roll-formed and joined into countless numbers of structural and decorative building products. The thickness ranges from 0.3 mm to 0.6 mm thick. They come in a standard width of 1060/1080 mm and maximum length of the sheet will be 12 meter. Colours available are Off White, Mist Green, Caulified Green, Brick Red, Pepsi (Royal) Blue, Torrous Blue & Sky Blue.

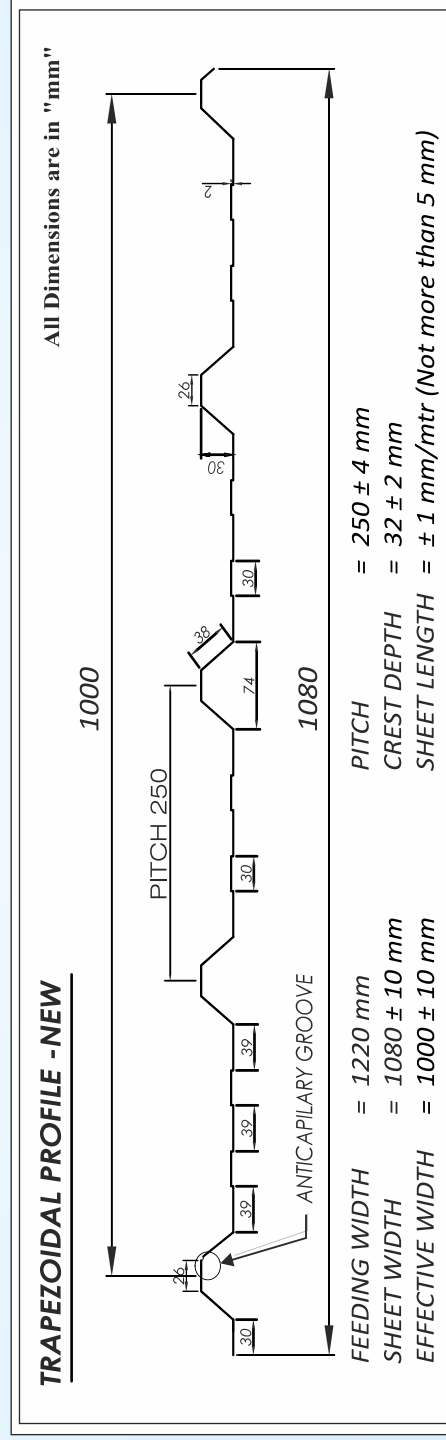
PPGL (Pre Painted Galvalume Sheets)

Pre-Painted Alu-Zinc Steel Sheets (Galvalume®)

(55% Aluminium 45% Zinc Alloy)
Alu-Zinc coating : AZ 150 (Optional AZ 70)
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



POLYCARBONATE SHEETS

Polycarbonate is a polymer with a unique blend of desirable properties which also have superior insulation and powerful physical properties. This polymer can be given shape by different process. Polycarbonate roof sheets are manufactured by the process of extrusion. It is ideal for non-corrosive industrial structural roofing, sliding and a multitude of Do-it-yourself application in view of its high impact strength and wide service temperature range. Polycarbonate sheets are commonly called transparent sheet due to their wonderful impact resistance and glass like clarity.



Specifications:

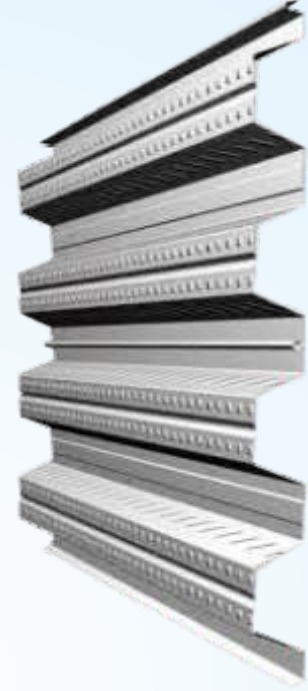
Type : Multiwall, Compact, Embossed and Corrugated.
Standard Thickness: 4mm, 6mm, 8mm, 10mm
Standard With : 2.10m & 1.22m
Standard Length : 11.80 & 5.80m
Colours : Clear, Bronze, Blue, Green, White.

DECKING SHEETS

It crests the highest bond between concrete and the steel floor. It performs as a positive reinforcement and a permanent form support providing saving in concrete and reinforcement steel. It is produced from galvanized and colour coated steel. Thickness of deck can be 0.8mm, 1mm or 1.2mm.

Advantages:

- ⇒ Provides a stable working platform instantly.
- ⇒ Arrives on site in light weight sheets cut to length.
- ⇒ Easy to fix using studs, clips and screws.
- ⇒ When installed the deck acts as a diaphragm.
- ⇒ Thinner/lighter slabs.
- ⇒ Easy to install.
- ⇒ Steel deck is also available in 55mm, 60mm, 76mm & 88mm deep crest.



