www.vaishnaviinfra.com

# Beyond
## Pre-Engineered Buildings

# Vaishnavi Infra

A Pre Engineered Building Company

ISO 9001:2015 Certified Company

CIVIL AND STEEL WORKS FOR COMPLETE METAL BUILDING SOLUTIONS

Vaishnavi Infra
A Pre Engineered Building Company

# ABOUT US

Vaishnavi Infra (A Pre Engineered Building Company) was incorporated in india in the year 2011 with the objective of providing turnkey solutions locally and over pan india level for all industrial needs. which includes PEB and Civil construction works. The company undertakes all activities of infrastructure development in industrial construction and also well known for its design, engineering, fabrication, transportation a nd on site erection of PEB steel buildings.

Vaishnavi Infra ( A Pre Engineered Building Company) offers turnkey solution to their clients in design, engineering, manufacture, sup pl y and completion of pre engineered metal buildings. we have full fledged design and engineering group working from the premises of our head office. Our factory has the facility to fabricate all the components for a standard PEB. We have set up a manufacturing unit at Surajpur, Noida. Vaishnavi Infra (A Pre Engineered Building Company) has been established with a vision to provide cost effective engineering solution to various type of applications like Heavy Industrial Buildings, Factory Warehouses, Cold Storages, Sport Stadium, Agricultural Sheds, Multi Storied Commercial Buildings, Aircraft Hangers and so on. The Structural steel division handles the entire Fabrication and Erection works. such as Design, Fabrication, Supply and Erection of steel structures. Vaishnavi Infra (A Pre Engineered Building Company) is specified in the Design, manufacturing and Supply of pre engineered buildings using international codes and standards with the most advanced production machineries in the PEB industry.

Over the years company succeeded in developing design and detailing skills in PEB to meet the global PEB demand and nurtured this strength into the market gaining recognition as one of the best product providers in the industry.

# OUR VISION

Meeting client's expectations at optimum level in terms of Safety, Quality, Cost & Delivery of projects within stipulated time.

# OUR MISSION

To be the India's most Reliable and Innovative manufacturer, Service and Solution provider in the PEB industry.

Vaishnavi Infra
A Pre Engineered Building Company

# BEYOND PEB

Beyond Pre-Engineered Buildings

(Civil and Steelworks for your total construction needs)

- Vaishnavi Infra goes above and beyond typical PEB responsibilities to take on civil foundation design and execution work as well
- All we need from you is access to your land or plot!
- Vaishnavi Infra will undertake the scope of column reactions, foundation layout and design, leveling, foundation execution and anchor-bolt grouting
- As out client, you get complete piece of mind and hassle-free single source vendor for all your project development needs
- Vaishnavi Infra is the only complete construction solution provider in India undertaking civil as well metal building works

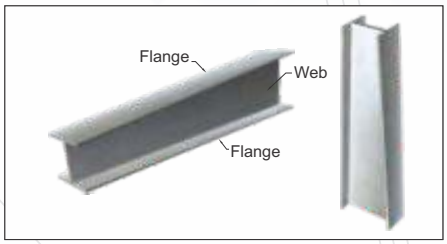
DESIGN & FABRICATION | CIVIL WORK ON SITE | BUILDING CONSTRUCTION | FINAL COMMISSIONING

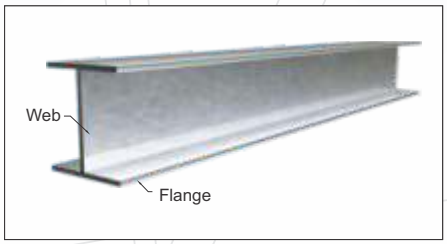
## SALIENT FEATURES

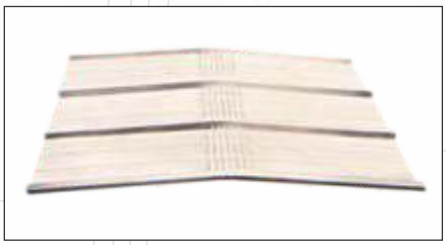
- Uses high strength steel plates having yield strength of 345 Mpa (i.e grade 50) for fabrication of primary members like colums, rafters, beams etc. Hence structure becomes light and economical.
- Uses tapered beam section concept, thus ensuring right amount of structural steel at right place.
- Built up sections are made from HR Plats with submerged arc welding process in automatic welding machine in the factory.
- Uses cold formed either galvanized or non galvanized section for secondary members.
- Usage of metal color coated material for sheets and cladding which are durable and aesthetically good looking.
- Column free building with longer spans. Building with mezzanine, cranes with different functional requirement. Speedy and planned execution drastically cuts down time and costs of projects.
- Single source Responsibility from inception to completion, covering design, engineering, detailing, fabrication suppl y and erection.
- Design which provide structurally stable PEB s using universally accepted codes and guidelines.
- Special building components like skylights, ridge ventilators, turbo ventilators, sliding doors, windows, roof curbs etc. can be supplied and installed.
- Insulation to mai nt ain t empe rature under control.

