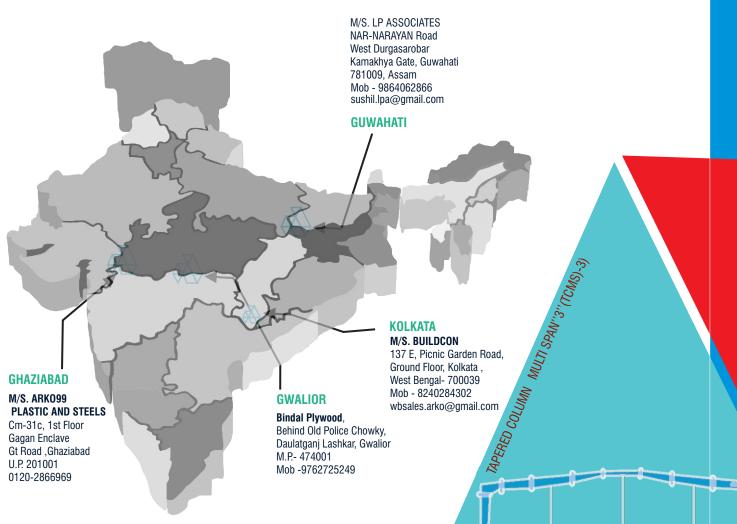
OVER 1000 BUILDING ACROSS 100 CITIES IN 20 STATES



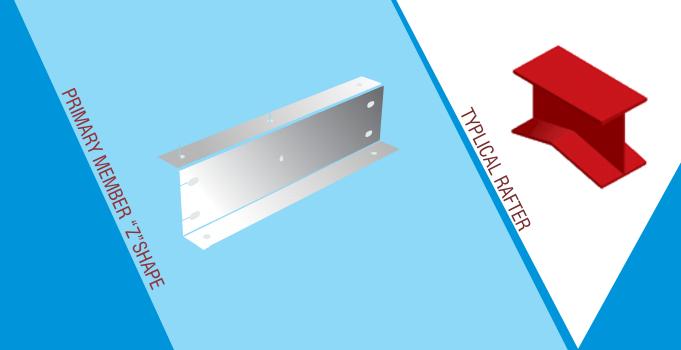




816, Laxmi Deep,

NEW DELHI

Laxmi Nagar, New Delhi Mob: +91- 9762725249 Email: info@protechpeb.com





ABOUT US

PROTECH is a unique brand name for preengineered building of ARKO family which provides complete turnkey solutions such as designing, manufacturing of PEB all structural members as per drawing, manufacturing of roofing & cladding sheets or PUF roof & PUF wall panels, erection of PEB structure and sheets, installation of structures & sheets. Since it's establishment from 2014, ARKO has implemented more than 100 steel buildings across pan India.

TURNKEY WORK SOLUTIONS

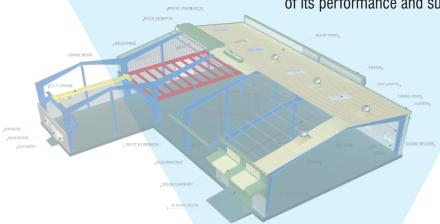
We Our scope of work is designing, manufacturing of PEB members as per drawing, supply of PEB members along with sheets or PUF roof & wall panels, erection and installation of PEB members along with sheets or PUF roof & wall panels.

OUR POLICY STATEMENT

We at ARKO BUILDING PRODUCTS PVT LTD. are committed and dedicated towards our timely manufacturing, supply and service work with quality and precision.

To realize our vision and mission we shall exert every effort to achieve the following in all our activities:

Gaining the confidence and trust of our supervising bodies, employees, stakeholders, customers, and the public through strict adherence to all applicable laws, regulations, best practices, Quality Standard (ISO 9001:2015) Adopting a proactive approach and setting an excellent example for other governmental and private sectors by implementing our Quality and Environment Management System and through applying scientific knowledge, use of resources in a sustainable manner and utilizing best available clean technologies in all our activities. Conducting all our business operations in such a way as to protect and conserve the environment, to prevent pollution and to minimize all risks to the environment. Systematically monitoring, measuring, reviewing and taking effective actions to mitigate adverse risks & enhancing positive impacts on the Quality & Environment of all our activities Communicating our Policy and Objectives to all our employees, stakeholders, partners, customers, interested parties and the public. Continually improving the effectiveness of our Quality and Environment Management System through periodic monitoring and review of its performance and suitability.



