

Fully Integrated Power Solutions _____ _____ Built Under One Roof



Lake Shore Electric's

eHouse

An eHouse, or electrical house, is a prefabricated modular structure that integrates critical electrical equipment into a single engineered solution.

As a vertically integrated manufacturer, Lake Shore Electric oversees every aspect in-house—from design and engineering to fabrication and testing—delivering a comprehensive and efficient power solution all under one roof. Our prefabricated, transportable eHouses arrive fully assembled, reducing on-site labor and material costs while minimizing delays caused by weather or other site disruptions. This provides a reliable and cost-effective alternative to conventional construction.

Customizable **Interior Configurations**

Every eHouse is custom-configured to accommodate a wide variety of electrical and support equipment.

Customizations Include:

- 1. Perimeter Ground Bus
- 2. Eye Wash Station
- 3. Network Racks
- 4. Relays & Communications
- 5. Cable Trays
- 6. Safety Switches
- 7. Transfer Switches

- 8. Termination Cabinets 9. Third-Party Equipment
- 10. Battery System
- 11. Panelboards (AC or DC)
- 12. Battery Charger
- 13. Fiber Cable Ducting

Additional Equipment Options:

- Low & Medium Voltage
- Switchgear
- Motor Control Centers
- PLC Cabinets • Transformers
- Interior & Exterior Lighting



Enclosure Features & Specifications



· A60 Galvanneal steel with G90-equivalent powder coat for a durable, corrosion-resistant surface

Wall Construction

- 5.5" insulated wall cavity
- R-19 insulation increases thermal efficiency & reduces energy consumption

Assembly & Installation

Bolt-together construction with integrated gaskets eliminates the need for on-site welding and provides a weather-tight seal

Structural Steel Base

- Constructed from ASTM structural steel
- · Protective coatings:
 - Two-part epoxy primer
 - Emulsified asphalt layer
- Spray-on expanding foam insulation for enhanced thermal performance

Optional Enclosure Specifications

- Stainless Steel Construction: 304 or 316 stainless steel for corrosive or extreme environments
- Ballistic Protection: UL 752-rated ballistic paneling available for high-security or sensitive applications
- Climate-Controlled HVAC: Integrated HVAC system for environments with strict thermal requirements

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Design Milestones



- Site Information Site information is provided to Lake Shore Electric two weeks after receiving the purchase order, confirming design, certification, and foundation requirements and allowing for preliminary design to begin.
- Kick-Off Meeting This meeting introduces key personnel from both the customer and Lake Shore Electric. Establishing a recurring 15-30-minute biweekly meeting is recommended.
- **Preliminary Layout Drawing Package** Lake Shore Electric issues a Preliminary Layout Drawing Package four to six weeks after the inital the Kick-Off Meeting, including plans, elevations, lifting details, and assumed foundation requirements. Customer approval is expected within two weeks.
- **Construction Package** Lake Shore Electric issues a Construction Package within three weeks of Preliminary Layout approval, including engineer-reviewed foundation reactions and structural calculations.
- Issued for Procurement The customer submits an approved Issued for Procurement (IFP) drawing package to Lake Shore Electric 40 weeks before delivery. This package includes Bills of Material (BOMs) for project-specific components, site layout, project zip code, local code requirements for loading, and foundation details (pier or pad). Lake Shore Electric will proceed with purchasing long lead components; changes afterward may require a change order.
- Issued for Fabrication The customer submits an approved Issued for Fabrication (IFF) drawing package to Lake Shore Electric 26 weeks before delivery. This package includes relay panel wiring, AC/DC panelboard circuit requirements, and security items. Lake Shore Electric will finalize the purchasing of remaining components; changes afterward may require a change order.
- Issued for Construction The customer submits an approved Issued for Construction (IFC) drawing package to Lake Shore Electric 16 weeks before delivery. This comprehensive package is the final release and authorizes Lake Shore Electric to proceed with the construction of the entire project.

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