

Modern Building Solutions

Pre-engineered building & all roofing solutions





PRODUCT RANGE

Pre-engineered Buildings
Metal roofing and cladding

Profiled and flat aluminum and steel wall cladding
Site-assembled insulated roofing and cladding system
Crimp Curved Roofing and Cladding



MARKET Value

Modern Buildings is the leader in the field and has a significant market value in the organized sector for products in our areas of operation:

Colour coated roofing and claddings system in color coated Galvalume/Galvanized Steel and galvanize





INDUSTRIAL & FACTORY SHEDS



AGRO & FOOD PROCESSING INDUSTRIES



GRANITE INDUSTRIES



Automobile Manufacturing & SERVICING CENTERS



INDOOR STADIUMS & SPORTS HALLS



WAREHOUSE & Garment Manufacturing Units

PRE-ENGINEERED BUILDING SYSTEMS

Modern Building Solutions are tailor made solutions to customer's need and are custom designed to meet exact requirements and satisfactory

They are ideally suited to Warehouses, Factories, Workshops, Distribution Centers, Cold Storage, Supermarkets, Sports Halls, Mezzanine Floor

ADVANTAGES

- Aesthetic Appeal
- Faster Completion
- Economical
- Seismic Resistance
- Ease of Expansion
- Maintenance Free
- Large Clear Spans
- Controlled Quality
- Hassle Free

PRE-ENGINEERED BUILDING SYSTEMS

Suited to large span construction

Pre-Engineering versatility

Expandable in all horizontal directions for future expansion

Quality - Each component of the building is supplied pre-manufactured in ready-to-use condition

Easy Installation - Simple bolt-on construction

Energy efficient roof and walls - low thermal mass construction provides energy efficient buildings specially when used in conjunction with thermal insulation.

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PRE-ENGINEERED BUILDING SYSTEMS

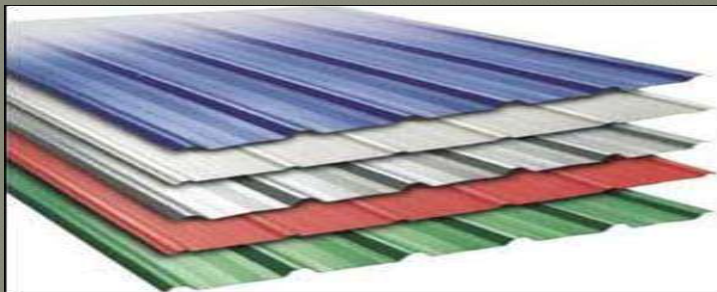
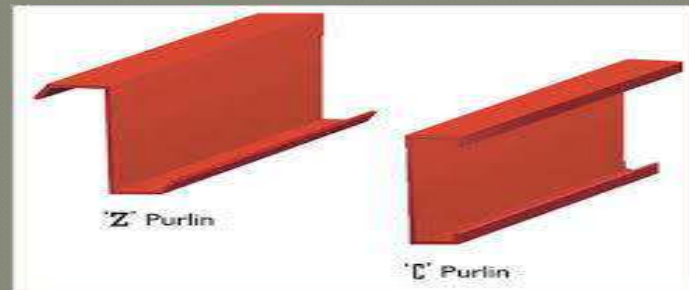
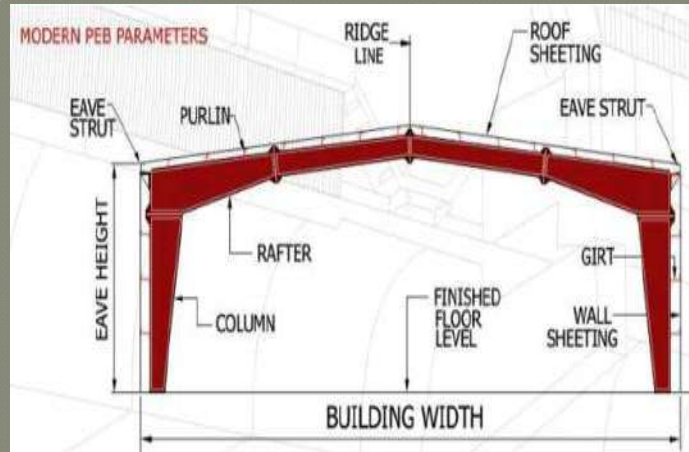
Advantages

Weather-tight roof & wall cladding systems with compatible accessories such as Louvers, Ridge Vents, Roof Curbs, Skylights, doors and windows are provided

High quality exterior finishes are available for a long **maintenance free** life

Cost effective - Achieved through design optimization for material and component usage

Very Less **Labour efficiency** required for erection



PRE-ENGINEERED BUILDING SYSTEMS

ELEMENTS

PRIMARY FRAMING

Primary framing comprises solid web built-up sections manufactured out of hot-rolled steel plates

SECONDARY FRAMING

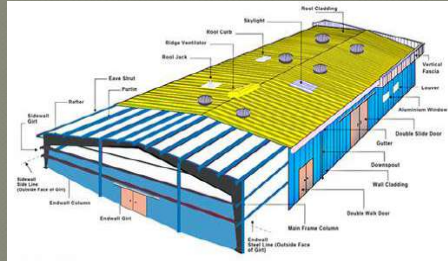
Secondary framing is generally cold formed steel sections

