K.K. STEEL

Pre-Engineered Steel Building Structure

JSW Steel | TATA STEEL

www.kksteel.in

KK Steel building

KK STEEL BUILDING

KK STEEL BUILDING

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Introduction

About us

"K K STEEL" is a steel structure building manufacturing company. The construction division was established in oct 2008, within a 16 year of span we have built more than **800+ Project** in the different region of india. From the 2014 **"K K STEEL"** founded PEB Division within the time of **10 years** we completed more than **325+ projects** with the built are over **1cr+ square feet** in PEB Division.

Advantages & Features

Larger Spans
Up to 50 meters without any columns in between

Cost effective
Optimum utilization of materials, built-to-design steel section and fast construction, all lead to direct & indirect cost savings. Reduce foundation cost with wider bay spacing.

Peace of mind guaranteed
Reputed, reliable, well equipped manufacturer undertaking the turn-key responsibility is a big relief. you can be rest assured of a quality job, deliverd in time.

Faster construction
Time Saved in money earned PEB save 50% construction time compared to conventional methods. 1,00,000 sq.ft. building can be made ready for occupation within 8-10 weeks.

Production Capacity
20500 Matric Ton

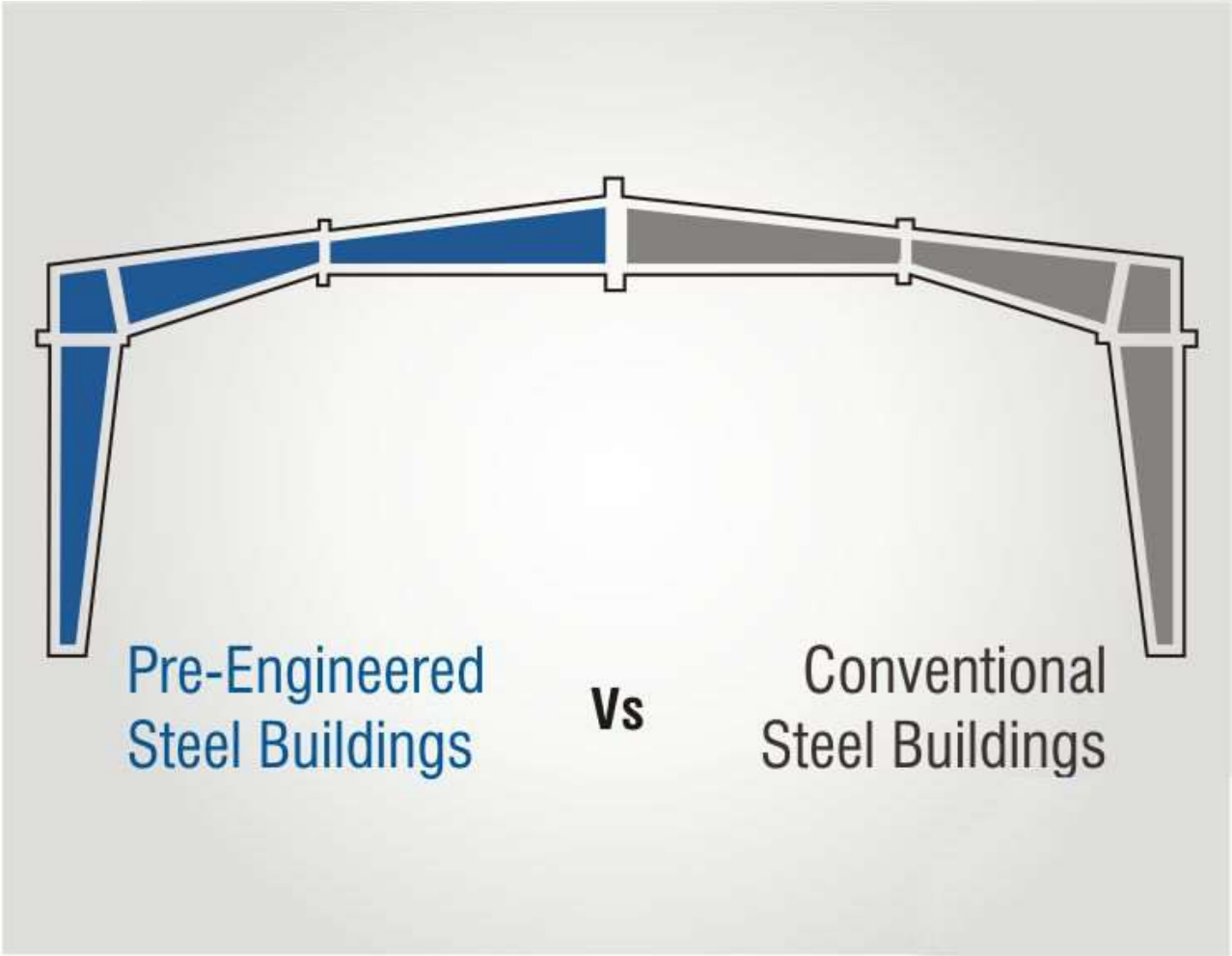
Re-locatable
PEB permit future expansion & relocation through easy dismantling & reassembling/

Custom designed
To suit specific need of the customer & the location.