# PRODUCT RANGE
AT A GLANCE

Vaishnavi Infra
A Pre Engineered Building Company

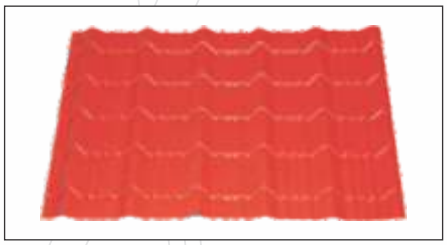


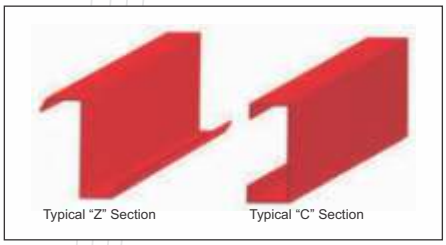



VI - Profiled Ridge

VI - Curved Sheets



VI - Wave Tile Sheets



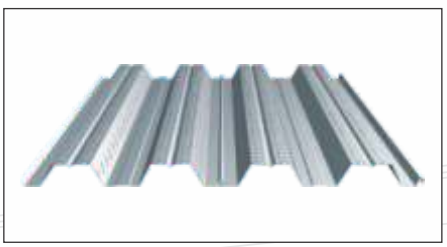

VI - Purlins

VI - DayLite Sheets

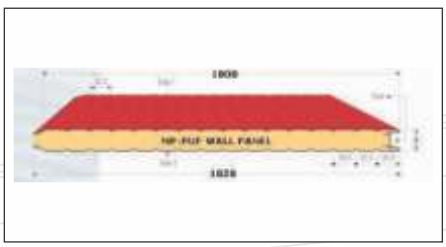
Insulation

VI Roof Vents

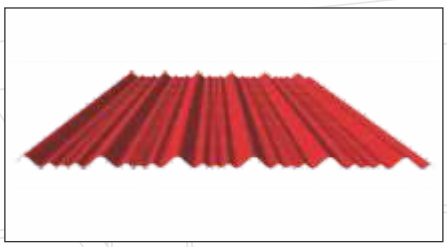
VI - 1020 Tile Sheets



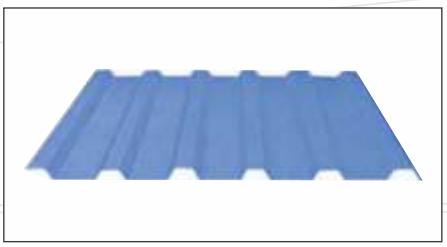
VI - Steel Deck



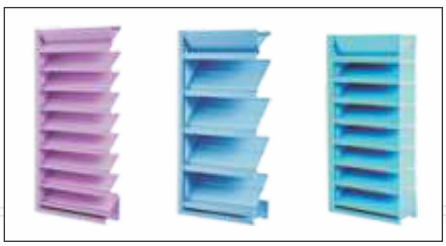
VI Wall Panels



VI - Wave Profiled Sheets

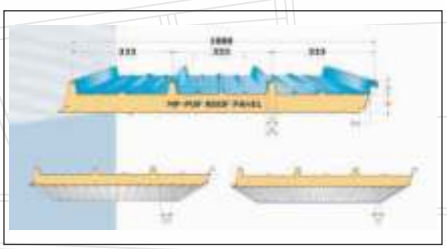


VI - 980 Profiled Sheets



VI Louvers

VI - 1020 Profiled Sheets



VI - Insulated Panel

Solar Panel Mounting Systems