ROOF and WALL CLADDINGS

Screwed down and standing seam systems with insulation and liner panels

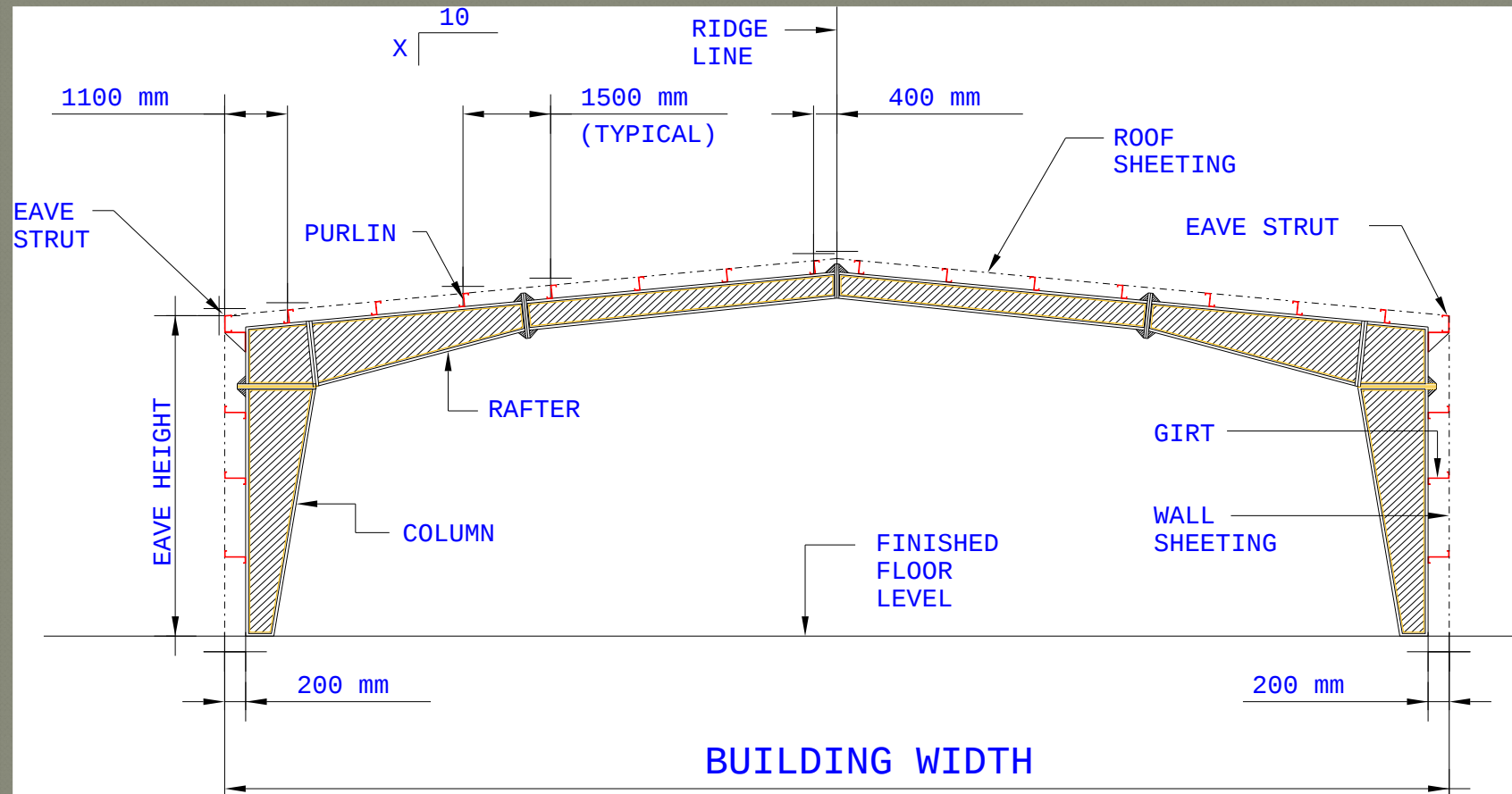
ACCESSORIES

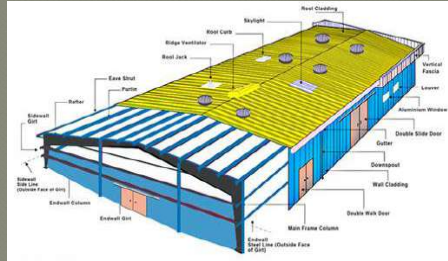




PRE-ENGINEERED BUILDING SYSTEMS

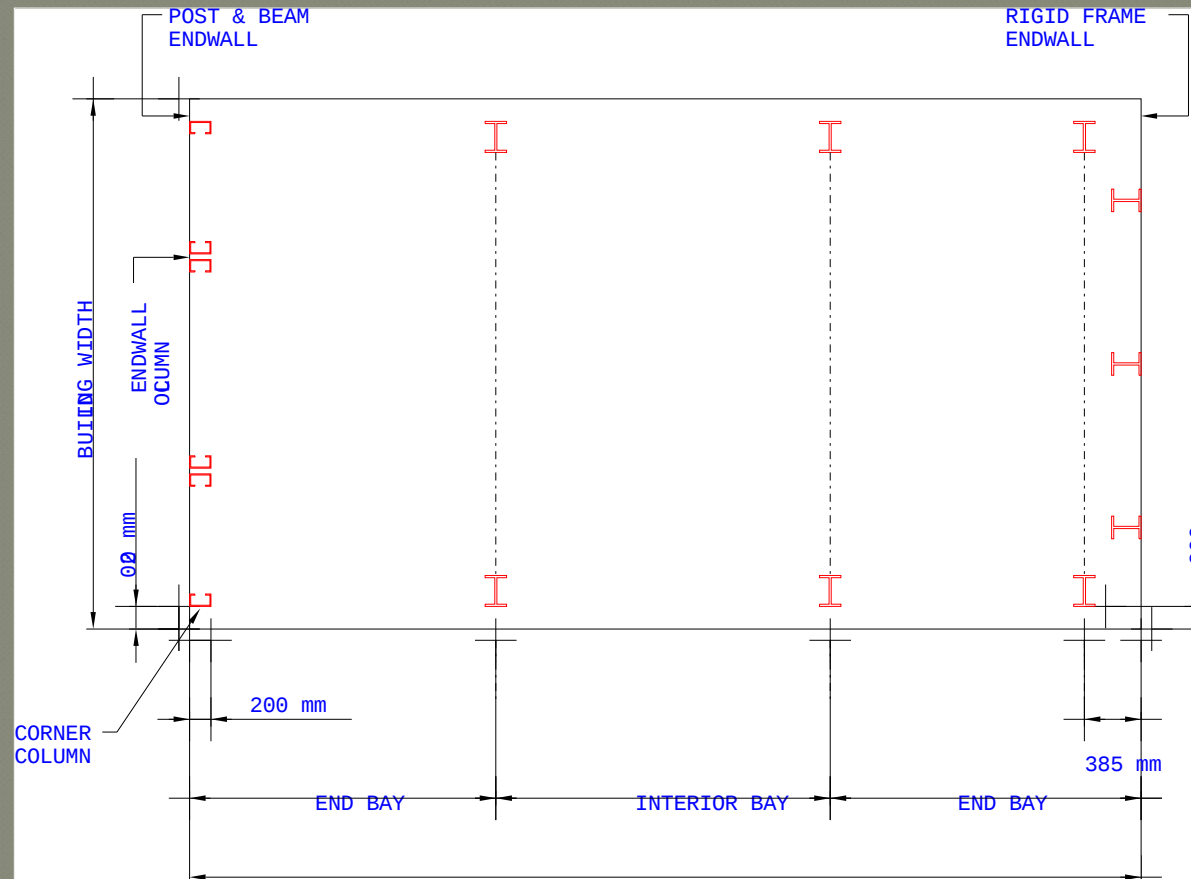
Specification in sectional





PRE-ENGINEERED BUILDING SYSTEMS

Specification Plan