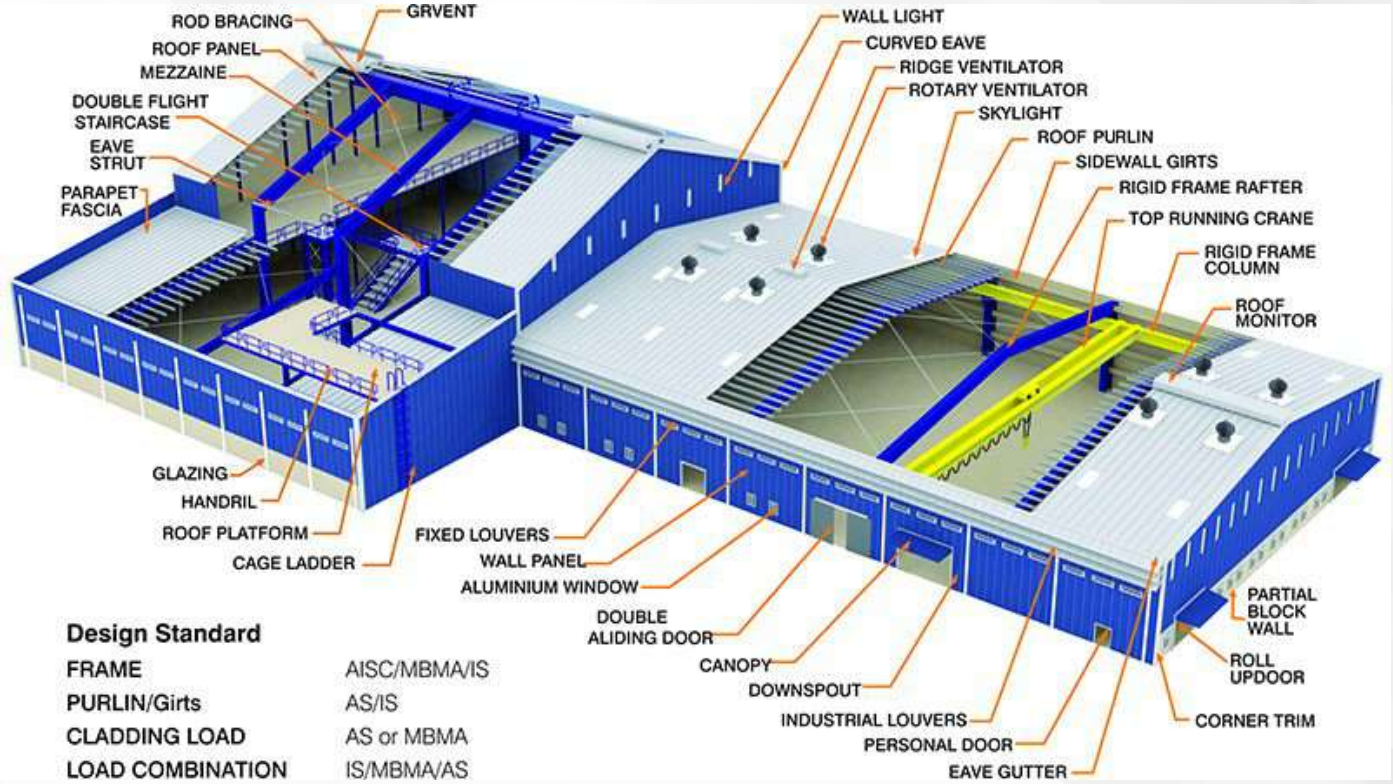
Our Specialities

- Industrial E O T Crane Building
- Warehouses / Godowns
- Rail Yards
- Logistic Yard
- Cold Stores
- Industrial All Steel Building
- Workshops
- Transport Terminals
- Exhibition Halls
- Service Stations
- Sports Halls
- Shopping Mall
- Meeting Hall
- Resort Hall
- Function Hall
- Auditoriums
- Food Courts
- Parking Lots
- Hotel Steel Building

Difference Between RCC Building & PEB Structure

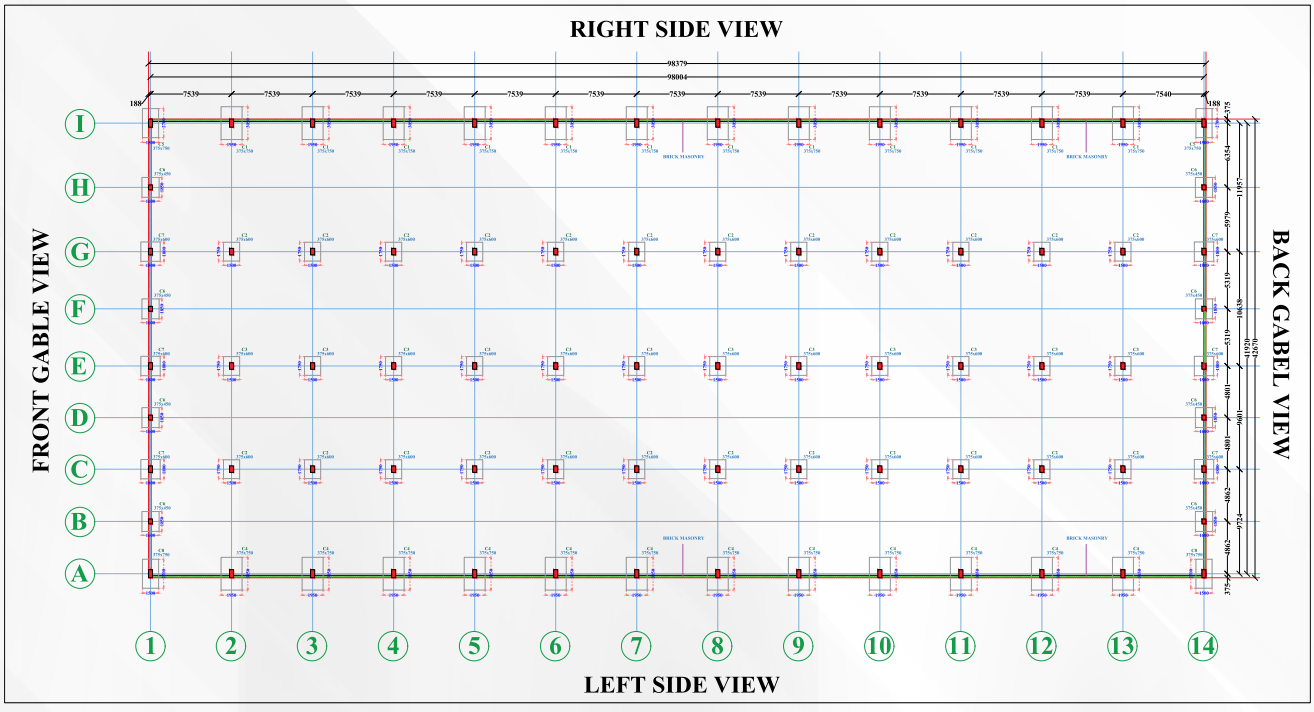


PEB 3D View



Design Standard	
FRAME	AISC/MBMA/IS
PURLIN/Girts	AS/IS
CLADDING LOAD	AS or MBMA
LOAD COMBINATION	IS/MBMA/AS

Typical Plan



Design Load considerations

- Dead load
- Live Load
- Wind Load : As per IS 875 : 1987 (Part)3
- Roof Slop
- Bay Spacing
- Eaves Height

APPLICABLE CODES

- **Cold Formed**
  Cold Framed members are designed in accordance with : 1980 Edition of Cold Formed Steel Design Manual, American Iron & Steel Institute (AISI)

- **Welding**
  Welding is designed in accordance with : Structural Welding Code - Steel Manual 1987 AWS

- **Wind Speed**
  Wind Speed is applied in accordance with : IS 875 (Part 3): 1987 Code for Practice for Design.

- **Hot Rolled Sections & Built UP sections a**
  Hot Rolled Sections & Built up sections are designed in accordance with : 1989 Manual of Steel

  Construction , Allowable stress Design, American institute of steel const (AISI) Design for seismic loads , collateral loads or any other local conditions must be specified at the time of enquiry .

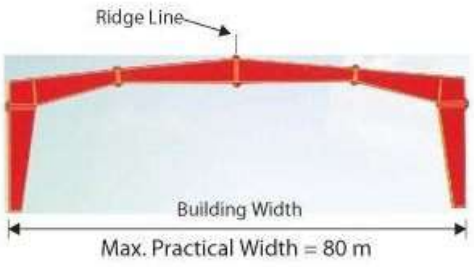
  Loads are applied in accordance with the latest American Codes & Standards applicable to Pre Engineered Buildings unless otherwise requested at the time of enquiry.

Design & Engineering

A world class design & engineering office manned with team of experienced Design & Engineers professionals and equipped with latest sophisticated design Software.

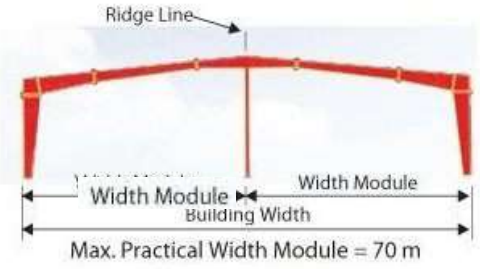
We delivers the quick, accurate and cost effective solutions. The design office offer intelligent engineering solutions and support pre & post order functions with arrangement, fabrication & erection drawings. The computerized drafting & detailing simplify manufacturing programs and erection methods. The buildings are designed as per universal codes like AISC/ IS as per utility of the building in consultation with the client/ consultant. K K Steel Structures consistent efforts in research & developments has positioned the organization as a lead runner in introducing innovative ideas and products in market place.