Vaishnavi Infra
A Pre Engineered Building Company

# ABOUT PEB

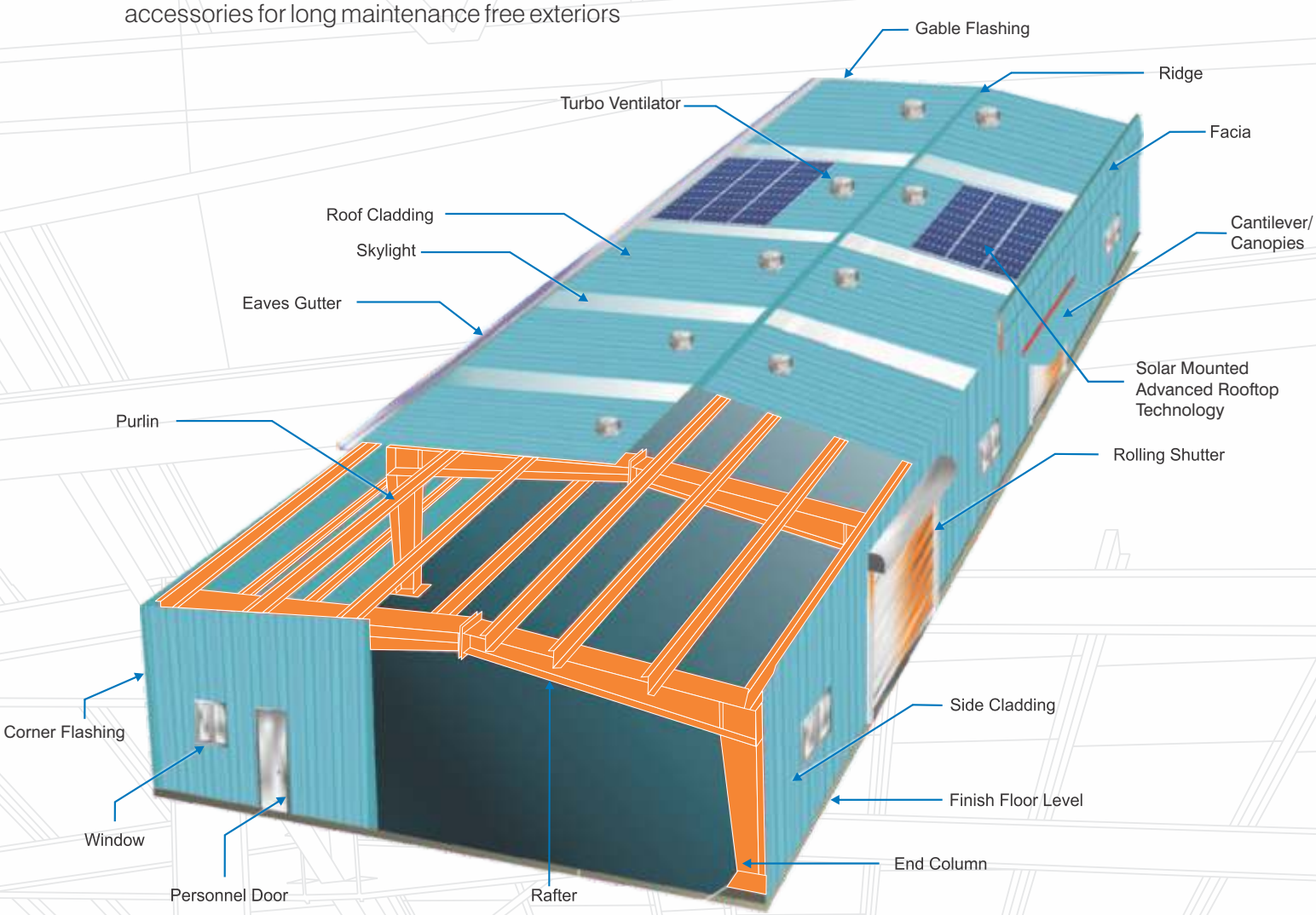
Pre-engineered buildings are the state-of-the-art steel solution to developing an efficient and cost-effective infrastructure. PEB's offer ultimate design flexibility and an extremely short construction time (right from initial design to completion). They are supplied as a fully finished product along with steel structure, roofing, cladding and building accessories. They require no on-site fabrication or welding – they can simply be bolted together as per specifications. PEBs are best suited for warehouses, sports halls, factories, workshops, distribution centers, cold storages, supermarkets, aircraft hangars or any ground + multi-storey construction.