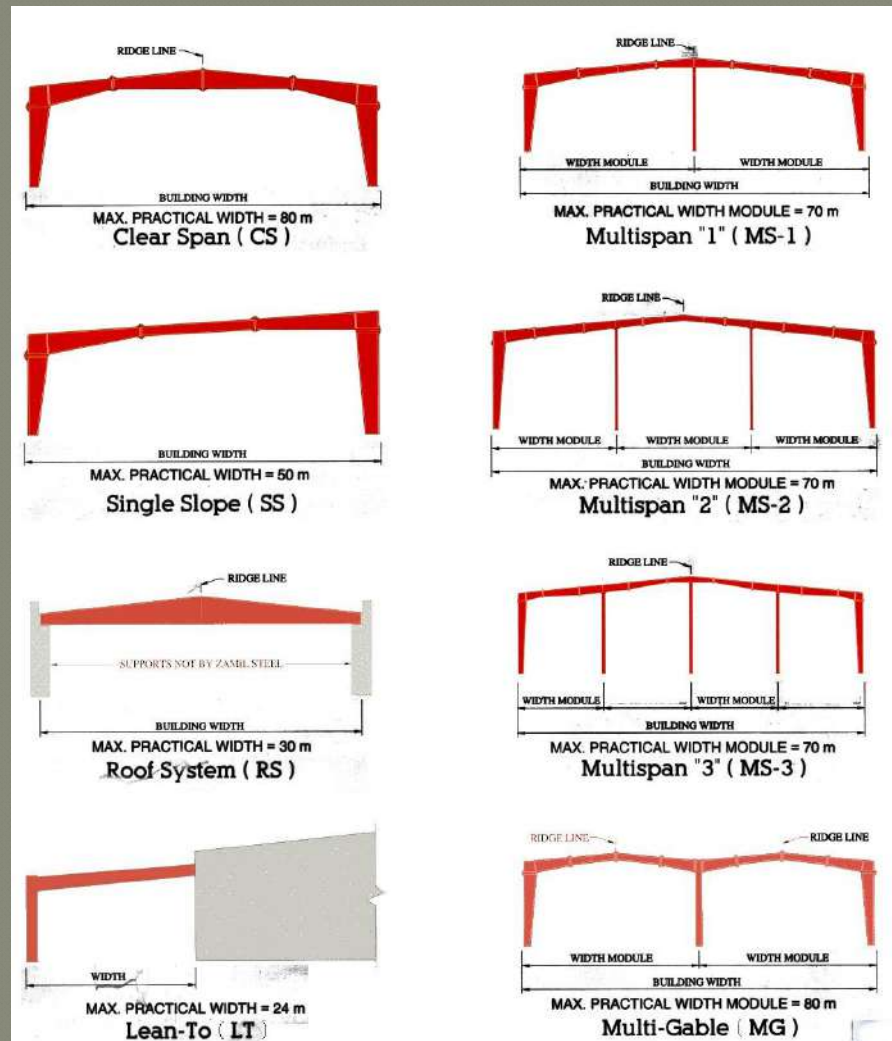
PRE-ENGINEERED BUILDING SYSTEMS

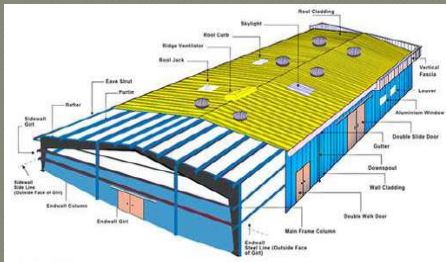
Types of Frames

Several types of framing are possible for clear span and multi-span building configurations, both symmetrical and asymmetrical about the ridge line

Integration of Mezzanine floors, Crane beams, Monorails, Roof extensions, Canopies, Parapet walls etc. is possible