Types of Typical Frames



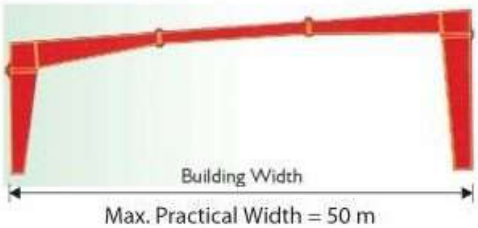
Max. Practical Width = 80 m

Clear Span (CS)



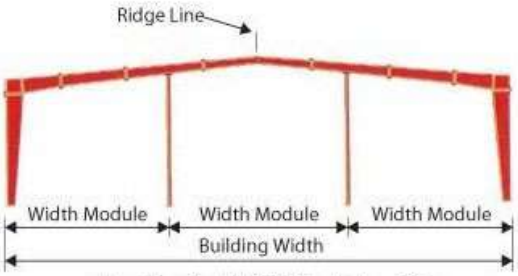
Max. Practical Width Module = 70 m

Multi-Span "1" (MS-1)



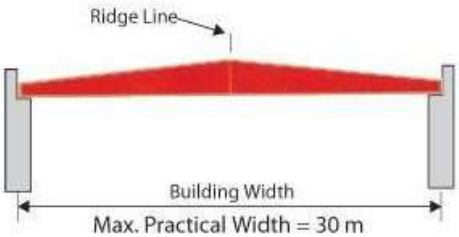
Max. Practical Width = 50 m

Single Slope (SS)



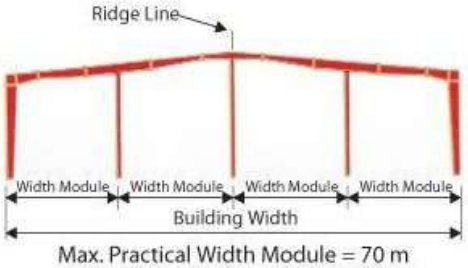
Max. Practical Width Module = 70 m

Multi-Span "2" (MS-2)



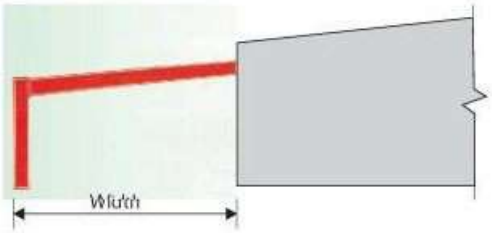
Max. Practical Width = 30 m

Roof System (RS)



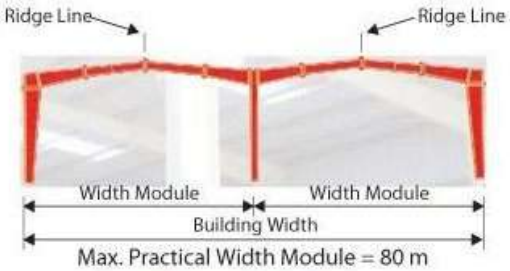
Max. Practical Width Module = 70 m

Multi-Span "3" (MS-3)



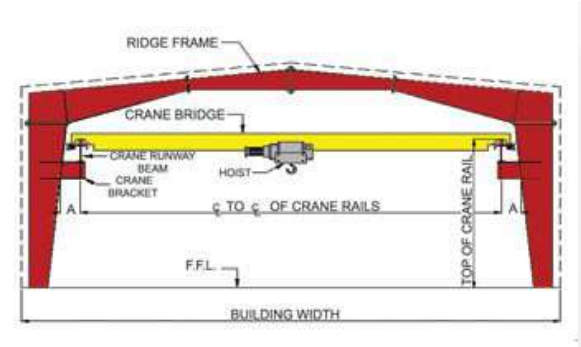
Max. Practical Width = 12 m

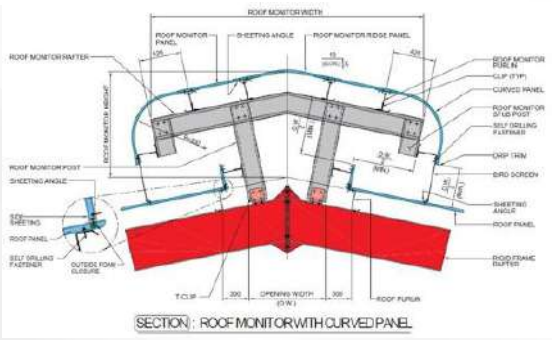
Lean-To(LT)



Max. Practical Width Module = 80 m

Multi-Gable (MG)



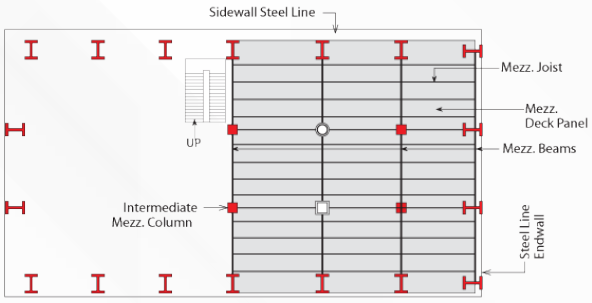


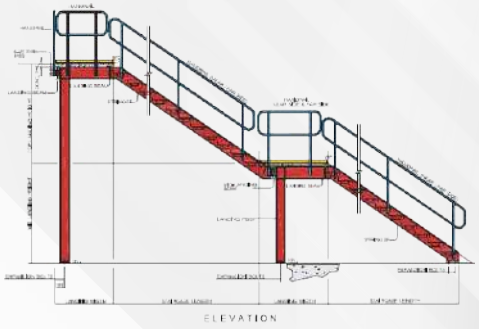
Mezzanine Systems

The standard mezzanine framing system consists of a steel deck supported by joists into main mezzanine beams. If required by design loads, the main beams shall also be supported columns. The top flange of the joists fit at same level of the top flange of the primary beams.

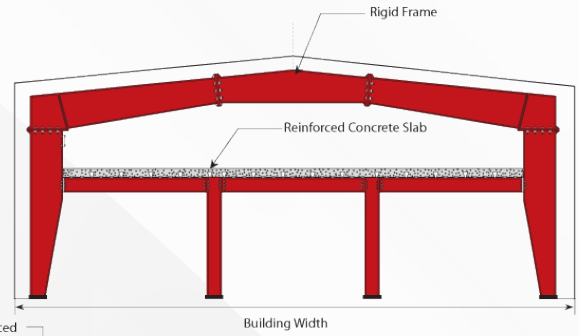
The embossments on the top and sides of the deck sheet ribs provide grip and minimize slip by creating a bond with concrete as done with normal reinforcement.