ADVANTAGES

Super Fast construction:

We can delivered Buildings are typically in just a few weeks after approval of drawings. Foundation and anchor bolts are cast parallel with finished, ready for the site bolting. PROTECH building systems reduces total construction time of the project by at least 50%. This also allows faster occupancy and earlier realization of revenue.

Cost Saving:

Pre engineering metal building systems is super fast construction technology which reduce cost in wastage material, time consuming delivery project. As it is by nature approach, there is a significant saving in design, manufacturing and on site erection cost. The secondary members and cladding nest together reducing transportation cost.

Flexibility of expansion:

PROTECH Buildings can be easily expanded in length by adding additional bays. Also expansion in width and height is possible by only pre designing for future expansion.

Large clear spans:

PROTECH Buildings can be delivered to around 80M clear spans.

Quality control:

3 stage quality check we have in our plant, which gives you superior quality products.

Low maintenance:

Buildings are delivered with high quality chemical treatment and paint systems for cladding and steel to match your actual requirements, which results in long durability and low maintenance in cost.

Energy efficient roofing and wall systems:

Buildings can be delivered with PUF Sandwich Panels (polyurethane insulated) or Bubble insulation to achieve required "U" values.

Architectural versatility:

Building can be delivered with various types of fascias, canopies, and curved eaves and are designed to receive pre cast concrete wall panels, curtain walls, block walls and other wall systems.

Trunkey Project Benefits:

As the complete building package is supplied by a single vendor, compatibility of all the building components and accessories is assured by PROTECH. This is one of the major benefits of the PROTECH pre-engineered building systems.





Building Length

Building length is the distance between the outside flanges of end wall columns in opposite end walls. It is a combination of several bay lengths.

Building Height

Building height is the eave height, Which is usually the distance from the bottom of the main frame column base plate to the top outer point of the eave strut. When Columns are recessed or elevated from the finished floor, eave height is the distance from the finished floor level to the top of the eave strut.

Building Width

No matter what primary framing system is used, the building width is defined as the distance from outside of eave strut of one sidewall to outside of eave strut of the opposite sidewall.

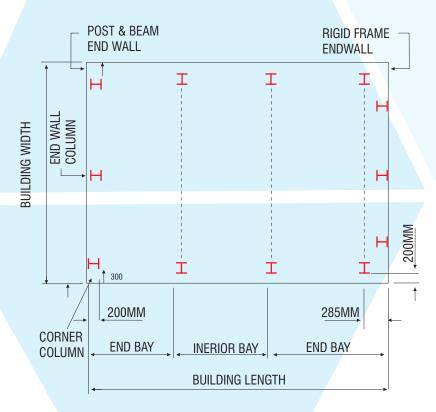
Roof Slope

This is the angle of the roof with respect to the horizontal. The most common roof slopes should not be less than 0.50/10. Any practical roof slope is possible.

End Bay Length

This is the distance from the outside of the outer flange of endwall columns to the centre line of the first interior frame column.

Pre-engineering
building are
defined by
the following basic
parameters,
Building
Width, Length,
Height, Roof
Slope, End
Bay Length,
Interior Bay Length
and Design
Loads.





Interior Bay Length

This is the distance between the centre lines of two adjacent interior main frame columns. The most common bay lengths are 6, 7.5, and 9 meters. Any bay length is possible up to 10 meters.

Design Loads

Unless otherwise specified, PROTECH Preengineered building are designed for the following minimum loads.

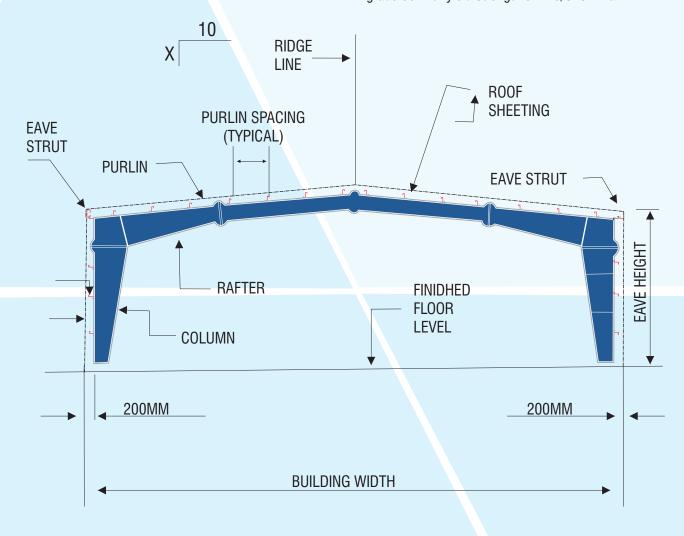
Roof Live Load: 0.57 kN/m2

Design Wind Speed: 130 km/hr, 3 Sec gust

Design parameters of snow loads, earthquake loads, collateral loads, crane loads or any other loading condition must be specified when requesting a quotation.