Each building structure is specifically designed to suit the application



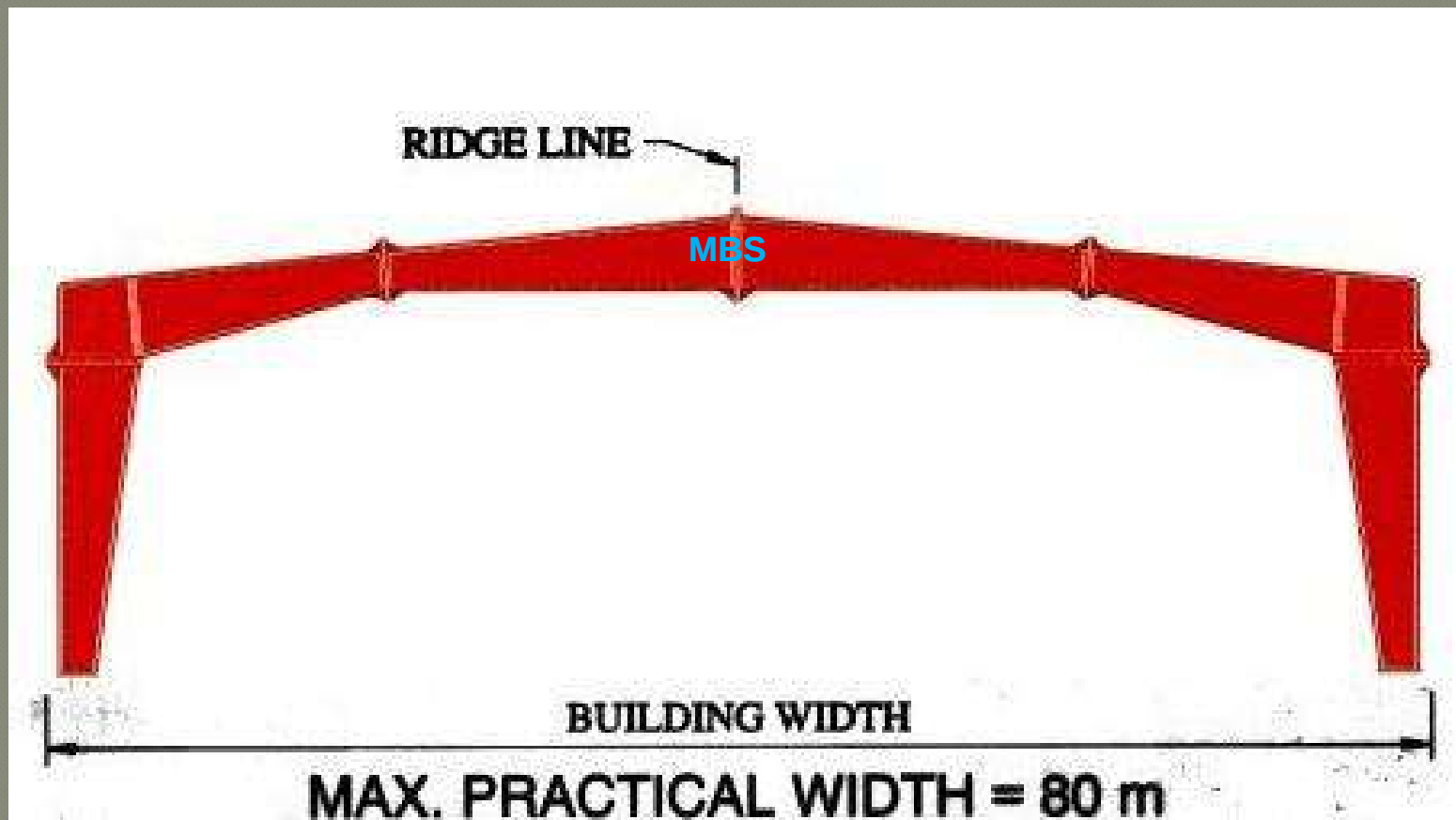


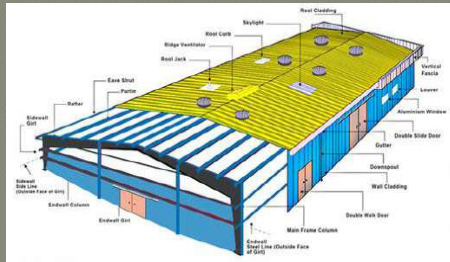
PRE-ENGINEERED BUILDING SYSTEMS

Clear Span Frame

Width: 10m to 80m

Height: 4m to 20m



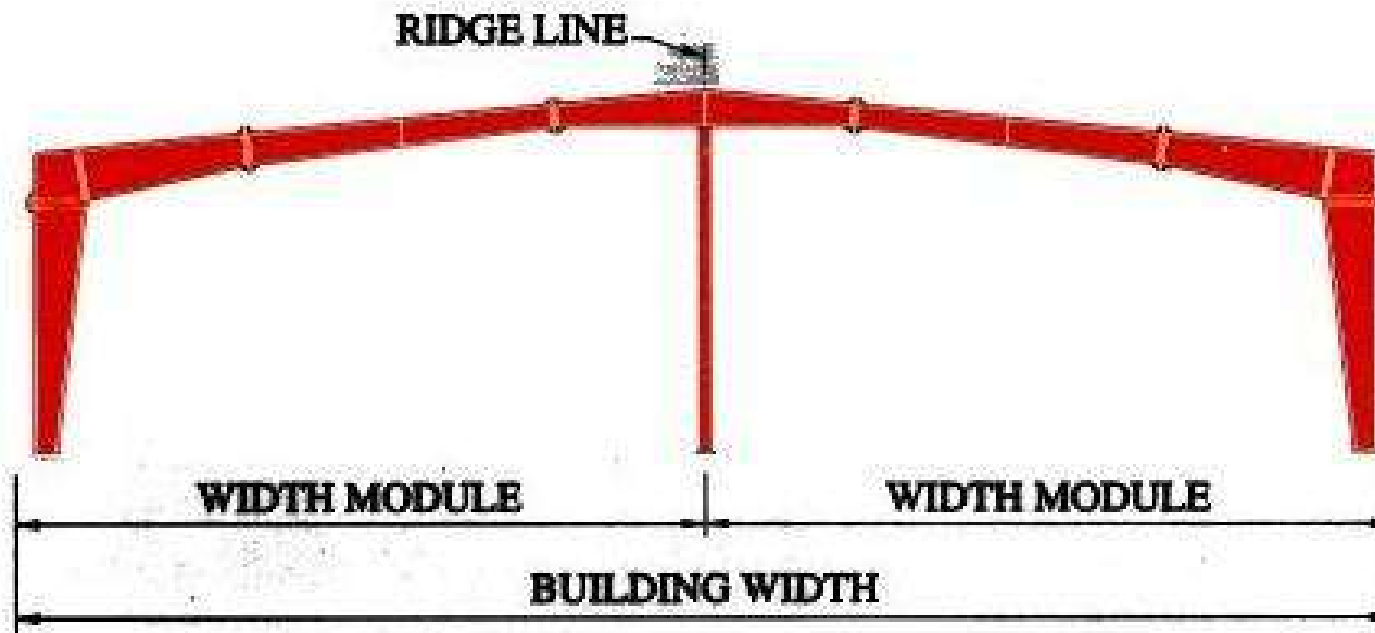


PRE-ENGINEERED BUILDING SYSTEMS

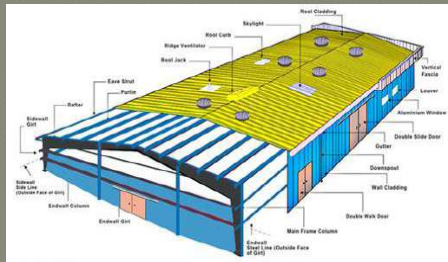
Multispan Frame (One interior column)