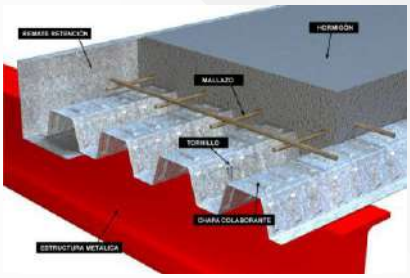
It provides permanent form work as well as positive reinforcement. No erection, removal, handling or storage of timber / steel form work as in conventional concrete slab construction, saving valuable time, Clean, uniform and attractive ribbed underside (soft fit) for exposed situation reduces the cost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

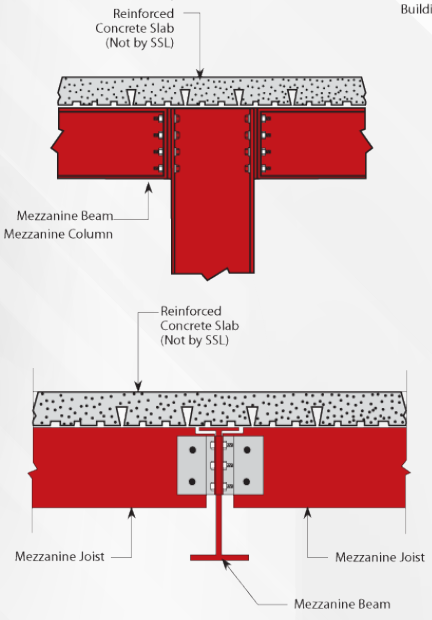




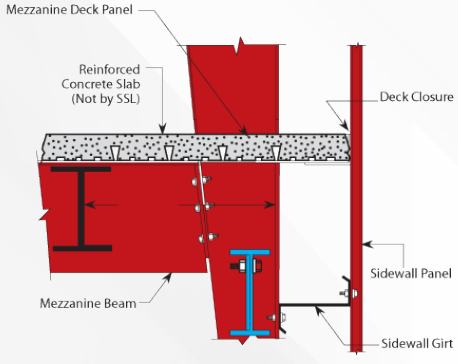
SINGLE FLIGHT STAIRCASE WITH TOP & MID LANDING
(OUTDOOR LOCATED)



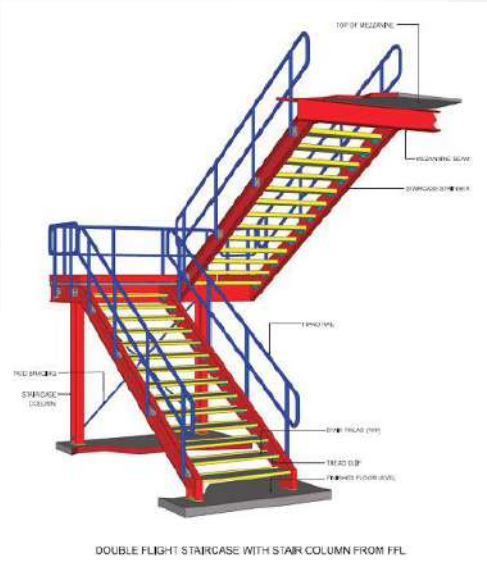




Mezzanine Joist Connection to Main Beam



Mezzanine Beam Connection to Main Frame Column



DOUBLE FLIGHT STAIRCASE WITH STAIR COLUMN FROM FFL

Roof Platform

The standard mezzanine framing system consists of a steel deck supported by joists into main mezzanine beams. If required by design loads, the main beams shall also be supported 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 grip and minimize slip by creating a bond with concrete as done with normal reinforcement.

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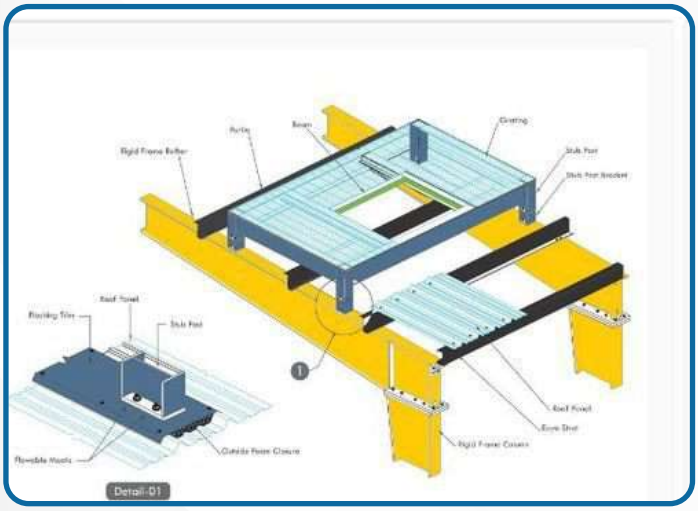
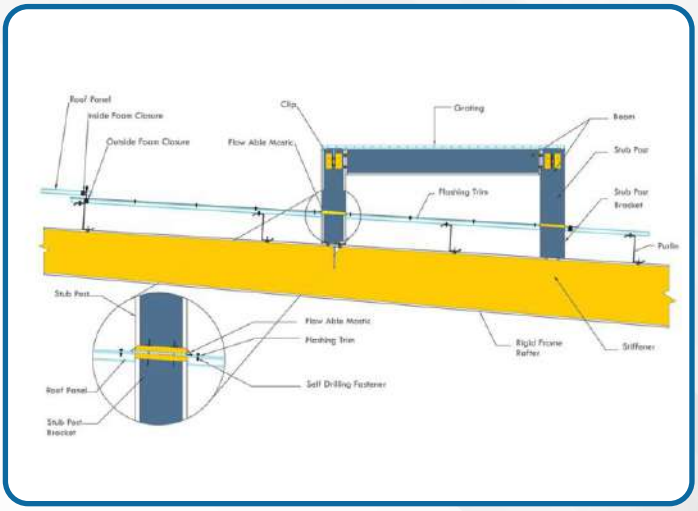
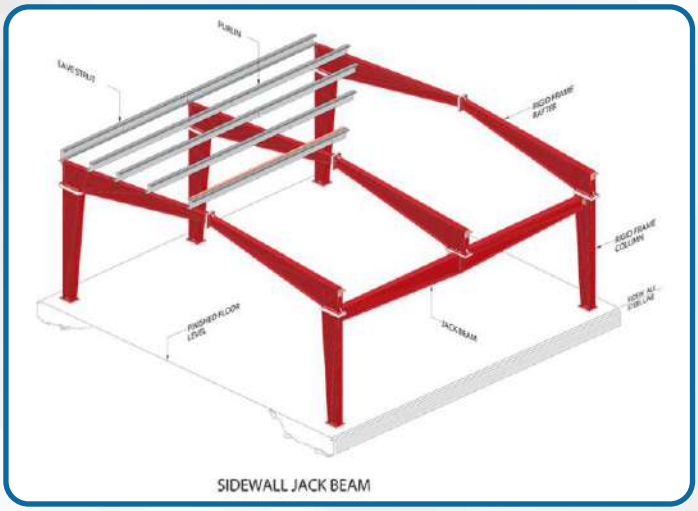


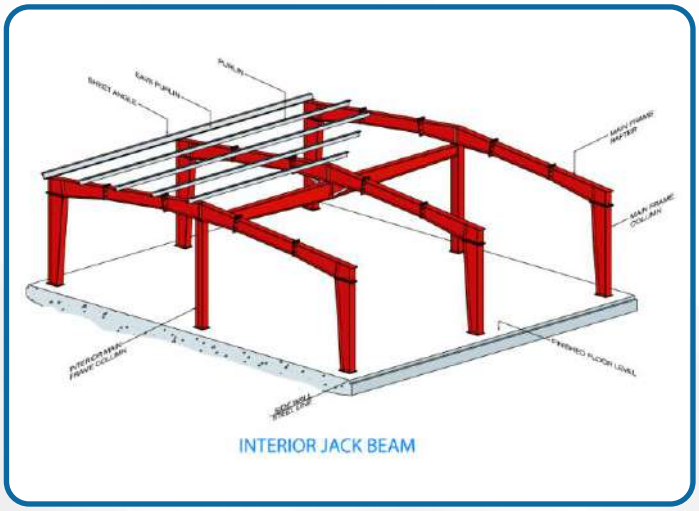


Jeck Beams

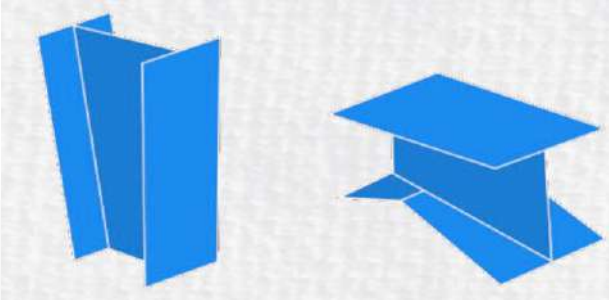
Jack-Beams (J-Beams) are used to support discontinued columns that do not extend to lower floors, satisfying space requirements in large stores and workshops. Often large concentrated loads are acting on the laterally unsupported J-Beam top. Built-up I-sections are often used in designing J-Beams. Lateral-torsional buckling (LTB) is crucial in designing J-Beams as it is one of the main requirements in controlling the ultimate bending strength of steel J-Beams carrying loads on top flange.