## Strengths of Vaishnavi Infra PEBs are :

- Clear spans up to 100m without internal columns
- Flexibility in building dimensions
- ISO 9001 quality accreditation
- Easy expansion
- Fixed deadlines and costs
- Weather-tight roof and wall coverings with accessories for long maintenance free exteriors

## Advantages of VI PEBs are :

- Single source responsibility
- Low initial cost
- Engineering flexibility
- Faster overall project completion
- Low maintenance
- Fast modular expandability



Vaishnavi Infra
A Pre Engineered Building Company

## PEBs are the SMART way forward

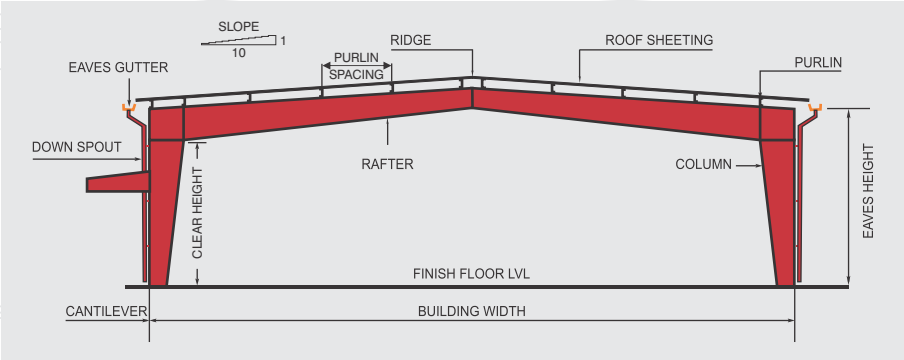
**WHY PEBs are more efficient than conventional RCC/concrete buildings:**

- PEBs take HALF the construction time.
- Usability of the building can be started earlier enabling faster ROI (Return on Investment).
- Design flexibility and completely customizable in shape, cost and use
- Superior aesthetic value, better rain water drainage and connect to RCC structure.
- Savings in costs of civil work. PEBs are lighter in weight thereby requiring lesser civil work
- No site fabrication required. Site work is minimized and largely hassle-free
- Vertical clearance from the floor can increase significantly, (from eaves to ridge) creating more volumetric parameter
- PEB can be dismantled, at ease and can be re-erected at a totally different location.
- Entire gamut of activities starting from inception to completion are being undertaken by a single entity resulting is efficient project control.

# Structural Frame

Multicolor Pre-engineered buildings are custom designed to meet your exact requirements.

The basic defining parameters are:




**Building Width :** No matter what primary framing system is used, this is defined as distance from the outside of Main Framed Column of one side wall to the outside of Main Framed Column of the opposite side wall.

**Building Length :** It is the distance between the outside line of one side Gable End Column (End Wall Column) to the outside line of Gable End Column (End Wall Column) of the opposite side. Any length is possible.

**Building Height :** It is the eave height which usually is the distance from the bottom of the main framed column base plate to the top cap plate of the main framed column. When the columns are elevated from finished floor level, the building height is the distance from finished floor level to the top of cap plate of the main framed column.

