



### WHY US

The PEB business is a challenging environment. With so many functions involved and a lot of co-ordination and follow-up required with multiple agencies demands an experienced and agile team. The Sterling Building Solutions team has just the right resources & expertise when it comes to estimation, design, detailing to execution of the project on site.

Project environment is quite dynamic and demands that the PEB team adapts to this changing environment at the same pace. At Sterling building solutions the team ensures that we keep up with our pace and deliver to customer expectations.

At Sterling building solutions we have set up systems and processes which ensure smooth execution of project so that it gives a complete "peace of mind" feeling for the customer. The team has exposure to this systems and processes which ensure that the project goes smoothly and "on-schedule"

With this you can be rest assured that your project is in the safe hands and you focus on your core business.



## What are pre-engineered buildings (PEB)?

Pre-engineered buildings are factory manufactured buildings of steel that are shipped to site and the steel members assembled together by bolted connections. As compared to conventional buildings in this case the contractor also designs the building commonly called as design & build.

These buildings are ideally suited for industrial buildings and warehouses. They are cost effective as compared to conventional steel buildings. They are cheap and fast to erect. As these buildings are bolted connections they can be dismantled and moved to other site as well.

#### Advantages of Pre-engineered buildings (PEB) over conventional steel buildings:

**Lesser steel consumption:** PEBs are normally 30% lighter as compared to conventional steel buildings. Since the steel members used are fabricated from plates as per the loads as compared to standard steel sections used in conventional buildings. Also light weight cold rolled secondary members are used instead of heavier members used in case of conventional steel buildings.

**Reduced site activity:** As the PEB is fabricated at the factory and not at site the only activity at site is bolting and screwing. Hence there is no welding, cutting or grinding at the site, which is required to be done at site in case of a conventional steel building.

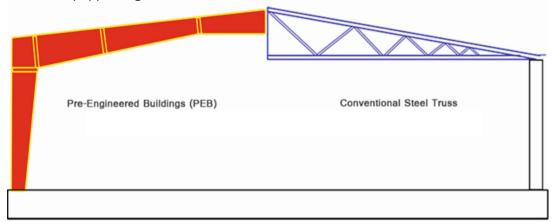
**Faster delivery schedules:** Time taken for fabrication is very less as compared to fabrication to be done at site in case of conventional buildings. Also there is no need to wait for fabrication to start until the civil work is completed.

**Quality of fabrication:** In case of PEB the fabrication is done in a factory wherein maintaining control over the fabrication parameters is easily possible. Whereas the controlling these parameters when fabricating at site becomes challenging. Hence the quality and finish of a PEB is quite superior as compared to conventional steel buildings.

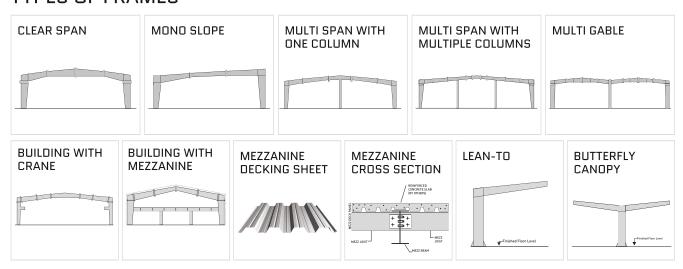
**Reduced Civil foundation cost:** PEB structures being light in weight exert lesser load on the civil foundations which result in smaller and simple foundations and thus reduced civil costs.

**Lesser risks of accidents:** As all the welding is done at factory in case of a PEB, there is no requirement of welding to be done at heights. Thus this reduces the risks of accidents.