Loads are applied in accordance with American codes and standards applicable to pre-engineered buildings unless otherwise requested at the time of quotation.

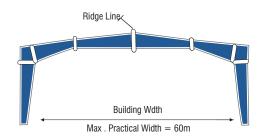
The steel structure shall be designed as per IS- 800:1984/2007. The PEB's primary section fabricated of Hot Rolled Plates conforming to IS-2062:2006 of grade E 250 / ASTM A-572-12 grade 50 with yield strength of 245/345 MPa.

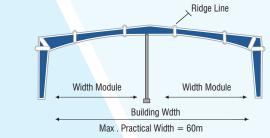


PRIMARY FRAMING SYSTEMS

PROTECH Pre-engineered building are constructed using a variety of framing systems. The diagrams on this page illustrate those most commonly employed. They are symmetrical at the ridge line.

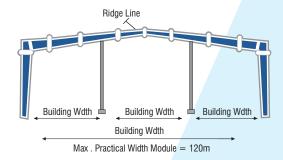
Asymmetrical and non-equal Multi-Span framing systems are also available. Please consult with your Arko Tech representative nearest to you about your specific project requirements.

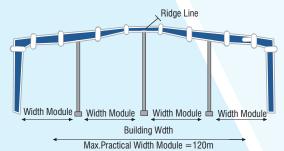




TRPERED COLUMN CLEAR SPAN (TCCS)

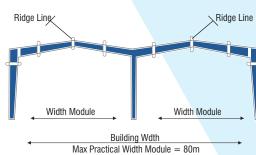
TAPERED COLUMN MULTI SPAN"1"(TCMS)-1)

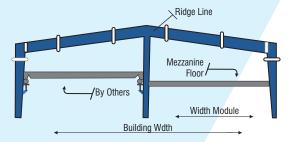




TRPERED COLUMN
MULTI SPAN"2"(TCMS-2)

TAPERED COLUMN MULTI SPAN''3''(TCMS)-3)

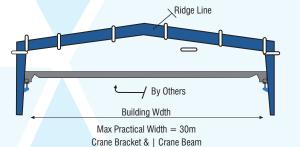


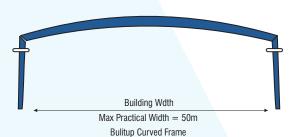


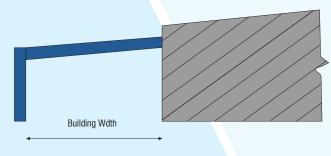
Crane Bracket & | Crane Bean / Mezzanine Floor Provision

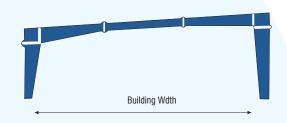






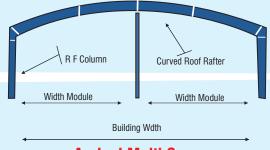


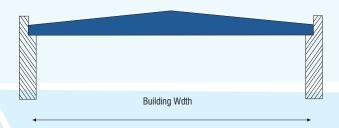




Lean- to

Mono Slope





Arched Multi Span

Roof System

PRIMARY & SECONDARY MEMBERS

Secondary framing systems is mainly purlin and girth of Z or C shapes of Various size. In Pre-engineered building normally cold form Z section are used for secondary framing to achieve high strength and lower weight. Typically cold form members used for roof are called purlin and for wall it is called as girth however profile for the both in general is same. Sometime C section is also used in place of Z. Purlin/Girth are the members which transfer forces and moments from one frame to another frame for overall stability o f the building structure and it all acts framing systems for weather covering sheeting purpose. For all practical purpose these members are spaced at an interval of about 1.5mm; which can vary and placed perpendicular to the direction of the rafter.