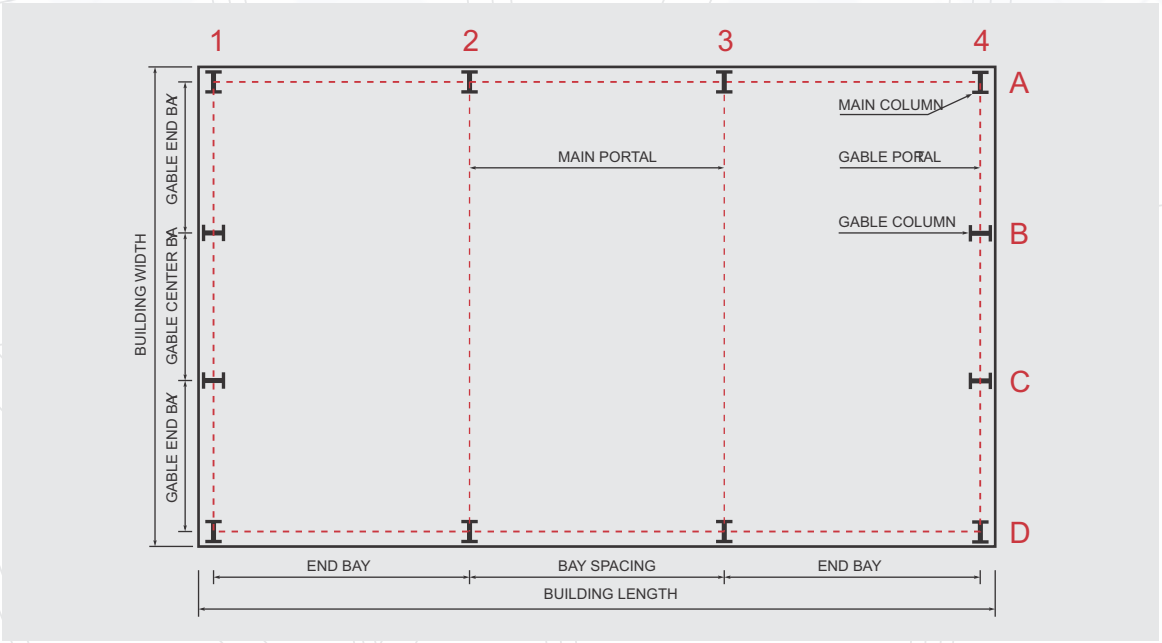
**Bay Spacing :** This is the distance between the centerline of two adjacent interior main framed columns.

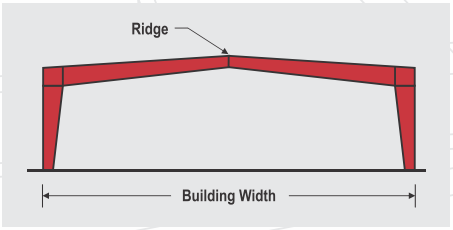
**Roof Slope :**This is angle of roof with respect to the horizontal. The most common roof slope is 1:10. Any practical roof slope is possible.

**Clear Height :** This is the distance between the Finished Floor Level to the bottom of knee joint.

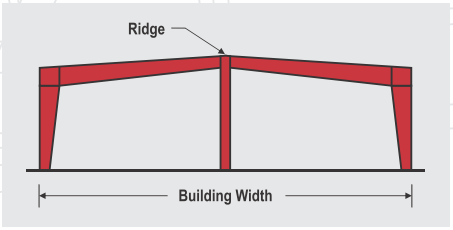
# Structural Frame

Vaishnavi Infra
A Pre Engineered Building Company

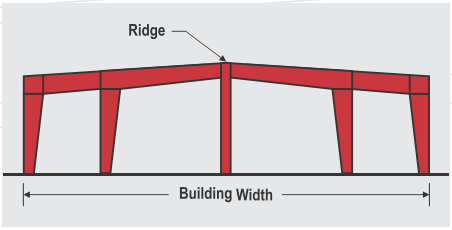


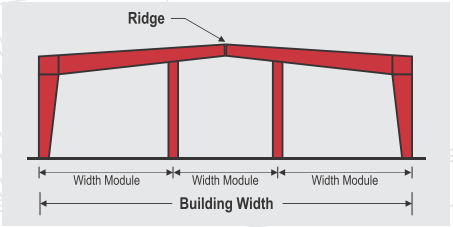

Clear Span



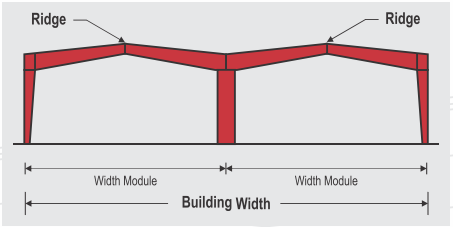

Multi Span “1”



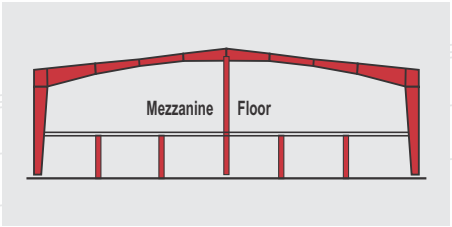

Multi Span “3”



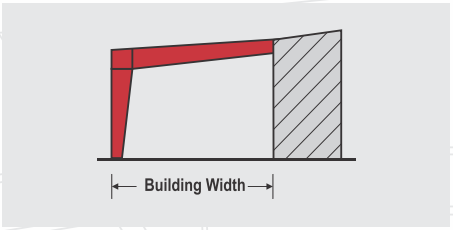

Multi Span “2”