Width: 20m to 140m

Height: 4m to 20m



MAX. PRACTICAL WIDTH MODULE = 70 m

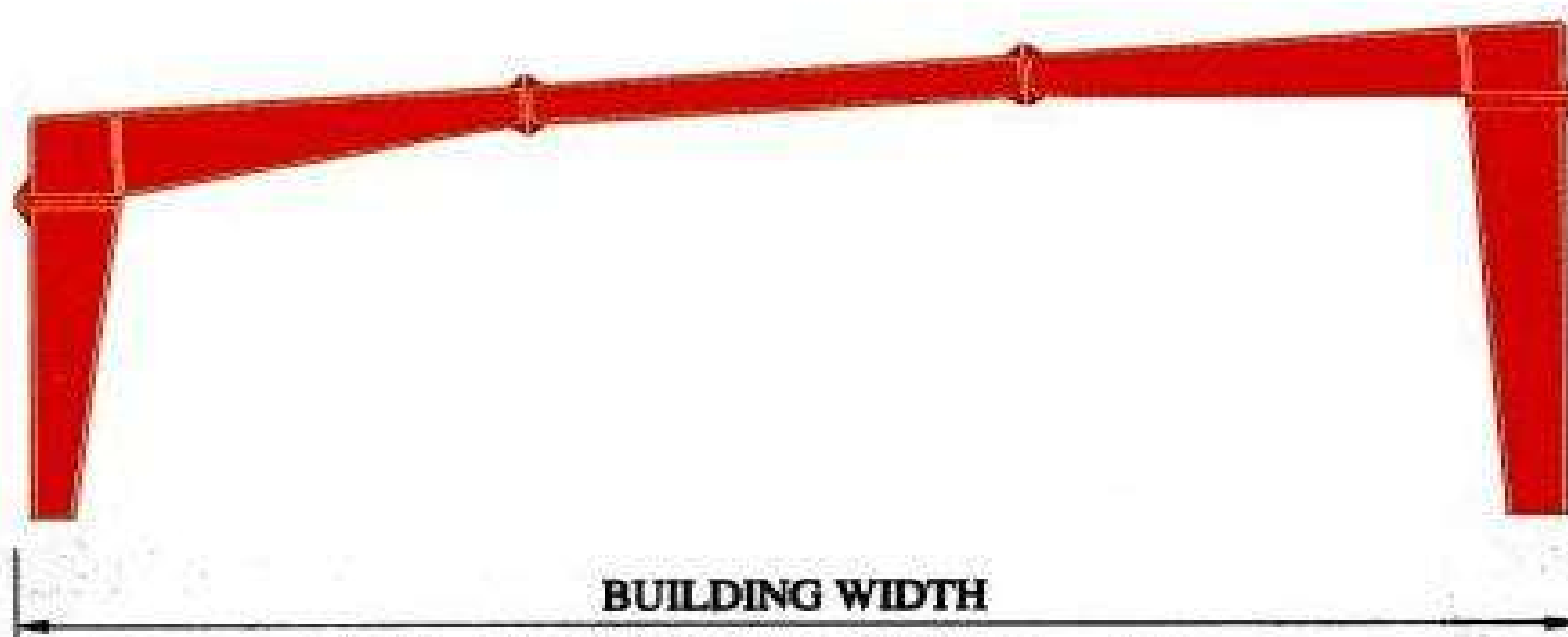


PRE-ENGINEERED BUILDING SYSTEMS

Single Slope Frame

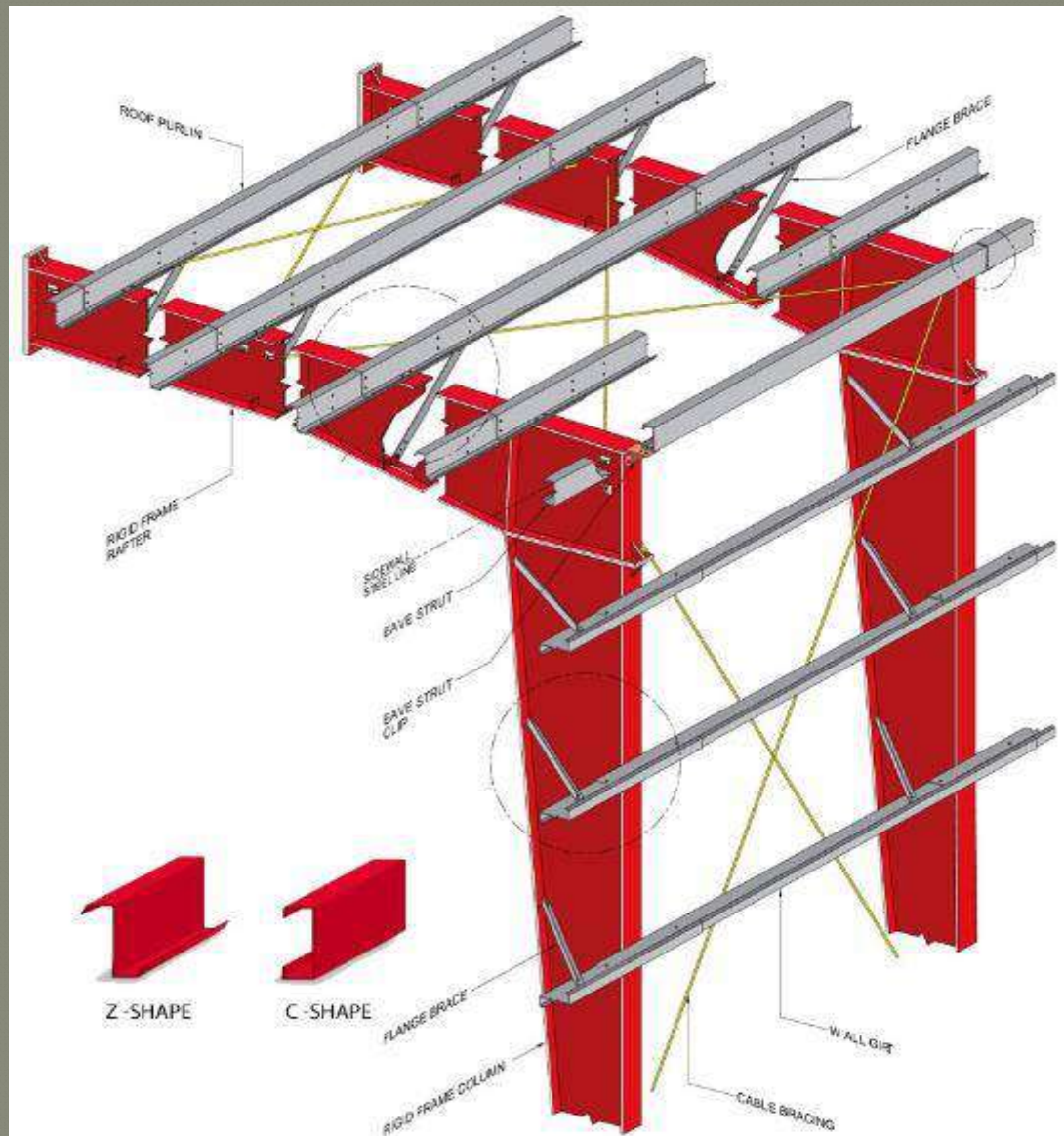
Width: 10m to 50m

Height: 4m to 12m (high side)



BUILDING WIDTH
MAX. PRACTICAL WIDTH = 50 m

PRE-ENGINEERED BUILDING SYSTEMS



Secondary Framing

Purlins
Girts
Eaves Strut
End wall columns & rafters
Rod bracing
Wind struts
Hardware

PRE-ENGINEERED BUILDING SYSTEMS

ACCESSORIES:

STRUCTURAL CONNECTIONS

High strength bolts used for structural connections

ROOF/WALL BRACINGS

Normally diagonal cable or rod type with complete assembly. Rigid bracing is sometimes provided depending on the application

ROOF CURBS

Special openings in the roof to fix extractors, ducts etc. Each curb is specifically designed and is supplied factory finished

SKY LIGHTS

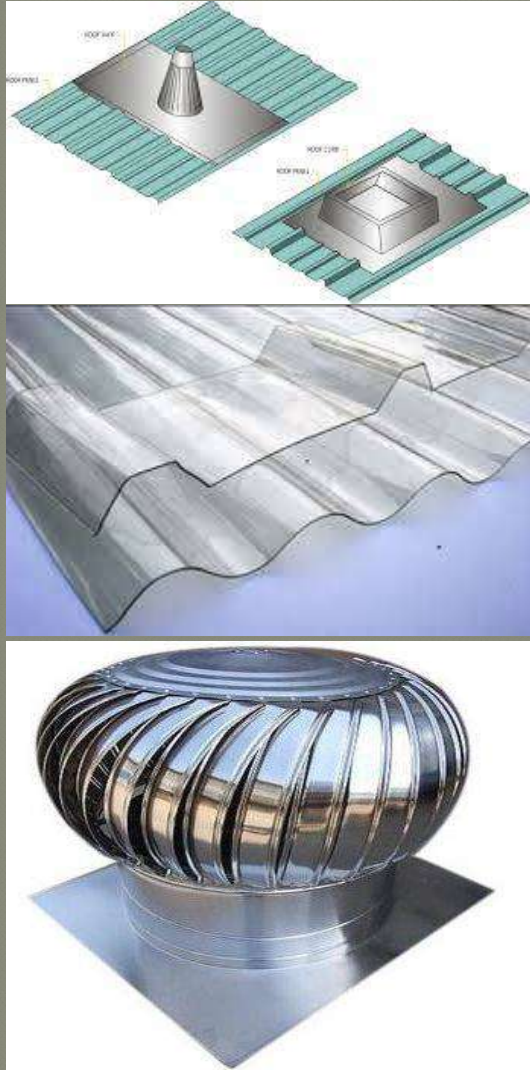
Translucent panels matching cladding profiles for natural lighting