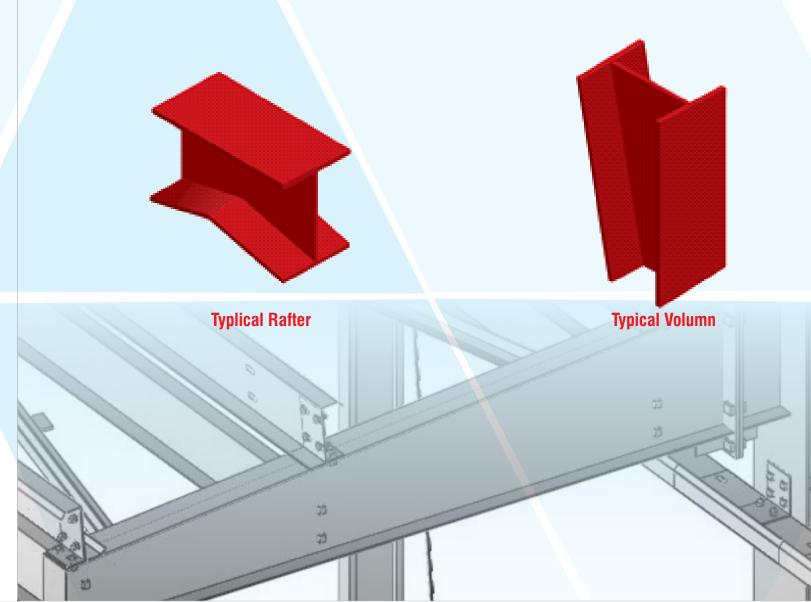
'Z' SECTION Thikness Range : 1 to 3mm Customized size of purline also available Thikness Range : 1 to 3mm Customized size of purline also available



BUILT-UP MEMBER

Material:

H - Beams are fabricated from high grade steel plates conforming to IS: 2062, ASTM A572 50, ASTM A570 50, ASTM A572M Grade 345 Type 1 or Equivalent with a minimum yield strength of 34.5Kn/Sq.cm and are factory painted with a minimum of 25 microns DFT of Red Oxide Primer.

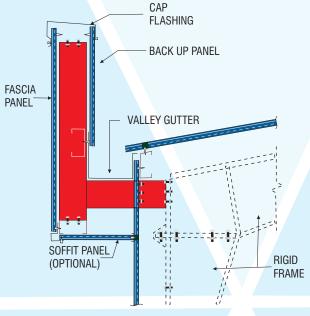




PROTECH PEB Construction:- Pre engineered steel buildings can be fitted with different structural accessories including mezzanine floors, canopies, fascia, interior partitions etc. Fascia is used to conceal the gable roof slop of building. PROTECH Pre-engineered steel buildings can be fitted with different structural accessories. The Buildings made up of Steel where different components of the building are designed, detailed and fabricated in the Manufacturing unit, shipped to and erected at the site. These are provided at the eave level of the roof. This action safeguards the roof and imparts a show-room like appearance to the construction. Following are Different Types of Fascia Used In PEB Construction.

- Canopy
- Curve Eave with projection
- Curved Eave without projection
- Parapet Fascia
- Vertical Fascia with back up Panel
- Top & Bottom Curved Fascia
- Mezzanine Beam Connection
- Mezzanine Joist Connection