It is possible to have 12, 15, 16, 18 and 20 m clear bay lengths in areas where unconstructed space is required.


SIDEWALL JACK BEAM

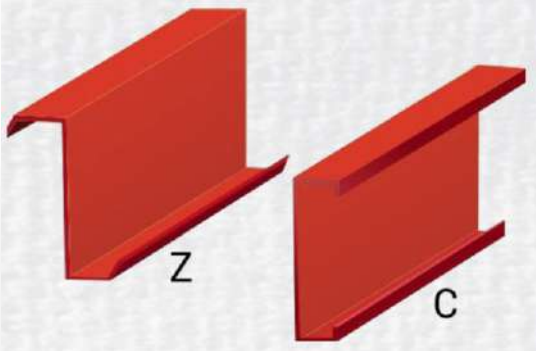

INTERIOR JACK BEAM

★ Primary Built - UP Members



Built - up " I " shaped primary structural framing members (columns and rafters)

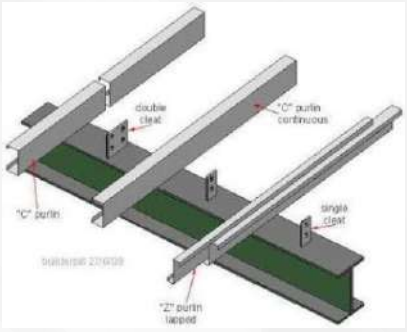
★ Secondary Membars : Cold “Z and C” shaped secondary structural members (roof purlin, eaves strurs and wall girts)



The Main Advantages of "z and C " Purlins are Savings upto 40-50% weight of structural steel and 25-30% in costs when compared to Hot Rolled Sections.
Saving upto 30-40% in weight and 15% in sosts when compared to Tubular Purlins.
We offer a wide range of sections to facilitate better and economical selction. Purlin erection is easier than other.

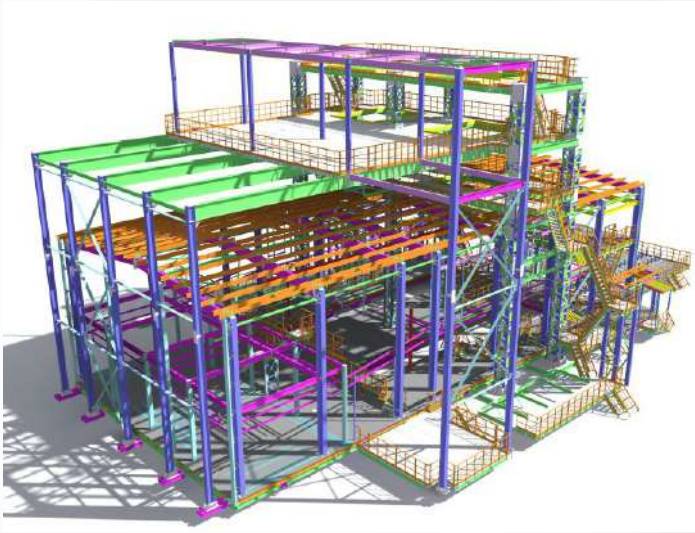
★ Coparison of Z- Purlins & Conventional HR Section

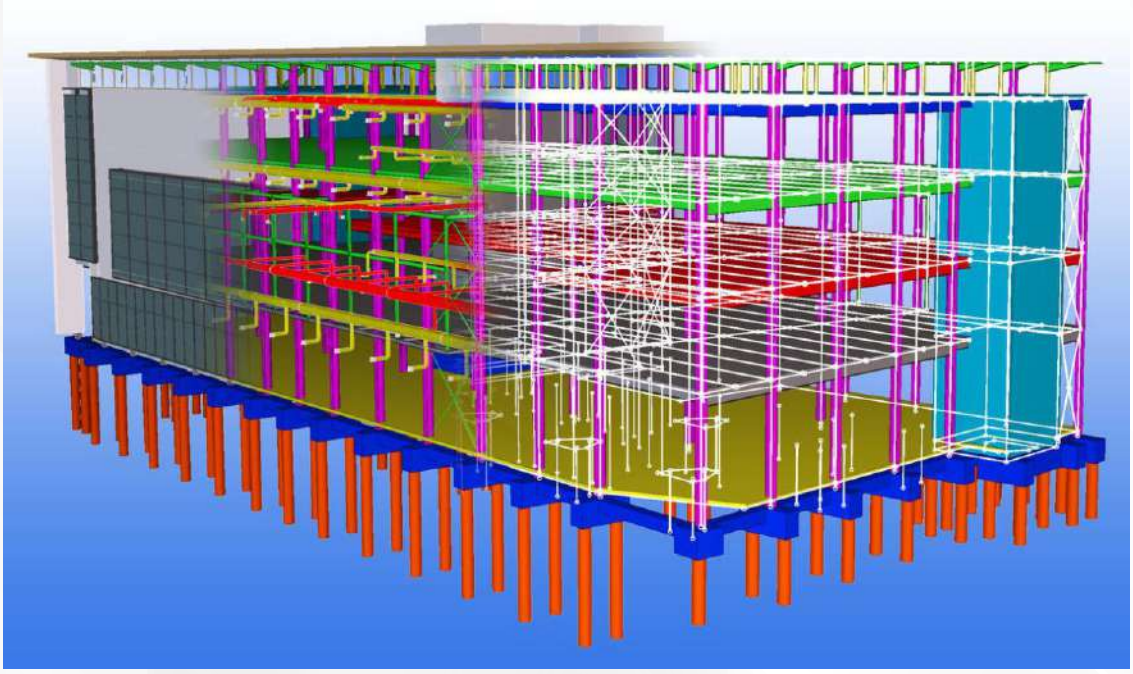
SPAN(M)	HOT ROLLED(HR)	RALL FORMED(CRF)	WEIGHT (HR)(KG/M)	WEIGHT(CRF)(KG/M)	SAVING IN WEIGHT(%)
4.0	ISMC100	150CMT2	9.2	4.3	54
5.0	ISC125	200C50T2.5	12.7	5.9	55
6.0	ISMC150	225C75T205	16.4	7.8	54
7.0	ISMC175	275C75T2.5	19.1	8.8	55
8.0	ISMC200	300C75T3	22.1	11.0	51



* Shape & Size are subjected to change due to continuous improvement
* Prices shown are indicative to chage to change without notice