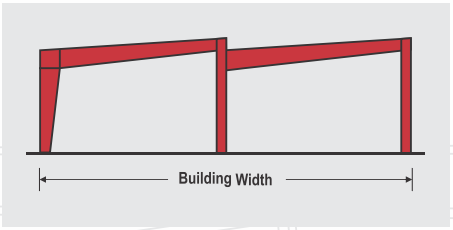

Multi Gable



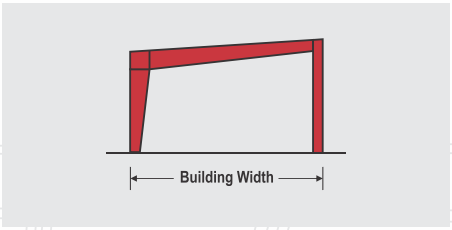

Mezzanine Floor



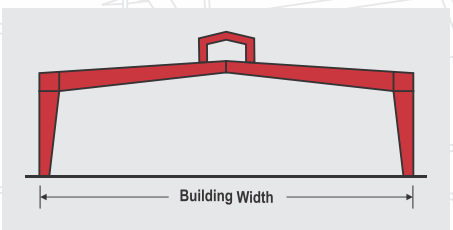

Lean To



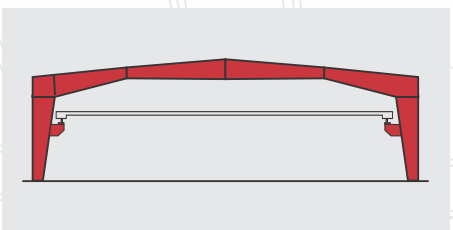

North Light



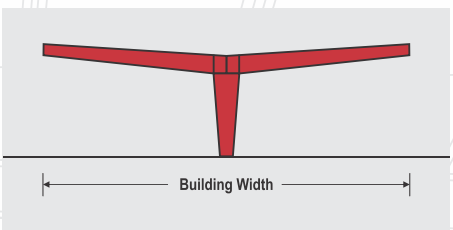

Mono Slope




Monitor Type



EOT Crane




Butterfly Canopy

Vaishnavi Infra
A Pre Engineered Building Company

# VI Plate Welded Beams

### Vaishnavi Infra I/H Beams – Parallel Flange Sections

World over, parallel flange beams are the increasingly preferred standard for large constructions owing to their superior strength, cost-savings, enhanced durability, and higher load-bearing capacity. VI beams are now the most sought after primary sections recommended by structural engineers, architects and construction companies throughout India.

### Applications

Multi-storey buildings, bridges, flyovers, rail projects, power plants, refineries, airports and industrial sheds.

Advantages of VI Plate Welded Beams

- Enhanced life cycle and durability.
- Time saving as manufactured on automatic online cutting and welding lines.
- Steel savings in excess of 20% as lower sectional weight beams can achieve higher load bearing capacity.
- Ideal for bolted or fabricated construction.
- Offer tremendous flexibility in design as beams are entirely custom-made.
- Shot blasted and painted; aesthetically superior.

### Product Specification

MPIL H/I Beams

| | | |
|---|---|---|
| Flange width | : | 200mm to 1500mm |
| Web thickness | : | 6mm to 60mm |
| Plate thickness | : | 6mm to 60mm |
| Length | : | Upto 12000mm without welding joint (can be made longer with welding joint) |

### Steel Grade

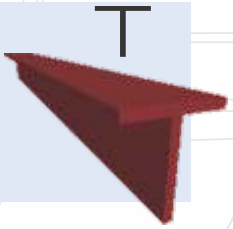
- IS 2062: E250A, E250B, E300, E350, E410
- ASTM: A36, A572 Grade 50 Certifications

### Plus/Cross Beams

- Maximum weight per section can be 35 tons
- Maximum size per column can be 1200 x 1200mm
- Range of plate thickness can be 6mm to 60mm

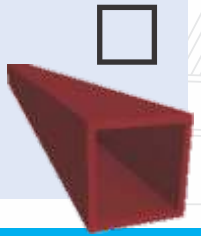
### T-Beams

- Flange width can be maximum of 1200mm
- Length upto 12 meters without welding joint



