

CONVENTIONAL STRUCTURE

COLOR COATED SHEETS

C & Z PURLIN

FASTENERS

PEB STRUCTURES

SKYLIGHTS

TURBO VENTILATOR



KESARI ROOFTECH Is a specialized manufacturing unit of metal buildings Which incorporates supply of roofing or wall cladding sheets, roofing accessories, pre-engineered steel buildings and architect design, at Raipur in Chhattisgarh.

Using good quality of raw material with modern machineries using latest technology, kesari rooftech an iso 9001: 2008 certified organization which profiles the widest Range of colors and different cover-widths in pre-painted galvanized, pre-painted galvalume and bare galvalume sheets and also supply of pre-engineered steel buildings under the brand name of kesari. It has the team of dynamically young entrepreneurs' professionally managing the company to cater the increasing needs of customers for Durable, affordable and versatile metal building system.

Kesari provides high precision quality work and the most effective solutions which are strong, leak proof, long term durable, having special metallic coating and gives aesthetic look which enhances the appearance, life and value of the building.





APPLICATIONS



- ★ Industrial & Agricultural sheds
- 🖈 Warehouses
- ★ Railway stations & Bus shelters
- ★ Naval dockyards & Ports
- ★ Airport terminals & Aircraft hangers
- ★ Cold storage & Fruit canning industries
- ★ Sports stadiums & Dairy farms
- ★ Garages & Parking areas
- ★ Thermal power plants & Engg-work shops
- ★ School & Educations institutions
- ★ Auditoriums & Commercial complexes
- ★ Hotel & Restaurants
- ★ Textile mills & Automobile showrooms

BENEFITS

- 🖈 Attractive colors
- ★ Resistance to extremities of weather
- ★ Very low maintenance
- ★ Thermal efficiency
- Qexcellent corrosion resistance
- 🖈 Flexible designs
- Environment friendly and fire proof
- ★ Product approved by civil-aid
- 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
- ★ Non-cracabie and gives 550 Mpa strength to roof





- ★ Superior technology
- ★ Accurate thickness, width & length helps give the perfect fit for any roof
- Wider valley ensures higher water discharge in case of heavy rains
- 🔶 Fastest delivery & easy to instal

SPECTRUM OF COLOURS





KESARI TRAPEZOIDAL PROFILE ROOFING SHEETS

Below are three types of corrosion proctected steel for roof and wall cladding applications >>>>>

- ★ Pre-painted galvanized steel (Zinc Coated Steel)
- ★ Pre-painted galvalume steel (Zinc-Aluminium Alloy Coated Steel)
- ★ Bare galvalume steel (Zinc-Aluminium Alloy Coated Steel)

TECHNICAL SPECIFICATIONS

Galvanized Steel : Zinc metallized coating can provide corrosion protection in rural and urban areas. Atmospheric conditions will not rust steel protected by a Zinc metallized coating. Therefore, a Zinc metallized coatingdsAmospheric the shape of the steel nor it will affect its metallurgical structure. If the product is scratched and the based metal is revealed, zinc will sacrifies itself and protect the exposed area until it is consumed entirely.

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Pre-painted Galvanized Steel

Thickness (TCT)		0.30mm - 0.80mm
THICKHESS (TCT)		0.301111 - 0.801111
Metallic Coating	:	Z 80-120 (total on both sides) Higher or lower coating optional.
Base Metal	:	High Tensile & Soft Material / CR
Tensile Strength	:	240 - 550 MPa
Paint Coating	:	RegularModified / SiliconModified / PolyVinylDifloride Polyster system
Paint Thickness	:	18 - 22 micron on Top & 5 - 8 micron primer on bottom
Thickness Tolerance	:	As per ISI
Standard followed	:	IS 277, ASTM A653 AS 1397 JISG3312
Combination	:	99.5% Zinc

Galvalume Steel: Zinc-Aluminium alloy coating gives corrosion resistance and superior heat reflectivity. Galvalume Steel reflects a high percentage of heat and can withstand in any weather conditions, without surface discoloration. It is also suited for coastal areas. Bare Galvalume coating is inorganic and does not contain volatile compounds that can harm the environment.

Pre-painted Galvalume / Bare Galvalume Steel

Thickness (TCT)	:	0.30mm - 0.80mm
Metallic Coating	:	Z 120 - 150 (total on both sides) Higher or lower coating optional.
Base Metal	:	High Tensile / CR
Tensile Strength	:	550 MPa
Paint Coating	:	Regular Modified / SiliconModified / PolyVinylDifloride Polyster system
Paint Thickness	:	18 - 22 micron on Top & 5 - 8 micron primer on bottom
Thickness Tolerance	:	As per ISI
Standard followed	:	IS 277, ASTM 1397 / A755 / A792, JISG3321/3322
Combination	:	55% Al, 43.4% Zn & 1.5 - 1.6% Si.