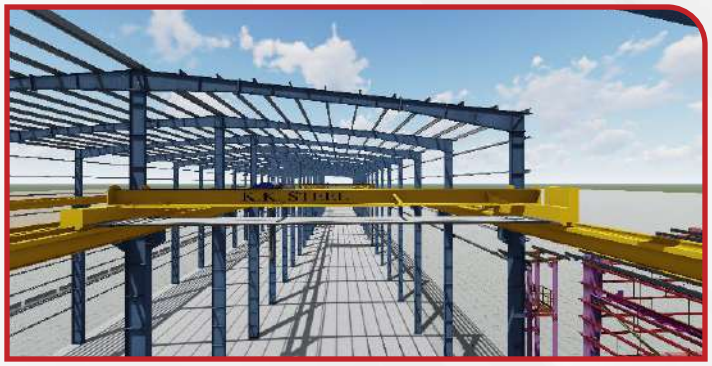
ISO VIEW / 3D STRUCTURE





Industrial, Residential & Commercial Project

STEEL STRUCTURE FRAME



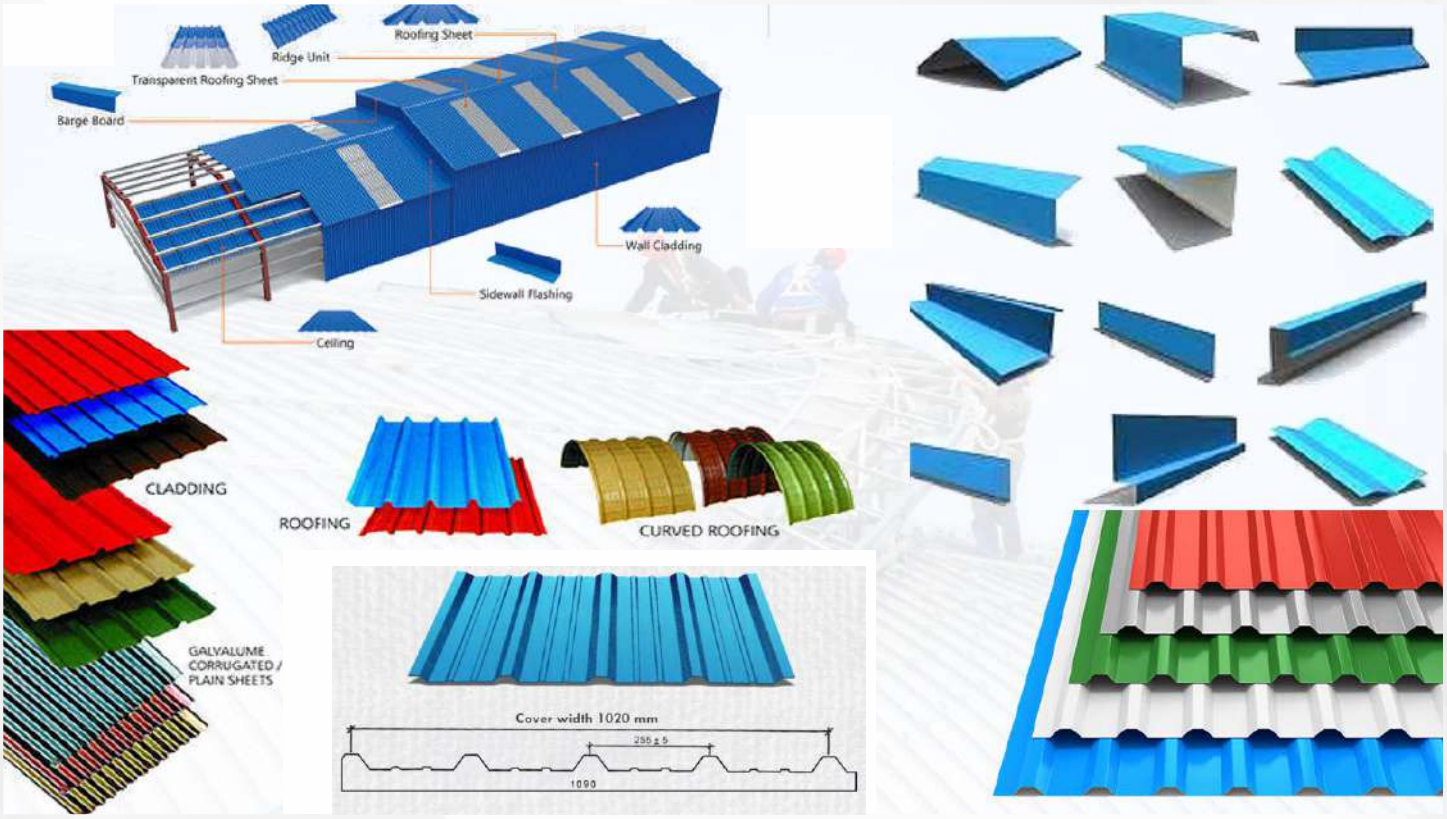
Building Canopy & Design

Roofing Accessories

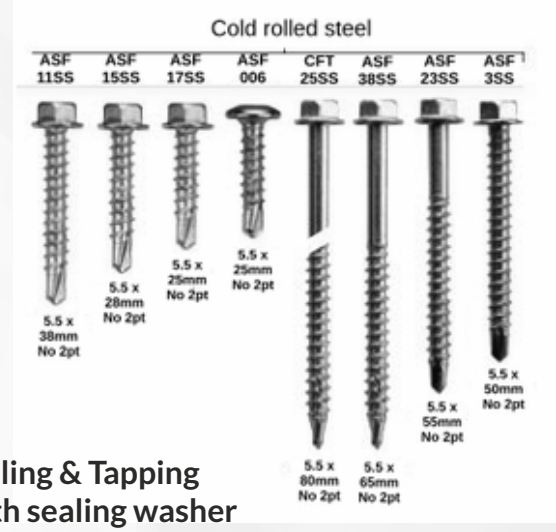
Roof / Wall Cladding System

With high precision Roll forming and Component forming machines , you can be assured a bout the Quality & Reliability of PEB Metal Roofing Solutions. Roofing Sheets are available in Pre - painted Galvanized Iron These Roofing sheets are available in a range of superior and aesthetic colors for Roofing and wall Cladding . These Roofing sheets have excellent corrosion and weather resistance there by ensuring low maintenance and long durability of the roofing system.

Metal Sheet - 30 / 200



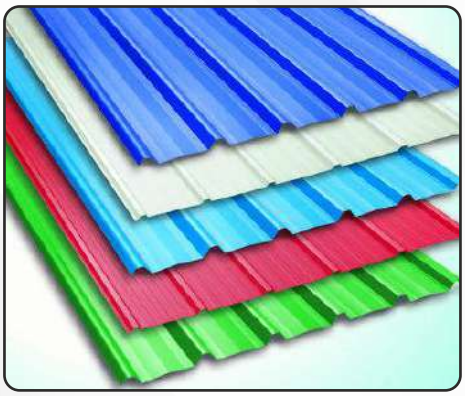
Fixing Accessories



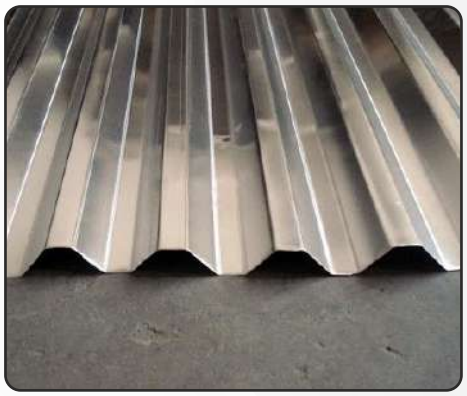
Self Drilling & Tapping Screws with sealing washer