### Box Beams

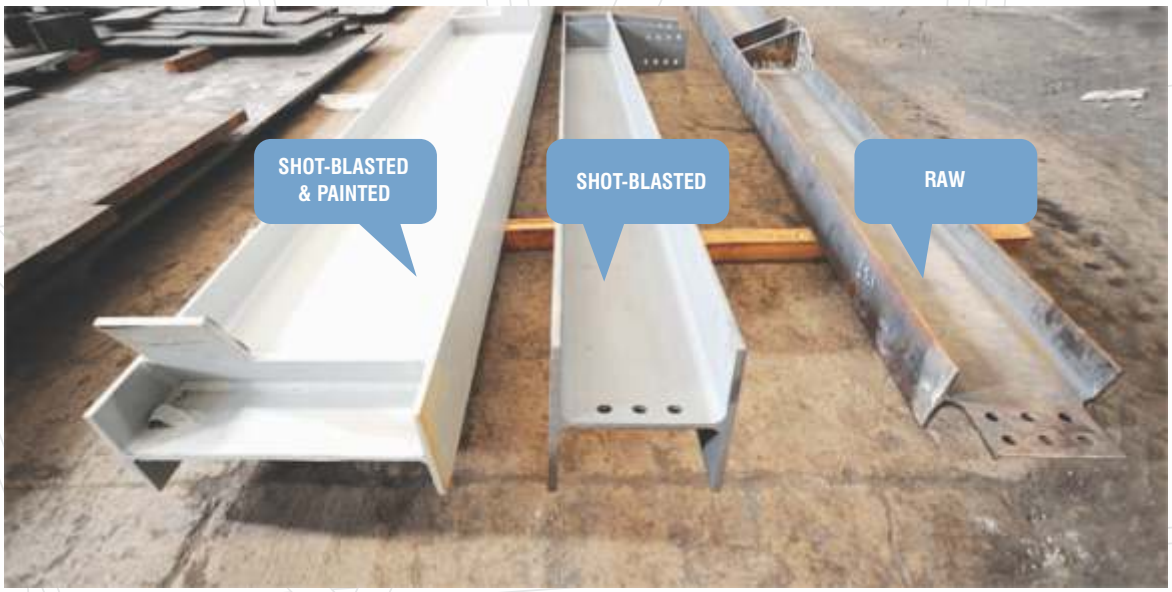
- Width can be maximum of 1200mm to 1200mm
- Length upto 12 meters without welding joint

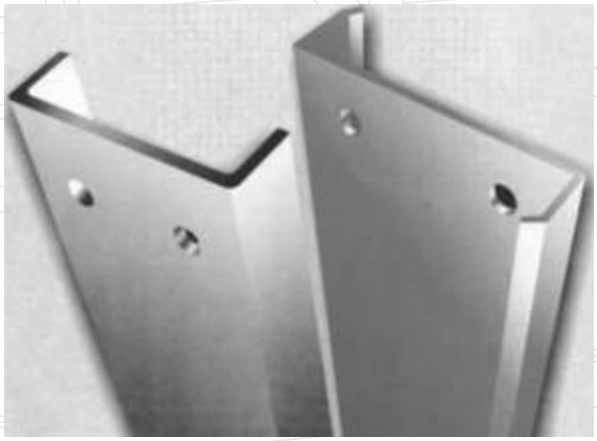


Vaishnavi Infra
A Pre Engineered Building Company

## Shot-blast & Painting

Vaishnavi Infra beams can be shot blasted, coated with red-oxide primer and enamel painted at the VI plant, before dispatch to client site.