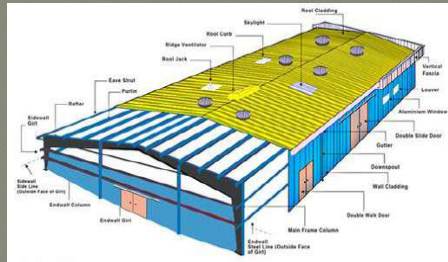
Turbo ventilators

600mm throat air rotation ventilators

RAIN WATER DISPOSAL SYSTEM

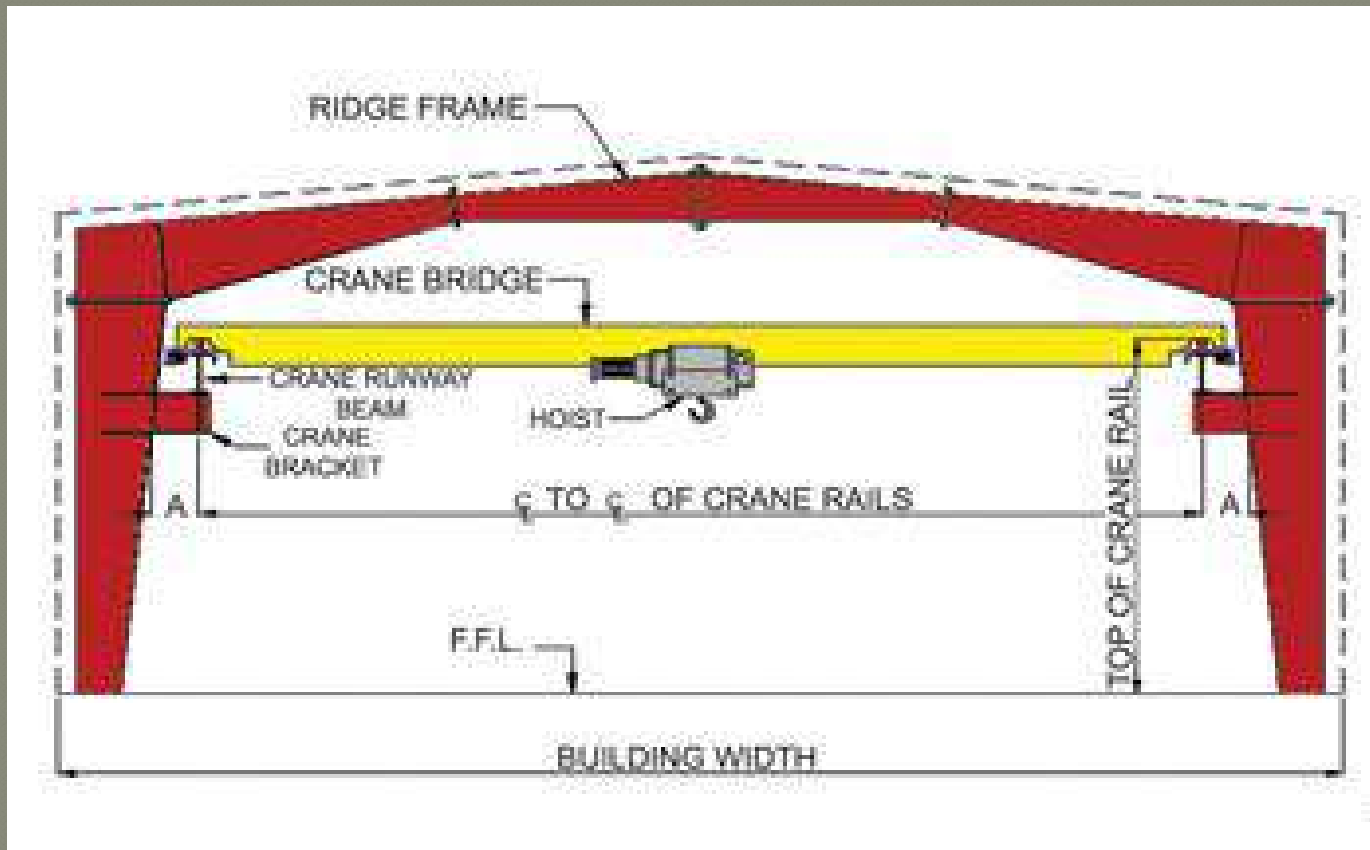
Comprising of rain water gutter in compatible substrates and down-take pipes.