Trapezoidal Profile Drawing

Profile



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JSW, Jindal India,

Bhushan, Essar etc

ACCESSORIES

KESARI ROOFTECH has wide range of accessories like Gutter, Flashing, Ridges, Louvers. Downpipe, etc which are manufactured out of the same material used for Roof and claddingto ensure equal quality and durability. All accessories are available in small, medium, heavy and customized sizes as per customer needs.



Benefits of Gutter and down pipes -Drainage solutions >>>>

- ★ Strong, light weight and corrosion resistant.
- ★ Leakproof water drainage solution.
- ★ Various panels and lengths available subject to different pitches and local rainfall.













TURBO ROOF VENTILATOR

Turbo Roof Ventilators are designedin a manner to fetch the normal as well as extreme weather cConditione pertaining at any industrial or commercial shed so as t0 remove neat & dust to the extent possible, also to maximum fresh air enters the shed, these are wind driven, they have the following specifications.

Specifications >>>>>

- ★ Designed as per industrial & commercial specifications.
- ★ Very high durability.
- ★ Can withstand any extreme weatherconditions.
- ★ Turbine Roof Ventilators are made up of Nylon /SS / Aluminum material
- ★ Vanes are designed so as to prevent rain water from entering the shed.
- ★ Very light in weight.
- ★ Requires no maintenance & zero operating cost.
- ★ Environmental friendly & Removes any kind of dust, heat replacing with fresh air.
- Makes working conditions cool for working.
- ★ Can be used in existing as well as new shed.



Working Principal >>>>

It utilizes wind energy to include air flow by centrifugal action. The centrifugal force generated by the rotating vanes creates low pressure zone, which draws fresh air from outside even after the stoppage of wind.

ROOF RIDGE VENTILATOR

KESARI Sandwich panels for wall cladding and roofing for multifarious applications. Rigid polyurethane foam is sandwiched by metals of flexible facing and becoming very popular in meeing the requirement of construction industry by providing a cost effective system for building and energy conservation. Panels are made for modern continuous plant and possess superior properties as against others they can be made with different types of facing materials, with varous thickness ranging from 25mm to 200mm as per customer requirement, proprietary and exclusive joint systems to deliver you the best combination of aesthetics, durability and thermal insulation.



Advantages of Sandwich Panels >>>>

- Excellent thermal insulation which result in better working environment, productivity and cost.
- High load bearing capacity at low weight helps to do erection without lifting equipment, and also easier & quick installation.
- Facing made of top quality metallic color coated sheets and guarantees for long life, Varieties of finishes available to match aesthetic needs.







Working Principal >>>>

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APPLICATIONS

PUF Insulated panels for various applications such as industrial application for Commercial buildings, Prefabricated shelters, Cold storages, Pack House, Food processing, Freezer rooms, Industrial building, Partition cabins, Clean rooms, Accommodation shelters for zero temperature areas, Information kiosks, Health centers & Renovation.

TRUSS LESS ROOFING (SELF SUPPORTED ROOFING)

Modern Curved/Arch Truss less Roof is a marvel of architecture and design proven to withstand various loads due to its unique profile and installation techniques. It is made of Galvalume material - the latest in metal roofing, without the need for any structural members. It's the fastest roofing system available today and the fabrication of roofing panels and erection is carried out at site.

Truss less roofing is Crimp curved, increasing the materials rigidity and hence the life of the roof. And the depth and cross corrugation with higher thickness and quality material ensures superior strength.

POLYCARBONATE / MULTIWALL / FRP SHEETS

Polycarbonate sheets are made up of polymers. The polymer is given rainbow orofile shape by different molding processes. Polycarbonate roof sheets are manufactured hy the process of extrusion. Polycarbonate roof sheets are commonly called transparent steel due to high impact resistance and glass like clarity.



Salient Feature of polycarbonate sheets >>>>

- ★ Have very high impact strength.
- ★ Light transmission of upto 95%.
- ★ Easy installation.
- ★ Light in weight.
- ★ Available in standard length of 3.00 mts.
- ★ High temperature tolerance (from-40°C to +130°C).
- ★ Excellent thermal and electrical insulation properties.

Salient Feature of polycarbonate sheets >>>>

- ★ Varying widths. Maximum width is 7 feet (2.1m).
- ★ Thicknesses: Can range from approximately 0.157 to 1.77 inches (4 to 45mm).
- ★ Length: Dependent on the equipment.
- Option to coextruded an ultra-violet (UV) protection layer on the top surface of the sheet.
- ★ Transparent, translucent, and opaque colors possible.
- ★ High degree of thermal insulation.
- ★ Light-weight material.
- ★ increased weathering resistance when coextruded a UV concentrate from BMS.
- ★ Continuous production and high output possible.