Sealant & Closures

Roofing Sheet Materials



PPGL & PPGI Coated Sheet

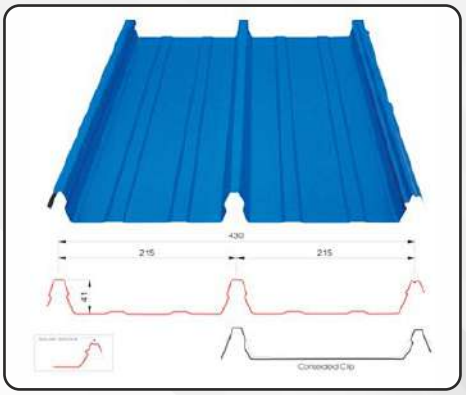


Aluminum Sheet

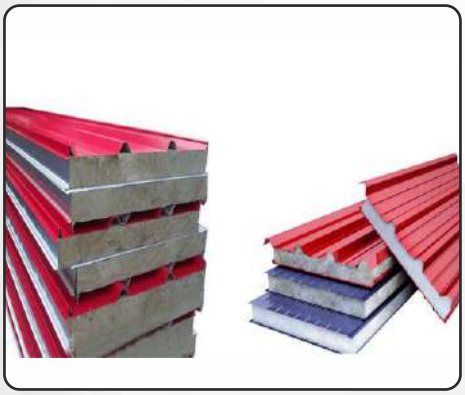
Polycarbonate Sheet

Bar Galvanium Sheet

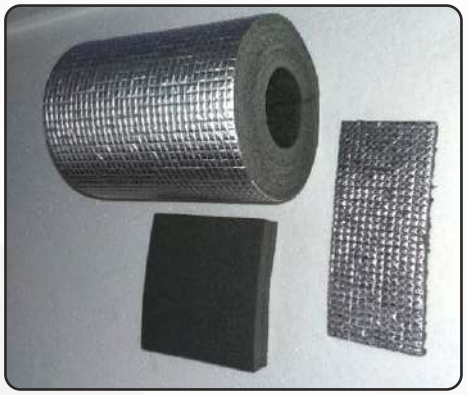
Deck Sheet



Clip Lock Sheet



Puff Sheet (Insulation)



XLPE Sheet (Insulation)

Air Bubble Sheet (Insulation)

Glass Wool (Insulation)

Rock Wool (Insulation)

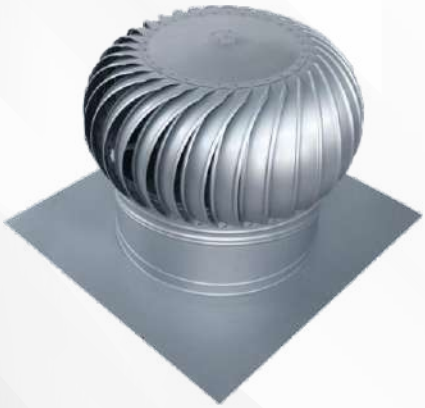
Standing Sheet

Air Ventilation System

PEB Side louvers

Standard Sizes :
1000 mm X 1000 mm
1000 mm X 1200 mm
1000 mm X 1500 mm

Exhaust Fan

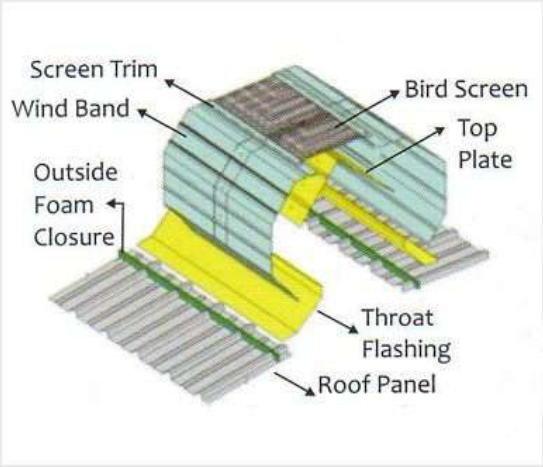


Turbo Ventilators

- The wind driven Air ventilators are used the world over because of their Low Capital Costs, Easy adaptability, High air displacement capacity per ventilator and Overall reliability, The air ventilator is designed to withstand a wind velocity of up to 100 kmph. It is made of Stainless Steel or Aluminum, therefor virtually maintenance free with a Five Year Warranty.
- The air ventilator weights less than 3 kgs. This enables flexibility and they can be installed anywhere on the roof without any structural changes.
- All size available as per requirement.

Features

- ★ Not Motor driven
- ★ Saves cost as it needs only natural winds
- ★ Safe as it does not require electricity
- ★ No Pollution as it uses natural air
- ★ Easy to install on any type or roof
- ★ Light Weight | Maintenance Free
- ★ Rainproof as it designed to protect from rain
- ★ Helps remove stale, damp and hot air



Ridge Ventilator

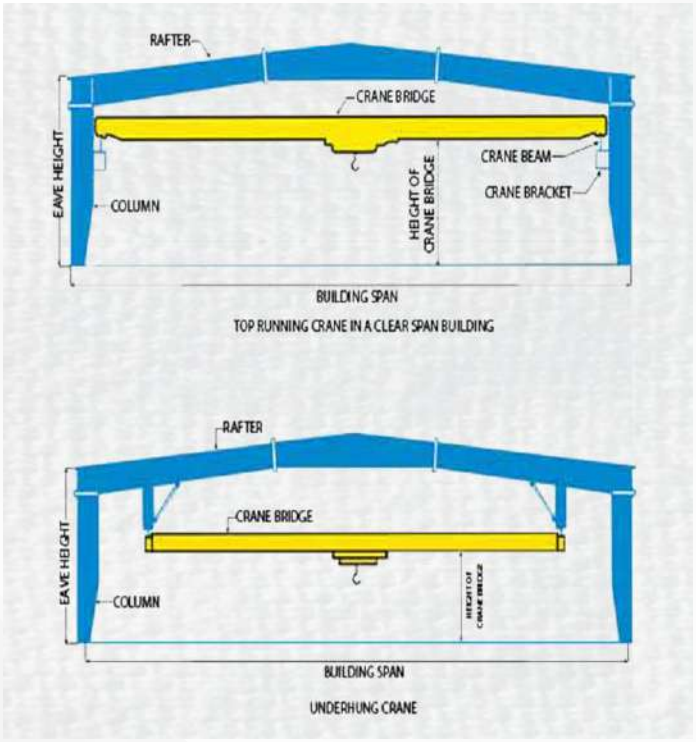
Size Available according to air changes per Hour