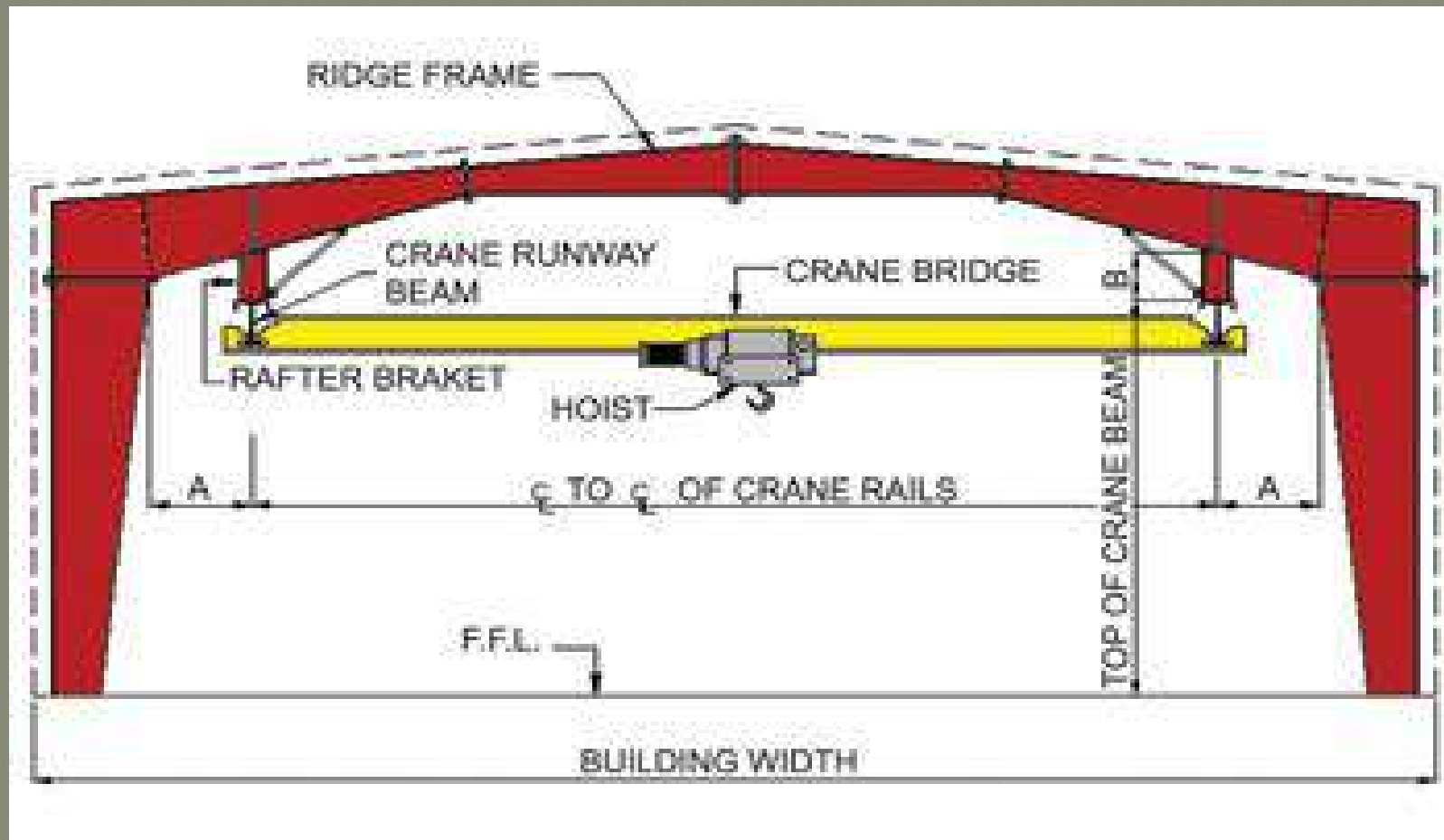
PRE-ENGINEERED BUILDING SYSTEMS

Cranes Top Running Eot Crane



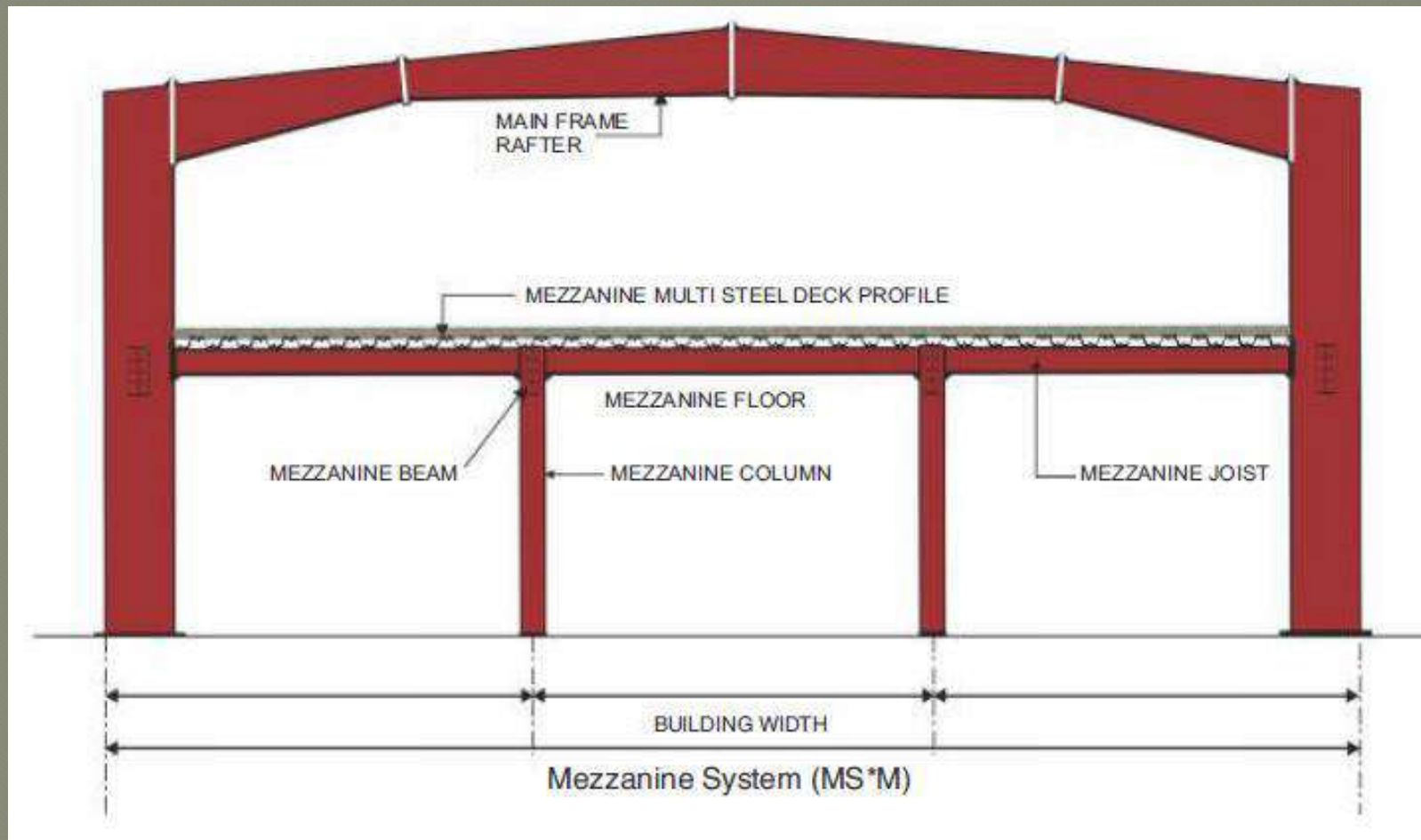
PRE-ENGINEERED BUILDING SYSTEMS

Under-hung Crane



PRE-ENGINEERED BUILDING SYSTEMS

Mezzanine





PRE-ENGINEERED BUILDING SYSTEMS

DESIGN CODES

Loads are applied in accordance with local design data as per IS: 875 and in general conforming to the following :

Low Rise Building System Manual, Metal Building Manufacturers Association (**MBMA**)

Manual of Steel Construction for Allowable Stress Design, American Institute of Steel Construction (**AISC**)

Cold Formed Steel Design Manual, American Iron and Steel Institute (**AISI**)

Structural Welding Code (Steel), American Welding Society (**AWS**)

ROOFING & CLADDING SYSTEMS



Fasteners and fixing systems are very important for long term durability of the cladding system. Poor quality fasteners corrode and cause streaking

ROOFING & CLADDING SYSTEMS

Roof & Wall Cladding System

Galvalume

Hot dip zinc-aluminium alloy coated steel

Hot dip coating of 55% aluminium, 43.5% zinc and 1.5% silicon

Proven life of two to four times that of galvanised steel in equivalent coating thickness

Dual protection due to sacrificial action of zinc and barrier protection of aluminium

Excellent cut edge protection

Available in 150 gm/m² (AZ150) coating mass grades, total of both sides



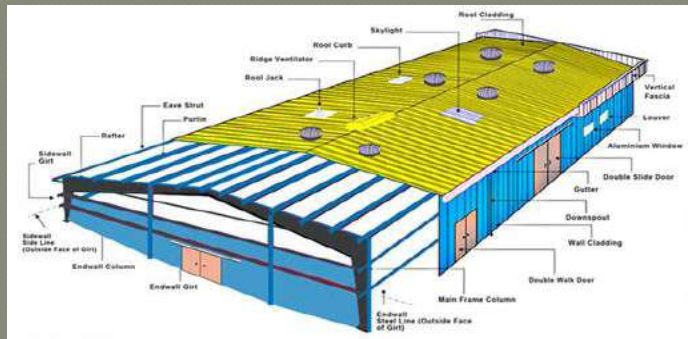
ROOFING & CLADDING SYSTEMS

Roof & Wall Cladding System

Galvalume has a shining aluminium like appearance with very small spangles. Can be used in natural finish or with organic coated finish.

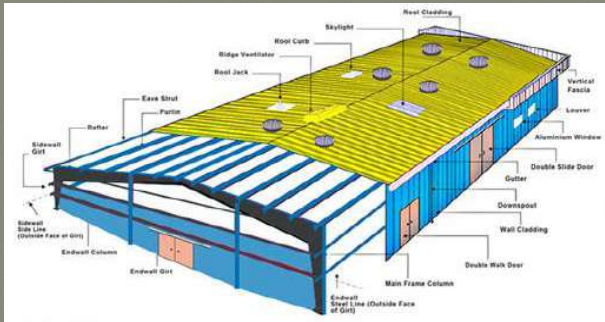
With silicon polyester coating - suitable for mild industrial, mild coastal and mild rural areas. Life to first maintenance in excess of 15 years

With fluoro polymer coating systems - suitable for heavy industrial, severe coastal and other severe environments. Life to first maintenance in excess of 20 years.