ROOF VENTILATORS

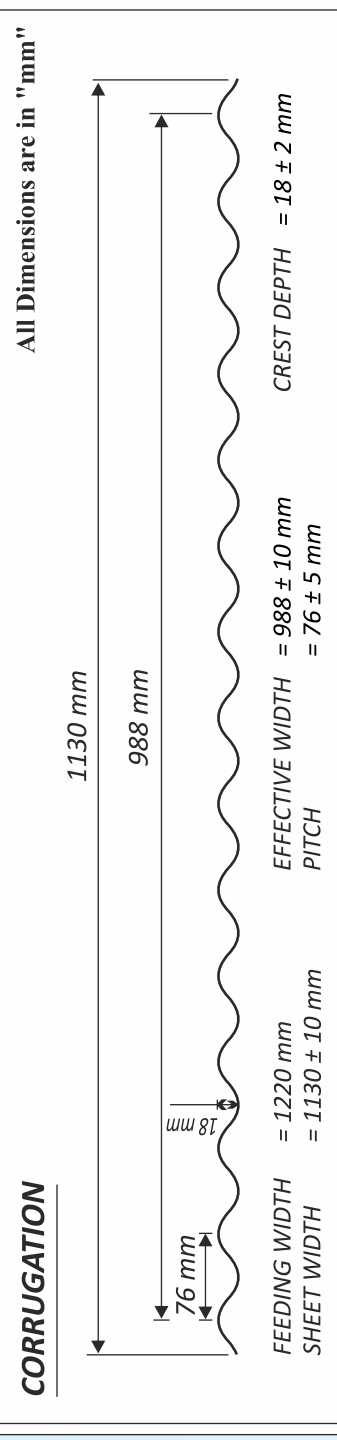
Available in Aluminum and stainless steel of different diameter. It is a self contained wind powered design to there are no operational costs incurred.

Advantages:

- ⇒ Proper ventilation provides a cooler, low humidity work environment which reduces the need for costly air conditioning and industrial fans.
- ⇒ Easy installation and reduced installation cost.



CORRUGATION



MANDARIN ROOFING TILES

In addition to Trap Profile, our range includes GANGA Mandarin roofing tiles which adds beauty to your building. They are available in many attractive colors and are designed to be extra durable and will lasts for generations. Also, there are rainwater systems and other accessories to suit these tiles.



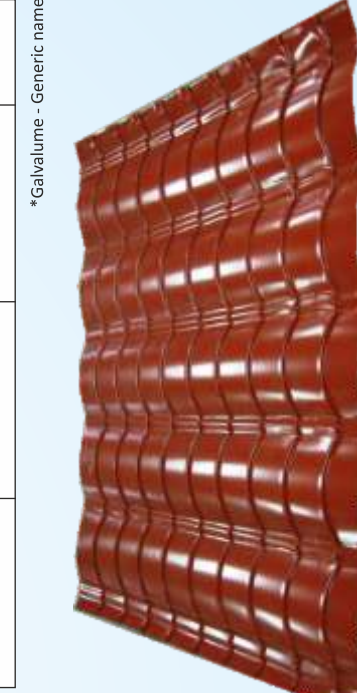
Material Specifications

Pre-Painted Alu-Zinc Steel Sheets (Galvalume®)

(55% Aluminium 45% Zinc Alloy)
Pre-Painted Galvanized Steel Sheets (GI-Base)
Alu-Zinc coating/Zinc coating : AZ 150, AZ 70/ Z 120/ Z 100/ Z 90/ Z 70 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 (Optional - Matt Finish)
Conforms to : ASTM A653, A755, A792, JIS G3303, G3312, G3321, G3322, AS1397



*Galvalume - Generic name

GANGA TILE PROFILE



GANGA ROOFING TILES

In Addition to Trap Profile, our range includes Ganga roofing tiles which adds beauty to your building. They are available in many attractive colors and are designed to be extra durable and will lasts for years. Also, there are rainwater systems and other accessories to suit these tiles.

Material Specifications

Pre-Painted Alu-Zinc Steel Sheets (Galvalume®)
(55% Aluminium 45% Zinc Alloy)

Pre-Painted Galvanized Steel Sheets (GI Base)

Alu-Zinc coating/Zinc coating : AZ 70 / Z 120 gsm
Primer service coat : 5 microns epoxy/PU on both sides
Paint coating : Regular Modified Polyester (RMP) (Optional - Silicon Modified Polyester & PVDF)

Painting thickness (top) : 18 ~ 20 microns

Painting thickness (bottom) : 5 ~ 7 microns

Surface paint reflection : Glossy finish (Optional - Matt finish)
Conforms to : ASTM A653, A755, A792, JIS G3302, G3312, G3321, G3322, AS1397

Material Dimensions
Standard / Customised*

Thickness	Sheet Width Tile	Effective Width Tile	Tile Length
0.40 mm	1099 mm	992 mm	13"
0.45 mm			10"
0.47 mm			6"
0.50 mm			

*Galvalume - Generic name



Sheet Width	= 1099 ± 10 mm
Effective Width	= 992 ± 10 mm
Pitch	= 248 ± 5 mm
Crest Height	= 29 ± 2 mm
Sheet Length	= ± 1 mm (Not more than 6 mm)
Tile Length	= 330 mm ± 2 mm / 13"