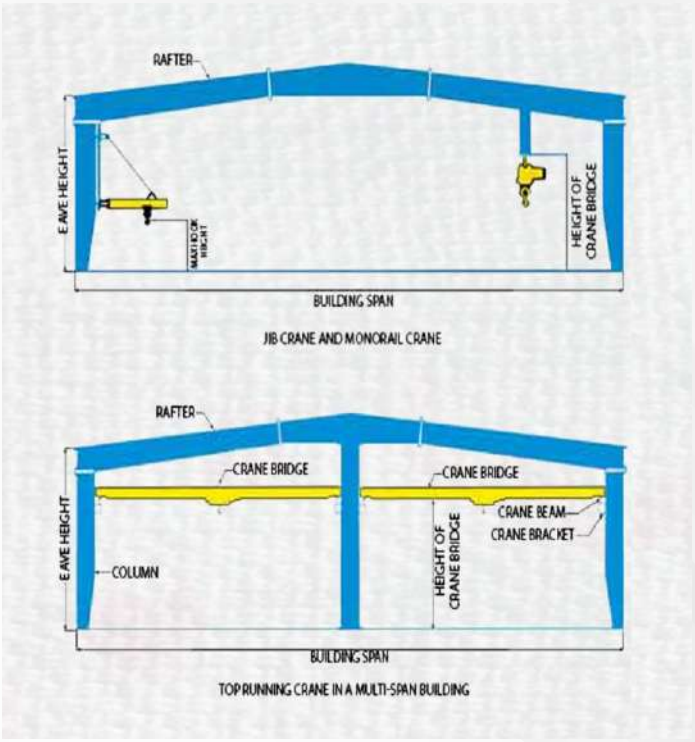
Slide Windows

Standard Sizes :
1000 mm X 1000 mm
1000 mm X 1200 mm
1000 mm X 1500 mm

EOT Crane System

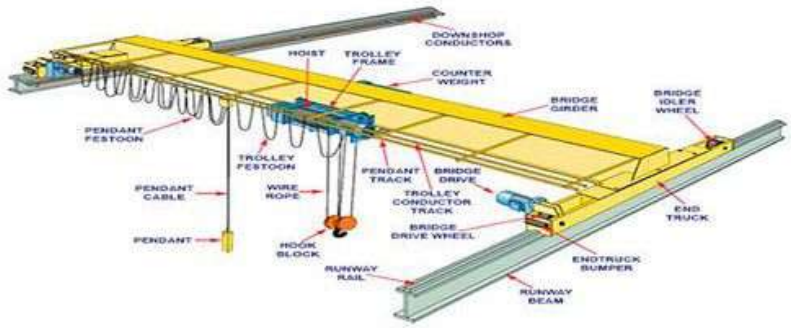
K K Steel Crane System includes crane runaway beams, columns, brackets and crane stop. **K K Steel** engineering department will design the crane runaway beams and frames supporting them on the basis of crane loading data them on the basis of crane loading date provided by the customer, and in accordance with the relevant standards





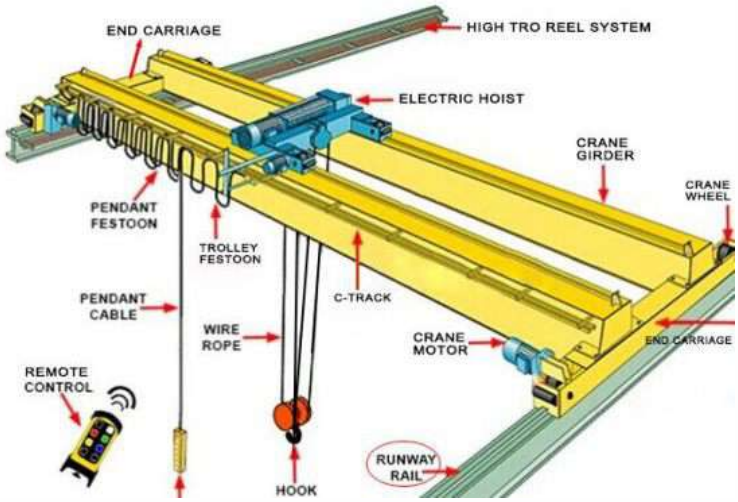
EOT Crane System Accessories

Type of Crane



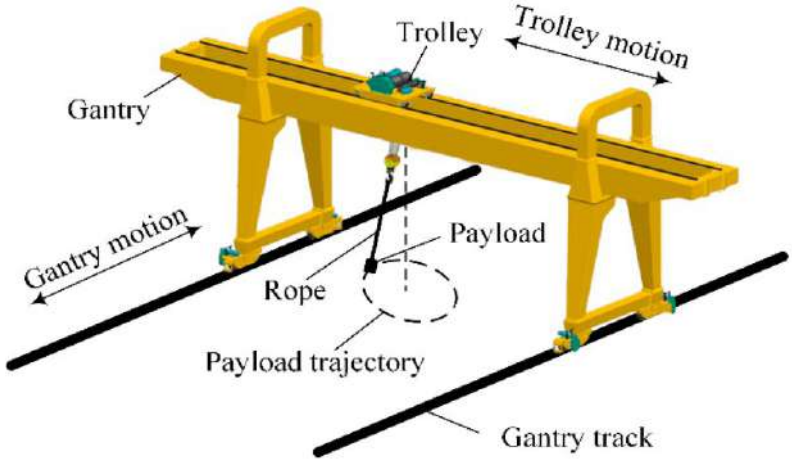
Single Girder Crane

Single Girder EOT Cranes are used for light to medium duty handling requirements, Lifting and shifting of loads, Vehicle Loading and Unloading can be the purpose for installing these cranes.
These cranes are also installed where there space is a constraint.
Advisable spans up to 20m. max and lifting heights from 3m to 9m.
Single Girder EOT Crane Manufacturer in Gujarat, India, 1 Ton to 20 Ton.



Double Girder Crane

Double Girder EOT Cranes are used for Medium and Heavy duty applications. Double Girder EOT Cranes are rugged in design and construction due to which Zero Maintenance Features are achieved. For the clients it is a fit and forget type of product because of its Durability. Ease of maintenance of every component at the installed height is the advantage. Standard capacity ranges from 3 to 200 Ton depending upon customer requirements.
Preferred in almost all types of Industries. K K Steel is the biggest Double Girder EOT Cranes Manufacturing capacity up to 200T in Gujarat.



Gantry Crane / Bridge Girder

Gantry Cranes are mostly used for Outdoor handling requirements. Areas where building sheds is not feasible/not required, such cranes are installed. Storage yards, Railway Yards, Ports, Docks and construction industry. Installing this type of cranes benefits buyer's as larger areas are covered under the crane working space. Cranes with larger spans and heights can be fulfill the requirements. .
K K Steel is the biggest Double Girder EOT Cranes Manufacturing capacity up to 100T in Gujarat.

PEB Roof Sheet 3D Design

PEB mezzanine steel structure

3D Models Structure

Manufacturing Component Unit

- CNC Plasma Cutting Machine
- Cnc Oxy Fuel Cutting Machine
- H Beam Welding Machine (Auto & Manual)
- Shearing Machine
- Bending Machine
- Power Press
- Hydraulic Punching Machine
- All Auto System Drill
- Blasting Machine
- Paint All System
- All Size Threading Machine
- Roll Forming Machine
- Crimping Forming Machine
- XLPE Sheet Forming Machine
- Decking Sheet Forming Machine
- C-Z Purlin Forming Machine
- Hydraulic Press Machine
- All type Welding Machine (Accessories)
- Hydraulic Press Machine (3 to 500 ton capacity)
- Clip Sheet Machine
- Standling Sheet Machine

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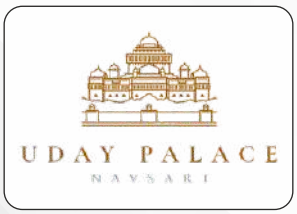
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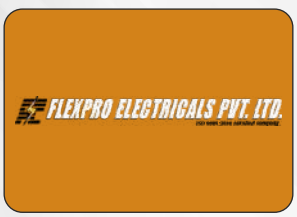
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