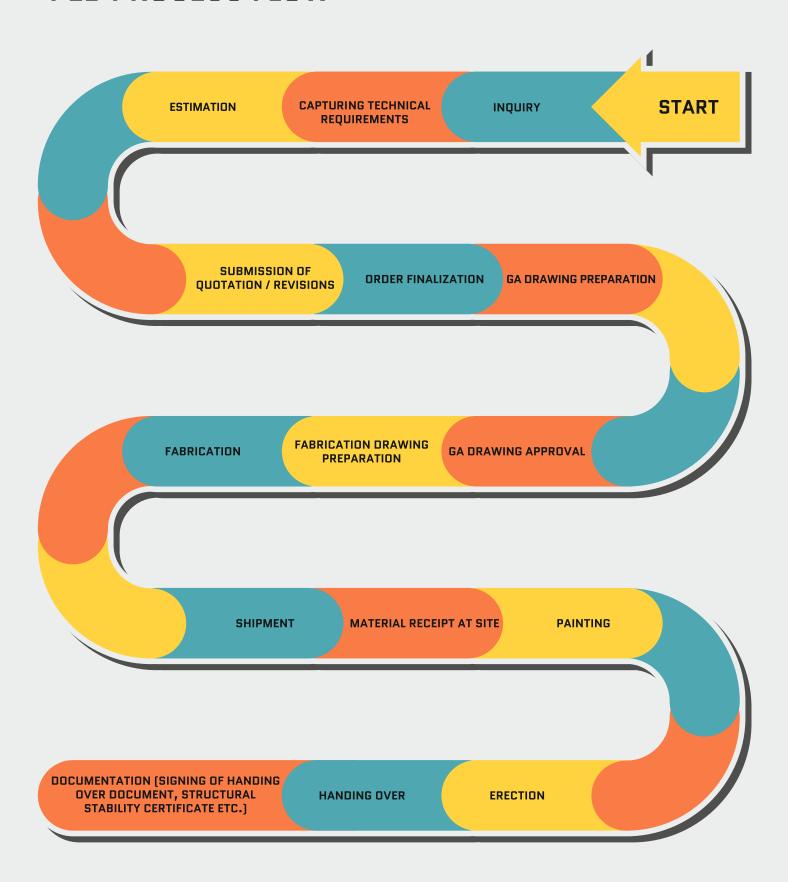
**Better aesthetic looks:** As the columns and rafters are built-up "I" sections and all members being bolted connections the PEB looks aesthetically appealing.



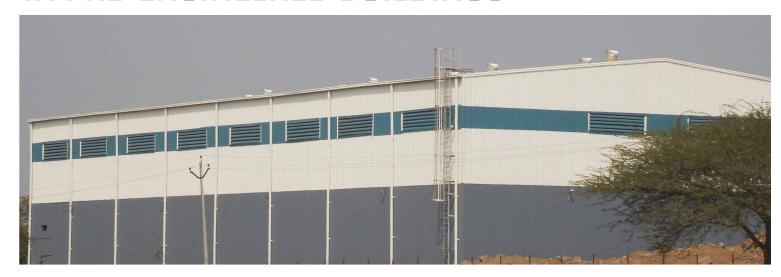
#### TYPES OF FRAMES



## **PEB PROCESS FLOW**



# TURN-KEY SOLUTIONS IN PRE-ENGINEERED BUILDINGS



Turn-key solution in PEB includes involvement from the conceptualization stage so as to optimize the design thereby bringing value to the customer and consequently optimizing the project cost at the same time serving the required functionality.

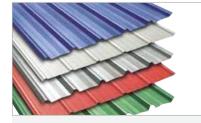
Services include Design, manufacturing, supply and erection of the PEB. During the complete project life cycle including the erection part, a professional project management and monitoring is done to meet and exceed customer expectations. This gives the customer a complete peace of mind and allowing time to focus on his core business.



The raw material for primary steel i.e. columns and rafters used is sourced from reputed steel manufacturers.



The primary members i.e. columns and rafters are fabricated using welding consumables of the highest quality.



The roof sheeting and wall cladding is manufactured from coil of Galvalume® steel.



The fabrication is done under strict quality control wherein the welding parameters and the geometry of the components are checked and certified by qualified and experienced quality personnel at the fabrication facility itself



The secondary steel members i.e. the purlins and girts are manufactured out of high tensile 345 MPa galvanized steel having coating mass of 120 GSM from the material sourced from reputed steel manufacturers.