Sandwich panels





ROOFING & CLADDING SYSTEMS

Roof & Wall Cladding System

DURABILITY of exterior finishes

Roof and wall cladding systems manufactured out of hot dip metallic coated steels like **Galvalume** and galvanised steel with organic coatings for colour and maintenance free exteriors

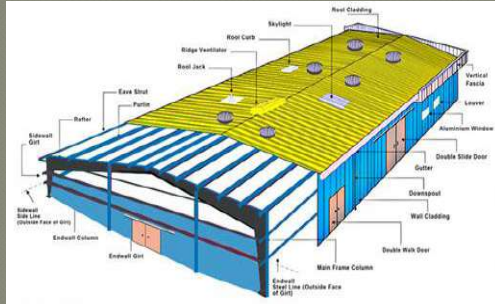
Organic coatings like silicon modified polyester, giving life to first maintenance

Bare **Galvalume** (hot dip zinc-aluminium alloy coated) steel increasingly popular for roofing.

Proven life of two to four times that of galvanised steel in equivalent coating thickness

Dual protection due to sacrificial action of zinc and barrier protection of aluminium

Excellent cut edge protection in excess of 20 years.



CONTRACT EXECUTION

faster supply and pre installation directly and through Experienced builders

Supply of materials and supervision of erection





MANUFACTURING &

Manufacturing profile

Profiling high rib panels, crimping panels



MANUFACTURING & DESIGN CAPABILITY

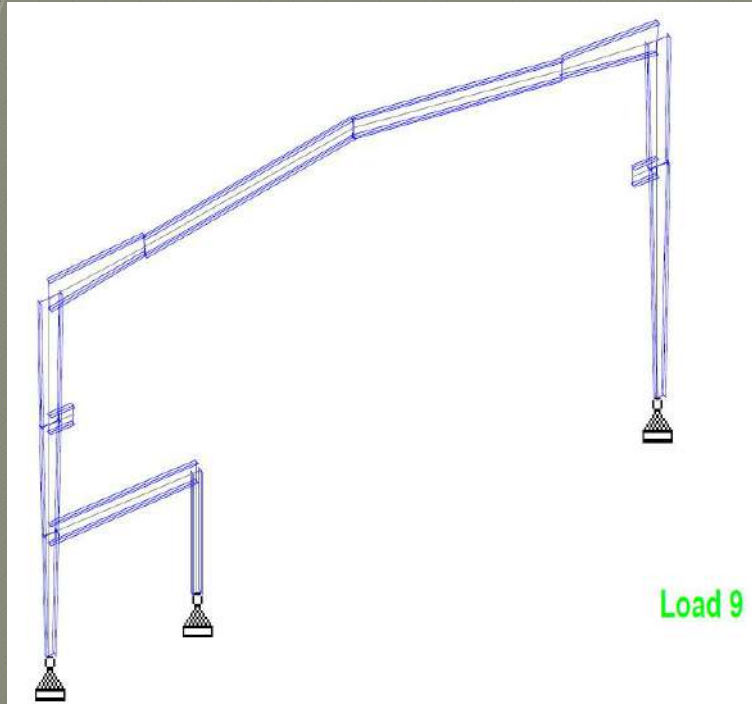
Design and Engineering

Minimum 10years experienced engineers and detailers for structural engineering design, detailing and automatic generation of Bill Of Materials using Staad pro,Tekala,Autocad softwares

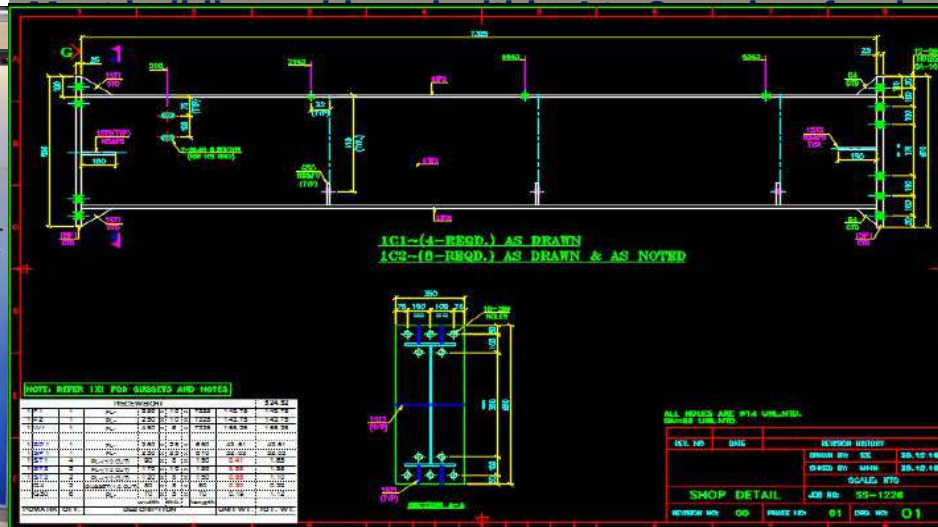
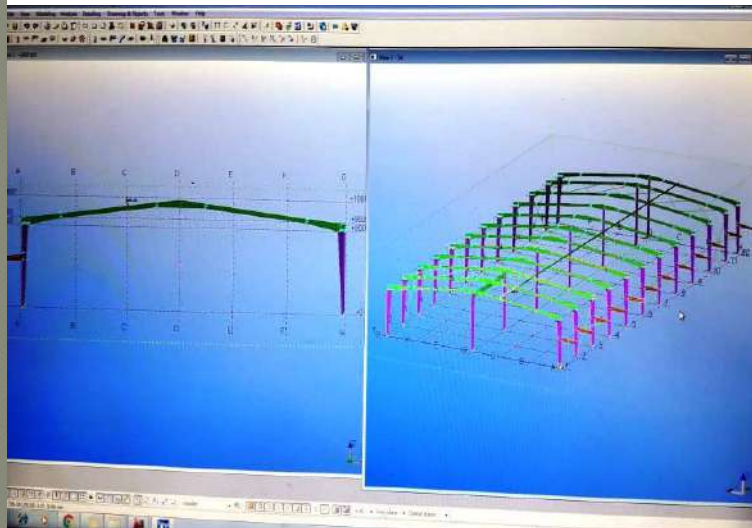
Delivery

Engineering designs prepared within 2 weeks of order

Erection and shop drawings and details prepared for every project within 2 weeks of order



Load 9



Pre-engineered Buildings

Set to Modern buildings

Modern Building Solutions



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Website: www.modernbuildingsolutions.com



GOOD DESIGN

Modern Building Solutions

Fascia



Arc shape or half round building



Unusual Full height brick wall with exterior visible main frame columns



Unusual Full height brick wall with exterior visible main frame columns



At Vijayawada



Yamaha showroom



PEB with EOT crane