THERMO BOND BUILDINGS	JOB DESCRIPTION ASSEMBLY SUBJECT MATTER EXPERT	TBA-HR-FJ-086

REPORTS TO:	Director of Engineering	PAY:	Salary
POSITION	Full Time	FLSA CLASS	Exempt
DEPARTMENT	Engineering	SHIFT	Day

JOB SUMMARY:

The Assembly Subject Matter Expert (SME) is the engineering authority for assembly execution across manufacturing and modular production. This role ensures engineering intent is translated into repeatable, efficient, and compliant assembly processes, and serves as the technical escalation point for assembly-related issues affecting quality, safety, or throughput.

This role is embedded in Engineering, not Operations, and owns assembly method integrity, standardization, and technical problem resolution.

REPORTS TO:

- Director of Engineering

SUPERVISORY RESPONSIBILITIES:

- None

CORE RESPONSIBILITIES:

Assembly Engineering Authority

- Serve as the technical authority for all assembly methods and sequences.
- Define, document, and maintain standard work, work instructions, and visual assembly standards.
- Ensure assembly execution aligns with engineering drawings, specifications, applicable IBC codes, and approved changes.
- Development of assembly systems and design standards that are optimized for pre-fabrication and efficient modular assembly and installation.
- Interpret, approve, and support execution of assembly drawings, BOMs, and specifications.

Engineering ↔ Operations Interface

- Act as Engineering's assembly liaison to manufacturing teams.
- Provide hands-on technical support during production ramp-ups, rework, or atypical builds.
- Resolve assembly-related technical questions without assuming production management responsibility.

Process & Standard Work Development

- Partner with Process Engineering to ensure assembly steps are practical, safe, and repeatable.
- Support validation of assembly flow, sequencing, and handoffs.
- Identify gaps between documented processes and floor execution.

Cross-Discipline Coordination

- Coordinate assembly interfaces between:
  - Structural systems
  - Pre-fabrication systems
- Work closely with Integration Specialist and Electrical SME to prevent cross-system conflicts.

Quality & Compliance Support

- Support Quality and Engineering in resolving assembly-driven defects and non-conformances.
- Ensure assembly processes support compliance with applicable codes and standards.
- Participate in audits and inspections as the assembly technical representative.

Continuous Improvement Support (Non-Owner)

- Identify assembly inefficiencies, defects, and ergonomic risks.
- Support CI initiatives with assembly expertise and data, without owning CI governance.
- Recommend tooling, fixtures, or layout improvements.

Training & Knowledge Retention

- Train engineers, supervisors, and leads on assembly intent and standards.
- Serve as the institutional knowledge holder for complex and legacy assemblies.
- Ensure critical assembly knowledge is documented and retained.

Customer & Program Support

- Serve as technical liaison for customer assembly questions and clarifications
- Support customer audits, walkthroughs, and issue resolution as required
- Participate in lessons-learned reviews for major programs

Required Qualifications

- Bachelor’s degree in Manufacturing, Mechanical, or Industrial Engineering, or equivalent experience.
- 5+ years’ experience in manufacturing or modular assembly environments.
- Strong ability to interpret engineering drawings, BOMs, and specifications.
- Demonstrated success resolving assembly-related technical issues.

Preferred Experience

- Modular construction or high-mix / low-volume manufacturing.
- Experience supporting multi-site assembly operations.
- Lean Manufacturing exposure (standard work, waste identification).
- Cross-discipline assembly environments.

Core Competencies

- Assembly process authority
- Interpretation and adherence to IBC codes
- Technical problem solving
- Engineering-to-floor translation
- Cross-functional collaboration
- Documentation discipline

Measures of Success

- Stable, repeatable assembly execution
- Reduced assembly-driven defects and rework
- Clear, adopted assembly standards
- Fewer late-stage assembly/design conflicts

TRAVEL, HOURS OF WORK & SUPERVISION: Hours are flexible. Some overnight travel may be required on occasion.

COMPENSATION & BENEFITS: This position is a full-time, salaried position that does not require hourly time reporting and is eligible to participate in Thermo Bond vacation, medical, 401K and life insurance programs.

PHYSICAL REQUIREMENTS (including but not limited to):

- Prolonged periods of sitting at a desk and working on a computer.
- Must be able to access and navigate all areas of the facility.
- Able to lift/carry 15 lbs.

Revision Date	Author	Description
2/27/26	HVR	Original Release