### **ADDITIONAL BUILDING ACCESSORIES**

**ROLLING SHUTTERS** 



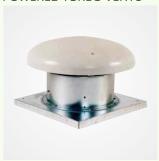
WINDOWS



DOORS



**POWERED TURBO VENTS** 



**DOCKING SYSTEMS** 



INDUSTRIAL LIGHTING



LIGHTENING ARRESTORS



**ROOF TOP SOLAR POWER SYSTEM** 



FALL ARREST SYSTEMS (LIFELINE SYSTEMS)



# ROOFING, ROOF SYSTEM AND RE-ROOFING SOLUTIONS

### ROOFING





Sterling Building Solutions offers turnkey solutions taking responsibility of not only supplying the sheets but also of installation. The sheeting used is from the best brands in the industry.

The Galvalume<sup>®</sup> sheeting has a coating of an alloy of Zinc and Aluminium. The alloy coated product nominally contains 55% aluminum, 43.5% zinc and 1.5% silicon by weight. The coating lasts 2.5 to 3 times longer than the Galvanized steel.

The fasteners, quality of which is mostly ignored, but are a critical component for the life of the roof sheeting are used of the best brands. These self-drilling screws are made of case-hardened Zinc plated steel. The screws come with EPDM rubber metal bonded washer.

Special attention is given to the detailing of the flashings, trims, gutters and down take pipes which contribute in the final performance and the aesthetics of the roof and building.

No compromise is made in the quality of sealants, mastic tapes and other sealing compounds used. This ensures leak-proof performance of the roof.

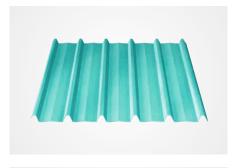
We ensure that the final look of the building is of the highest standards. The resources for this job are carefully handpicked from the industry.

### SCREW DOWN ROOF SYSTEM

This is a traditional roof system wherein the roof sheeting is directly screwed to the structure with the help of a self-drilling screw. Fasteners and flashings are critical components in this type of roof system.

At Sterling building solutions we ensure proper detailing is done to take care of minute details of flashings and fasteners.

Other critical components in this system are the sealing materials. At Sterling Building Solutions we use one of the best sealants and sealing components. The sheet profile used is trapezoidal profile corrugated from a coil of 550 MPa strength having at least AZ 150 coating of Galvalume®







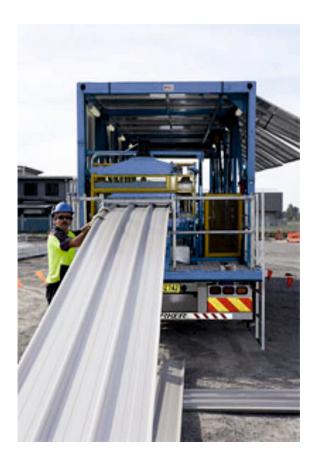


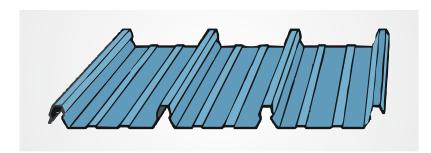




### CONCEALED FIXED ROOF SYSTEM

In this type of roof the end laps are eliminated as the length of the sheet is equal to complete one side slope of the building. For buildings having slope lengths of more than the transportable length, the coil and the roll forming machine are transported to the site and the sheeting is roll formed at the site itself. In this type of roof, the sheet is nowhere pierced with the screws, as a clip forms a connection between the roof and the structure. This clip is fixed to the structure and in turn the sheet is fixed to this clip.







### STANDING SEAM ROOF SYSTEM

This type of roof system allows the roof to contract and expand due to the thermal stresses induced by the temperature differences. This is achieved by illuminating the direct contact between the roof and the structure through a special clip fixed to the structure. This sheeting is fixed by a seaming process carried out at the site.





## MINI - PEB: ONE POINT SOLUTION



Mini PEB buildings are the outcome of the power of high tensile strength cold formed light gauge galvanized steel members. These members do wonders in the LGFS i.e Light gauge framing system. Also the construction time is drastically reduced. The LGFS system allows flexibility of design thereby giving beautiful aesthetic looks to the buildings.

One point solution in Mini-PEB buildings covers the complete scope from civil, electrical, plumbing, interiors etc. This gives customer the comfort and ease of dealing with just one agency for all his needs.





















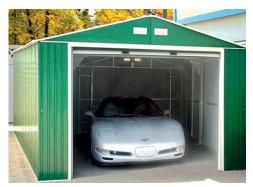








LOW COST HOUSING / LABOUR COLONIES

















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