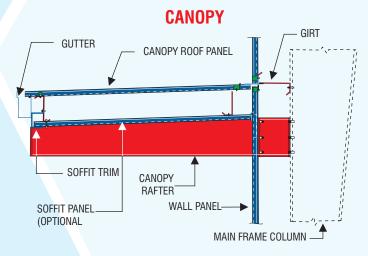
VERTICAL FASCIA WITH BACK UP PANEL



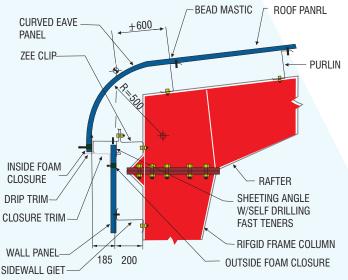




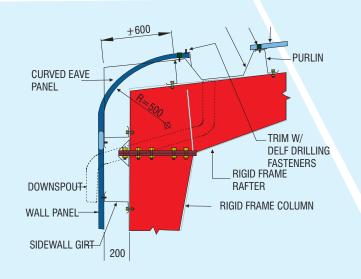
STRUCTURAL SUBSYSTEMS



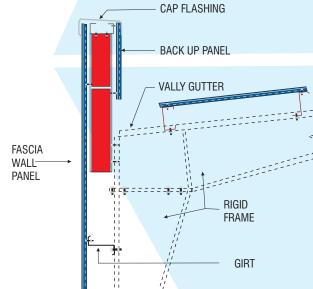
EAVE CURVED WITH PROJECTION



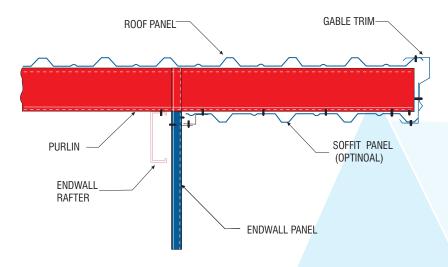
EAVE CURVED WITHOUT PROJECTION



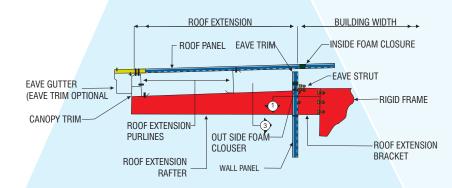
PARAPET FASCIA



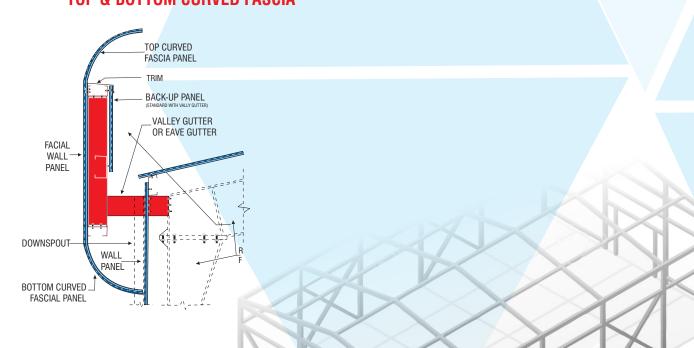
ENDWALL ROOF EXTENSION



SIDEWALL ROOF EXTENSION



TOP & BOTTOM CURVED FASCIA



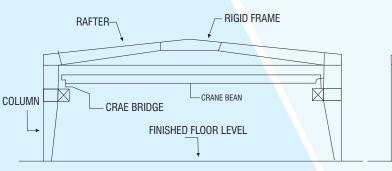


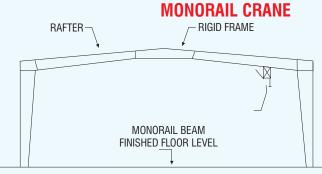
CRANE AND MEZZANINES

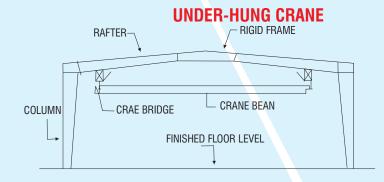
Crane - PROTECH Pre-engineered buildings can be designed to accept most types of crane systems such as EOT, Monorail, Under-hung cranes and other load carrying devices like conveyors etc., in both clear span and multi-span buildings. When a crane system is to be conform, Arko's scope is limited to brackets and crane runway beams which support the crane system. Complete information on the crane system is required in order to design and estimate buildings with cranes.

Mezzanine -Intermediate mezzanine floors are possible in metal buildings. Mezzanine floors can be provided in complete or partial area in Preengineered buildings to suit loading requirements for office and storage. Mezzanine floors consists of steel decks, supported by joists framed to the mezzanine beams. Main mezzanine beams normally run across the width of the building and are located under the main rafters while joists run parallel to the length of the building. The top flange of the joists fit immediately below the top flange of the mezzanine beam. The economy of the mezzanine floor is affected by the applied load and support column spacing. Multi-level equipment platforms, catwalks, staircases etc. can be accommodated.

TOP RUNING CRANE

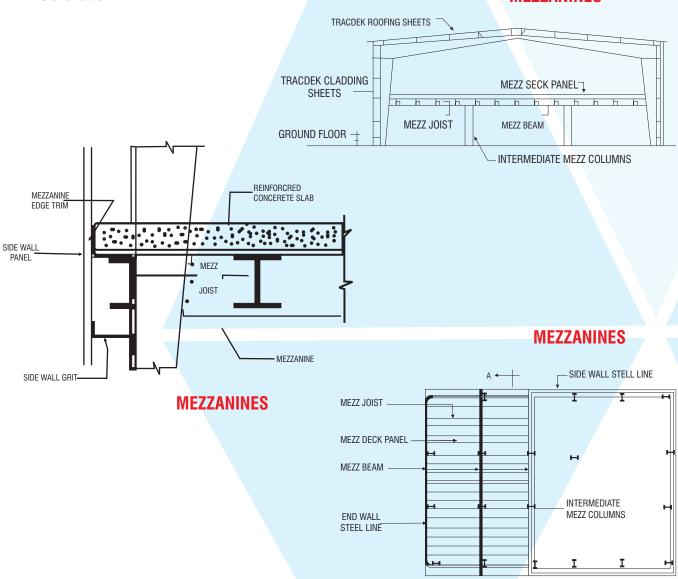






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MEZZANINES





MEZZANINES

