#### Products – PRE-ENGINEERED BUILDING

Standard Frame Types

Frames in PEB are mainly rigid frames – comprise of Taper Columns & Rafters, are built using the state of art technology. Splices plates are welded to the ends of the tapered sections & Flange is welded to Web.

Available in maximum range of shapes, layouts and sizes to meet the explicit needs of our valuable esteemed clients. PEB Frames are designed innovatively to deliver the optimum, long lasting durability performance, that fits accurately for efficient and economical constructions. We have engineered highly efficient & flexibles frames to the client's requirement.













• Roofing and wall panel:

#### 1.Screwdown System



#### **HI-RIB Sheet Profile:**

Metals panels are the most attractive features of Metal Building System, having contributed mightily for the growing popularity of the Metal Buildings. The term "Panel" in this context refers to the metal skins used as roof and wall panels, interior roof and wall liners, partition panels, Fascia Panels, soffit panels etc. roof systems can be used as single skin roof or wall cladding or can be used in combination with advanced multi—layered insulated systems to give optimal thermal and acoustic characteristics. They can also be combined with other cladding systems on the inside to form a Sandwich panel System.

From Industrial & Infrastructure projects to commercial Developments, malls, offices, and homes, offers several systems for structural and architectural roof and wall cladding applications. All the panels are available in Galvalume and Galvanised steel substrates and in premium colour coatings viz. Architectural Polyester, Siliconized Polyester or Fluoropolymer, for permanent appearance. All the roof and wall coverings are supplied with custom accessories such as flashings, capping, trims, Fasteners etc. which are formed out of the same substrates and coatings as the roof and wall covering panels.

#### SSIPL Roof & Wall Cladding:

SRS/ SWS, a pierced fixed roof and wall covering system, consists of structurallyengineered profiled panels that are available in single length (up to 12 m) and are fixed by means of self-drilling fasteners. It can be used for roof slopes as low as 1 in 10. SRS roofing/ cladding panels can be used as internal liners for double —skin roof and wall construction, with us without insulation. Roof curved panels are also offered for special architectural requirements.

#### **DECK Sheet Profile:**

Trapezoidal Metal Profile sheets with strong and reliable shear bond performance which is augmented by cross embossing located in the profile. The composite floor profile offers the ultimate in the light weight steel decking which reduced concrete usage to provide a cost effective and alternative floor solution that easy to install.

#### 2.Standing Seam



# Standing Seam Roof System - SSR 600

Standing Seam blends the aesthetics of an architectural panel with the strength of a structural panel. These panels have a good uplifts rating assuring the reliability of the roof and can go down to roof slopes of up to 1:50. The designer is this afforded a flexible tool to meet any design challenge. Panels for each system are available in 0.55 mm or 0.6 mm TCT Galvalume. Galvalume is high quality cold-rolled sheet steel with a corrosion resistant metallic coating of aluminium and zinc.

SS is field seamed system that combines a slim rib with exceptional uplift resistance. This panel has been designed to withstand the most rigorous conditions. The SS features CONCEALED FASTENING and on-site roll forming for single length panels to form a one-piece non-pierced roofing system. Each of these systems features optional factory installed hot melt mastic for low slope applications to ensure weather- tight seams. A standing seam roof system is the most weather tight roof system available in the roofing industry. Special clips available allow thermal roof expansion and contraction during extreme temperature changes. All trim is weather tight and aesthetically pleasing, giving the roof a nice finished appearance. Also, the only panel penetration required, other than for end laps, is outside the building envelope. The end laps are tightly sealed using either unique components or by swaging the panels.

#### **3.Insulated Panels:**



#### Roof and Wall Single Skin with Insulation



#### **Insulated Roof and wall Cladding:**

Heating or cooling is one of the largest operating expense in a building. That's why it is important that each building has good thermal insulation adapted for the usage of the building. SSIPL offers metal building roll insulation laminated or foil reinforced kraft or white metalized scrim craft vapour barrier. Metal Building insulation exhibits low thermal conductivity value.

roofing and wall cladding are individually designed for each project and adapted to the specific requirements of the customer. Single or double —skin insulated roof and wall cladding represent a major breakthrough in meeting the demand for a versatile high-specification system. The cost efficiency achieved makes it a viable proposition for all the users who require higher insulation values in terms of energy efficient roof and walls.

