

POWERED BY IDC

ASXTRAA

Turnkey Pre-Engineered Building(PEB) Warehouse &
Industrial Infrastructure Solutions

- ✓ Concept-to-Completion Turnkey Execution
- ✓ Advanced Structural Designing & Tekla Detailing
- ✓ High-Tensile Heavy-Duty PEB Manufacturing
- ✓ Precision On-Site Structural Erection & Assembly

Asxtraa Structural Solutions Private Limited
Industrial Infrastructure & Engineering Partner

Pre-Erection Engineering & Fabrication

We eliminate multi-vendor coordination by managing absolute structural analysis, optimization, and fabrication under single-source accountability.

1. Advanced Architectural & Structural Designing

- **Custom Layout Optimization:** Space maximizing floor plans, bay spacing configurations, and clear-span designs matching operational logistics.
- **STAAD.Pro & Tekla Detailing:** 3D structural analysis under absolute wind loads, seismic zones, and dead/live weights to deliver safe, material-optimized blueprints.
- **Civil & Foundation Mapping:** Absolute anchor bolt settings, concrete pile/footing detailing, and civil coordination mapping for heavy industrial floor loading.

2. Premium PEB Manufacturing & Component Engineering

- **Primary Structural Members:** High-tensile plate fabricated Built-up 'H' and 'I' beams, columns, and tapered rafters treated with rust-resistant epoxy primers.
- **Secondary Structural Framing:** Cold-formed, precision-punched Galvanized Z & C purlins, structural girts, eave struts, and solid rod wall bracings.
- **Roofing & Cladding Systems:** High-grade Galvalume profile sheets with advanced weather-proof coatings, optional PUF/Glasswool insulated thermal sandwich panels.

On-Site Structural Erection & Accessories

Our highly trained site engineers and erection teams execute precise, safe assembly models using rigorous mechanical standards.

3. Precision Structural Erection & Assembly

- **Component Part-Coding & Logistics:** Every manufactured component arrives on site completely part-coded, eliminating installation confusion and field delays.
- **Mechanical Raising & Alignment:** Precision crane operations for column hoisting, rafter splicing, cross-bracing fixation, and absolute torque-wrench bolt tightening.
- **Quality Audits & Compliance:** Multi-level verticality alignments, alignment verification via digital equipment, and strict compliance with global IS codes.

4. Integrated Industrial Accessories & Ventilation

- **Environmental Control Systems:** Wind-driven high-capacity SS/Aluminium Turbo Ventilators and continuous Ridge Ventilators for natural air exchange.
- **Natural Daylighting Panels:** Heavy-duty, UV-stabilized Polycarbonate skylight profiling sheets to significantly optimize operational daylight power costs.
- **Utility & Entry Inclusions:** Industrial-grade gutters with PVC down-take pipes, motorized roll-up shop doors, canopies, structural dock leveler frames, and crash guards.

Project Execution Framework

Asxtraa implements a robust 4-Stage turnkey project delivery timeline ensuring on-time project handover with zero budget overruns.

STAGE 01

Site Survey & Engineering Design Lock

Detailed assessment of terrain, load bearing requirements, and localized weather factors to finalize approved 3D Tekla detailing models and connection drawings.

STAGE 02

Precision Controlled Plant Fabrication

Automatic CNC cutting, submerged arc welding (SAW), precision shot-blasting, and execution of protective priming layers inside state-of-the-art manufacturing infrastructure.

STAGE 03

Secured Supply Chain Logistics

Phased delivery of components mapped to site erection progress, ensuring primary components arrive exactly when civil foundations cure.

STAGE 04

Site Assembly, Quality Commissioning & Handover

Rigorous erection sequence tracking, final alignment certification, flashing fixes for 100% water-tightness, and absolute client sign-off.