Applications >>>>>

- 🖈 Residential flat & curved glazing
- ★ Roof glazing
- Building façades and claddings
- ★ Greenhouse roofing
- 🖈 Skylights
- \star Walkways





SELF TAPPING SCREWS

The fasteners (screws/rivets) used to fix roofing, cladding sheets and the accessories, should be durable as much as the product itself. Screws used for attaching panels and trims to girt and purlins are confirming to Indian standards.



Features >>>>>

- ★ High corrosion resistant coating.
- ★ Provides 4-6 times more durable than conventional galavanised fasteners.
- ★ Unique shank protection system minimizes damage to the protective coating on the screw.
- ★ Grip sheeting towards the seal to maximize water-proof ability.
- ★ Strong self tapping drill point and durable washer.
- To maximize water tightness, always place roof screws with EPDM washers with shank guard through the crests.
- ★ For wall cladding, you may use either crest or valley fixing.

PRE-ENGINEERED BUILDINGS

Pre-engineered building concept >>>>

Pre-Engineered Buildings(PEB) were introduced into the steel building industry to facilitate fast design delivery and erection of simple low rise structures like canopies, warehouses etc.

Benefits >>>>>

- ★ PEB Can be constructed in much less than the normal time from other structures.
- PEB is a structural concept whereby all the components of a building are designed, detailed, and fabricated to suit the specific requirement of design and serviceability.
- ★ There would be absolutely no cutting or welding at site.
- ★ The erector would only use spanners to connect the various elements together.

PEB BUILDINGS ARE MADE OF 3 MAJOR COMPONENTS. THEY ARE

1. Primary Framing

Primary Framing consists of columns and rafters with tapered web and variable flanges. These are manufactured by welding together cut plates to form the desired frame l-sections. The tapered sections are welded at factory/bolted at site to form the desired frame profile. These frames in PEB are normally moment resisting frames with fixed or pinned bases as mandated by the design.

2. Secondary Framing Members

Secondary framing members are purlins and grits made of cold formed sheets. Normally, secondary framing members are in Z or Cshapes. Purlins which are used to support roof sheeting and the grits at longitudinal walls are normally designed as continuous members. However, the grits at transverse or short walls are normally designed as simply supported beams. The spacing of secondary framing members are primarily dictated by the capacity of the cladding to span in the between the purlins/grit.

3. Cladding

Cladding comes in a variety of profiles which are customized to suit structural and aesthetic requirements.

STRUCTURAL PROFILES IN PEB

The various profiles for the primary members are chosen based on the requirement in terms of the building usage, loads, economy etc. The chosen profiles are spaced at distance varying from 6 to 10m in order to form the length of the building. Quite often in buildings a combination of all the profiles indicated are used. This gives lots offlexibility for the building configuration.





PURLINS AND GIRTS

C & Z Purlins

Purins and Girts are roll-formed from Hi-Tensile Galvanised/Hot Rled steelThey are primarily used to provide lightweight, economical, efficient roofing and cladding support systems for framed structures. Purlins and Girts are available in a range of different sizes and configurations.



C-sections have equal flanges and may be used in single spans and unlapped continuous spans in multi-bay buildings. Their freestanding stable shape allows easy handling and storage and is easily adapted for use in small and medium sized buildings as structural framework.

Z-sections feature one broad and one narrow flange allowing the two sections to fit together snugly, making them suitable for lapping. Z-sections of the same depth and different thickness' can be lapped in any combination. Purlins and Girts that are lapped form a structurally continuous line along the length of the building, a factor that contributes significantly to the reduction in building costs. we also able to customise sections outside the standard range to C & Z Purlins suit your individual requirements.

METAL DECKING SHEETS

Metal Deck Profile Sheets for steel buildings are manufactured from Cold Roll Formed Steel. Composite Deck Slab is steel cum concrete slab having ribbed steel profile at the bottom & concrete on top, together forming a part of the floor/roof structure called the composite deck slab.





concrete usage to provide a cost effective and alternative floor solution that is easy to install. The floor is constituted by a profile sheet on to which a layer of concrete is poured. The sheet is bonded to concrete by means of mouldings on the sheet which stop the concrete from slipping horizontally and detaching vertically. When the concrete is poured and until it has reached an appropriate level of hardening, the weights of the concrete, personnel working and equipment used in borne by the sheet alone. Once the concrete has hardened the sheet and concrete form a unified bond with all the characteristics of traditional reinforced concrete, where the sheet, after having performed the function of framework, acts as a metal reinforcement. Appropriate crops ends must be provided to absorb the negative moments.

Application Areas

Multi-storey Buildings (industrial/Residential), Shopping malls, Mezanine floors, Bridges, Walkways, Platforms etc.

Advantages

Decreases in slab thickness, provide lighter slab, reduced foundation loads resulting in less material consumption & thus lowering the cost.





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