

PEB V/S CONVENTIONAL BUILDING

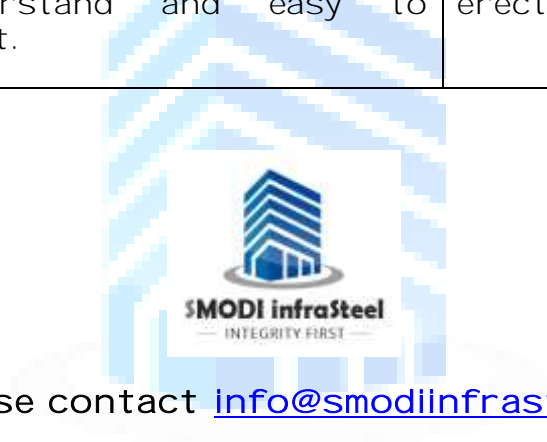


COMPARISON OF PRE-ENGINEERED STEEL BUILDING V/S CONVENTIONAL BUILDING CONSTRUCTION:

| S. No. | FEATURE | PRE-ENGINEERED STEEL BUILDING SYSTEM. | CONVENTIONAL BUILDING SYSTEM. |
|--------|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| 1 | SINGLE SOURCE | Steel building package from one source, from conceptual stage to design, Engineering, Manufacturing, Supply, Erection & Completion as a total system. | From several sources i.e. architects, structural consultant, fabricator / contractor, Painter, PMC etc. |
| 2 | QUALITY | Fully finished products in ready to erect condition reaches at site in CKD form-involving absolutely no welding, cutting etc at site and assembly is only done by bolting. | All fabrication work at site involving lot of wastage of material and loss of quality. |
| 3 | TIME SAVING | Completely factory made/shop fabricated system resulting significant saving in time and superior quality. | Site fabrication requires a lot of infrastructure facilities and involves more time resulting in delays in project implementation. |
| 4 | DESIGN OBJECTIVE | Efficient design, due to synergy between all elements/building components, Primary members tapered with built-up sections, roof /wall, SECONDARY MEMBERS' continuous cold formed | Heavy/over designed due to limited range of sections, secondary members generally designed as simply supported. |

| | | | |
|----|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | sections. | |
| 5 | DESIGN SYMMETRY | All sections are fully designed with available inventory. Non-availability of sections does not arise and hence ensures no price escalation. | Non-availability of designed sections often forces the designers to go for higher sections resulting in higher weight and escalation in project cost. |
| 6 | DESIGN VERSITILITY FOR LARGE CLEAR SPAN | Can offer large clear span up to 100-120 m without intermediate support columns. | Generally limited to medium span up to 40m max. |
| 7 | DESIGN CODE & COST SAVING | Designed as per International standards such as AISC, AISI, MBMA, AWS which are proven all over the world for metal building system. American codes are continuously updated on latest researches. | IS-Codes more conservatives. Increases weight of structure and cost without adding any value to building. Codes are not updated for abnormally long time. |
| 8 | SINGLE SOURCE | Entire product range of roofing, structure, mezzanine, staircases Crane beams, doors, windows, Ventilations, insulations everything is easily available in stock from single source supply in finish condition. | To procure from 10-15 sources from local market results in non-compatibility. Needs lot of coordination with several agency which costs time and money. |
| 9 | STRUCUTRE WEIGHT | PEB is almost 10-15% lighter compared to conventional construction due to efficient design and integral framing system. | Use of standard hot-rolled sections result in heavy steel structure and comparatively oversized structure. |
| 10 | COMOSITE SOFTWARE | PEB are often designed on standard design software which is integrated design package for design, estimation, detailing, shop drawing, erection drawings, boq etc. everything can be generated form single design package. | No such technique or methodology is available as standard module. Each and every activity is planned and executed separately without any integration resulting high chances of error and faults. |
| 10 | DELIVERY | Can be manufactured in mass production line resulting | Large manufacturing schedule being site |

| | | | |
|----|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | faster deliver. Average 500 MT building can be supplied in 6-7 weeks time after finalization of design. | fabrication .Average 16-18 weeks required for 500 MT size building. |
| 11 | FOUNDATION | Being light structure foundation size and design is lighter and simpler. | Corporately heavy foundation design resulting higher cost. |
| 12 | EASE OF ERECTION | PEB is bolted design and simple multiple module framing system in which every assembly is a standard module i.e. repetitive in nature resulting easy to understand and easy to erect. | Being site fabricated structure; erection is quite complicated and needs lot of enabling structure and support system resulting complex and expensive erection. |



For further details please contact info@smodiinfraSteel.com

SMODI infraSteel
 — INTEGRITY FIRST —