

**NEXT GEN
STRUCTURAL
FOR ROBUST
OPERATIONS**



**RACKS &
ROLLERS**
STORAGE TECHNOLOGIES AND AUTOMATION

PRE ENGINEERED BUILDINGS

Pre-Engineered Buildings are metal buildings that are fabricated in parts in factories and are later assembled on the site. Like a computer system of early 2000s, parts of the building are transported to the site and put together to form a fully-fledged, ready to use building. The structure of a PEB is made of strong and durable steel. The manufacturing is done by designers using predetermined raw materials and standard manufacturing methods. However, it is highly imperative to maintain the good quality of steel used while manufacturing, otherwise they might succumb to corrosion.

Nuts and bolted connections are later used to help assemble the building. **The whole structure includes a primary frame, secondary frame, roof and wall panels, bracing and crane brackets along with accessories can also be provided.** The Primary Frame includes I shaped steel members, or I shaped beams. These I beams are actually steel plates that are welded together in factories. The primary frame also consists of trusses, castellated beams and mill sections. The Secondary Frame includes Roof Purlins and Eave Purlins, also known as Cold formed members. The accessories include mezzanine floors, stairways, ventilators, sky panels and other useful items. The frames of PEB are rigid and can withstand forces of nature.

PEB have many advantages as compared to conventional metal buildings. **They are quick to manufacture and quick to assemble.** They are highly economical, low maintenance & easy to assemble. The quality of these buildings is great as certain design parameters and quality checks are followed by the manufacturers.

Due to easy assembly, you can also save up on high labour costs. Although while assembling, extra care must be taken to ensure that all areas are properly covered, and no steel part is left exposed as it will hamper the appearance of the building. These types of buildings are mostly used to set up warehouses, metro stations, bridges, factories and industrial structures.

BEST SUITED FOR

Aircraft hangers, bridges, railway stations, metro stations, factories, etc.

NOT RECOMMENDED FOR

Buildings that require an extension to height.

MAIN FEATURES

EASY ASSEMBLY

PEBs are quick to manufacture and easy to assemble.

STRONG AND DURABLE

The structure is rigid and can bear forces of nature thus protecting the inside of the building.

STANDARD QUALITY

The quality of material used is great due to standard manufacturing methods.

PROS

- 👍 Less construction time
- 👍 Inexpensive
- 👍 Easy expansion using bays
- 👍 Low maintenance

CONS

- 👎 Not very physically appealing
- 👎 High insulation costs