#### **Single - Skin Insulated Construction**

Single-skin insulated roof and wall construction comprises of roof and wall cladding with metal building roof insulation used underneath the cladding as underdeck insulation. The metal building insulation is rolled over the purlins or girts & the external cladding SRS/ SWS are then fixed to the secondary framing through the insulation. Only the vapour barrier is visible from inside of the building.

#### **Double - Skin Insulated Construction**

Double — skin insulated roof construction comprises of internal liner panels directly screwed to the secondary framing, sub-girts screwed through spacer blocks and liner sheet to the purlins below. Metal building roll insulation with vapour barrier is laid over the sub-girts and finally the outer panel is screwed to the inside face of girts with the external sheet and insulation fixed on the outside of the building.

Cranes System

When Crane System is required, supply includes Columns, Rafters, Brackets, Crane runway beams & lateral tie that support crane system. Clients have to provide complete crane data as per the crane's manufacturer for optimal designing of PEB having crane systems.

# The most common types of Crane System available for Pre- Engineered Steel Buildings are:



#### Underhung Crane



Jib Crane and Monorail Crane



#### Mezzanine System:

The standard mezzanine framing system consists of a steel deck support by joists into main mezzanine beams. If required by design loads, the main beams shall also be supported by

intermediate columns. The top flange of the joists fit at same level of the top flange of the primary beams.

The embossments on the top and sides of the deck sheet ribs provide added grip and minimize slip by creating a bond with concrete as done with normal reinforcement.

It provides permanent formwork as well as positive reinforcement. No erection, removal, handling or storage of timber / steel formwork as in conventional concrete slab construction, saving valuable time. Clean, uniform and attractive ribbed underside (soft fit) for exposed situation reduces the cost of ceiling finishes. MS deck sheet is provided for suitable load on the floor and covered with form concrete.



Mezzanine Cross Section



#### **Roof Platform**



# Section of Typical Root Platform



#### Staircase

## **Single Flight Staircase**



# Plan: Single Flight Staircase with Mid-Landing



# **Double Flight Staircase**



#### Other technical details:

1.Canopy & Eave Details





# Roof Extension at Eave (with Soffit)



#### Canopy with Curved Eaves with Bottom soffit



# Canopy with Curved Eaves without Soffit



# Canopy with Gutter & Down take without Soffit



#### Section: Curved Eave



### 2.Fascia System



Typical Sidewall Section for Flush Fascia

Typical Endwall Section for Flush Fascia



Typical Sidewall Section

Typical Endwall





Typical Sidewall Section Flushed Fascia with Box Gutter Gutter



Typical Sidewall Section

**Typical Endwall** 

Section

#### 3.Jack Beam:

Jack Beams are used to make economical as well as safe approach for creating longer bay length when large unobstructed space, is required. Common bay lengths (5,6,7,8,9 & 10) can be doubles with the use of jack beam making it possible to have 12,15,16,18 and 20 m clear bay length in areas where unstructured space is required. For example, if the customer specified to have 10 m bay lengths instead of the more economical 8 m bay length, jack beams will be used in the interior of the building to make that possible. Jack beams may also be used on the exterior walls in the same way.



Isometric: Jack Beam at Interior Column Location



• Standard Trims & Flashing



Eave Gutter (GU1)



Eave Trim (ET1) Single Ridge cap (SRC-1)



Outside Corner Trim (OT1)



Facia Sill Trim (FST-1) Facia Sill Trim (FST-2)



Masonry Trim-MF1Drip Trim (DT1)



Transition Trim (TT1) Jamb Trim (JT1)



Jamb Trim (JT2-200) Jamb Trim (JT2-250)



Cap Flashing For 200Z-FC200



Cap Flashing For 250Z-FC250



Bottom Trim (BT1-250)







Fascia Transition Flashing (FT1)



Apron Trim



Down take Strap (DSS1)



Length - 400mm Gutter Strap (GSS1)



Base Angle (BA1)

# • Accessories:

#### en nome en

Ridge vent System

S-Type Louver Detail



#### **Roof Monitor**



Turbovent Fixing Detail





#### Gutter / Downspout Fixing to Wall panel Using Strap

Sky Lights and Wall Lights



**Project** 

**Client** 

**Career** 

**Quotation** 

**Gallery** 

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