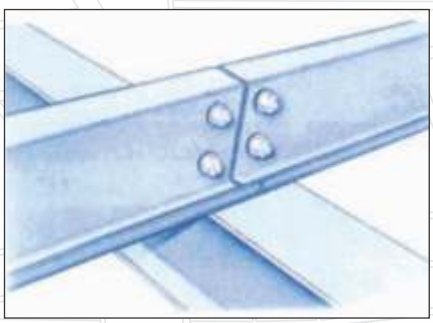


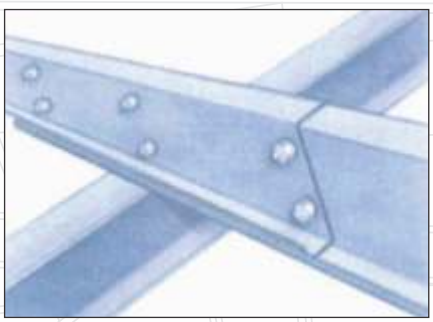
MP-Purlin

### VI-CEE and MP-ZED Purlins

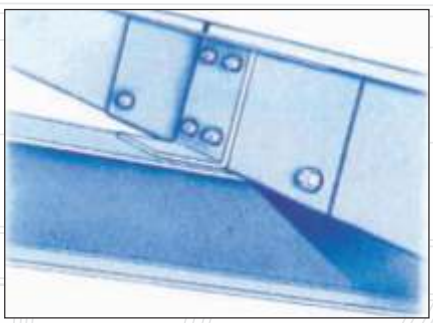
VI-CEE and VI-ZED Purlins are secondary members of steel structures which serve as the basic material of construction for fast-track projects. These purlins are characterized by high strength, yet low cost (as a result of the high strength to weight ratio). VI Purlins are supplied in required sizes and lengths with pre-punched holes for quick bolting.



Butt - Connection



Overlapping



Sleeve Connection

## Applicable Codes

Welding is designed in accordance with : Structural Welding Code-Steel Manual 1996 AWS

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

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

Hot Rolled Sections & Built up sections are designed in accordance with: 1989 Manual of SteelConstruction, 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 other wise requested at the time of enquiry.

## Material Specifications for Various Components

| STEEL MATERIAL | SPECIFICATIONS | MINIMUM Yield Strength |
|---|---|---|
| Primary Members<br>Portal Frames/Builtup Frames | ASTM A 570 G 50/IS 2062:E250/E350 or Equivalent | Y S 345 mpa |
| Secondary Members<br>Cold Formed<br>HR steel<br>Galvanised Steel | ASTM A 570 or IS 1079/10748<br>ASTM A 653 MSS Gr 34, coating 150/180 G S M | Y S 245 or 345 mpa<br>Y S 345 mpa |
| Roof Sheeting & Panels<br>Bare & Colour Coated | ASTM A 792M Grade D AZM150 | Y S 245 or 550 mpa |
| Valley Gutter<br>Galvanised Steel | IS 513 Grade O Or D | Y S 240 mpa |
| Mezzanine Deck Panels<br>Galvanised Steel | ASTM A 653 SS Grade55, Zink Coating 180 gsm | Y S 345 mpa |
| Diagonal Bracing Members<br>Rods round bar | ASTM A 36M /IS2062 or Equivalent | Y S 245 mpa |
| High Strength Bolts (Rafter) | ASTM A 325M Grade 8.8, or Equivalent | UTS 830 mpa |
| Anchor Bolts | ASTM A 36M /IS2062 or Equivalent | Y S 245 mpa |
| Galvanised M S Bolts | ASTM A 307 /IS1367 or Equivalent Grade 4.6 Hot dip Galvanised /plating yellow colour | Y S 245 mpa |

# STEEL CABINS

VI-Steel Cabins are modular, relocatable or fixed steel cabins/buildings/structures which are made of precoated steel sheets and thermally insulated panels.

They have the strength of steel, the aesthetic appeal of modern construction, as well as the cost effectiveness of signature VI steel structures. VI-Steel Cabins are light weight and light weight and have very effective heat and sound insulation.

# PROJECT GALLERY

Vaishnavi Infra
A Pre Engineered Building Company








# PROJECT GALLERY

Vaishnavi Infra
A Pre Engineered Building Company

# PROJECT GALLERY

Vaishnavi Infra
A Pre Engineered Building Company



# PROJECT GALLERY

Vaishnavi Infra
A Pre Engineered Building Company

# PROJECT GALLERY

Vaishnavi Infra
A Pre Engineered Building Company










# ADVANCE MACHINERIES

CNC Plasma Cutting Machine

H Beam Assembly Machine

H Beam Welding Machine

C & Z Purlin Machine

Curved Crimping Machine

Metal Roof Sheet Forming Machine

**Vaishnavi Infra**

A Pre Engineered Building Company

ISO 9001:2015 Certified Company

**RO. :** Sanjay Arked, 3rd Floor, M.G. Road, Bose Park,
Near Royal Darbar Apartment, Bhagalpur, Bihar-812001, **Ph : 06412402826**
**Factory :** Pocket#1, Surajpur Noida, U P
**Email :** info@vaishnaviinfra.com, **Website :** www.vaishnaviinfra.com