



ACCELERATING CONSTRUCTION OF **SAFE, DURABLE,** AND **COST-EFFECTIVE COMMUNITIES.**

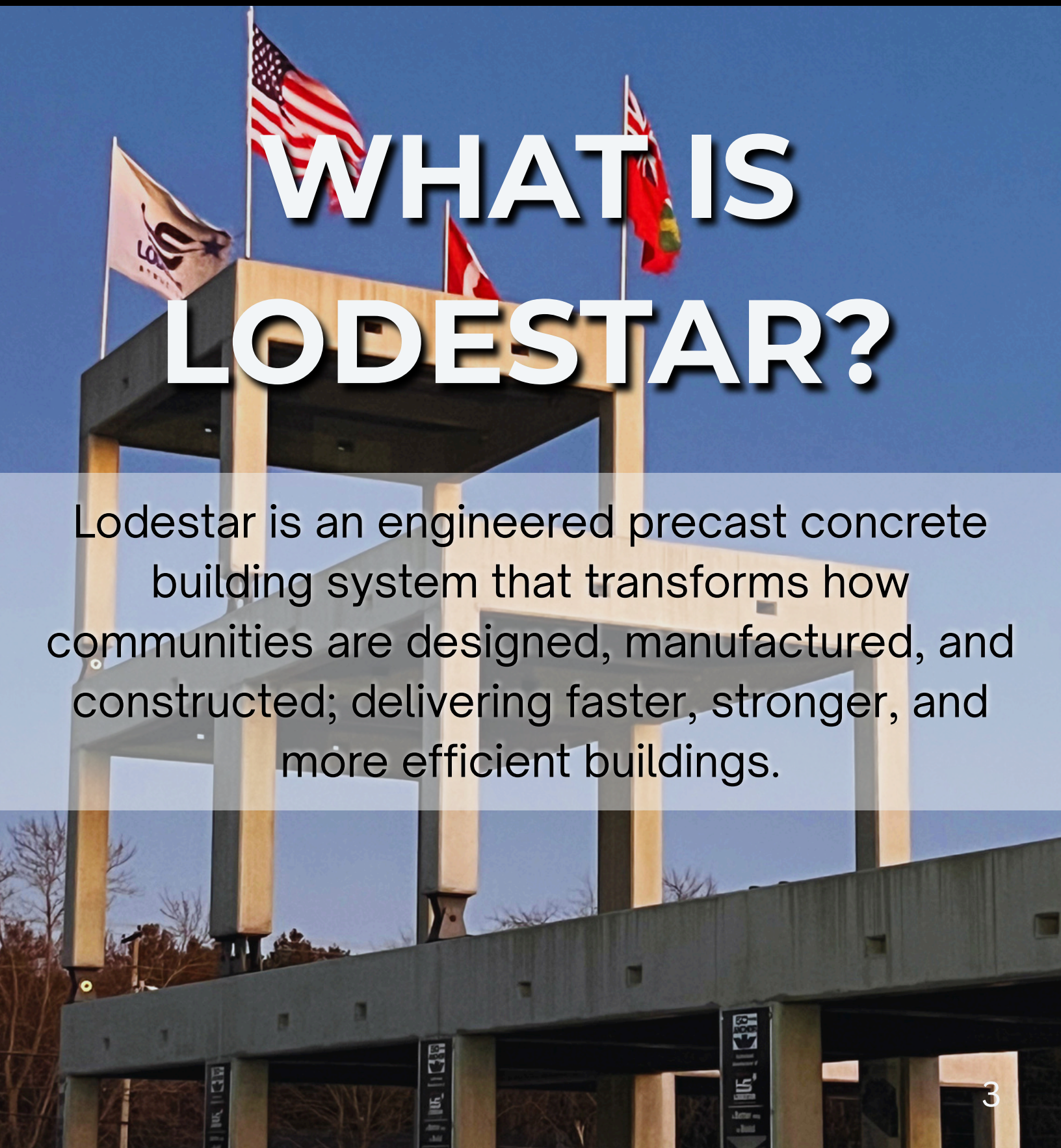
• Branding

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INTRODUCING LODESTAR STRUCTURES



WHAT IS LODESTAR?

Lodestar is an engineered precast concrete building system that transforms how communities are designed, manufactured, and constructed; delivering faster, stronger, and more efficient buildings.

PROVEN PROJECTS

Performance in the real world

Lodestar has been successfully applied across commercial, residential, and institutional projects, proving that engineered precast systems can dramatically reduce construction time while maintaining exceptional quality, durability, and long-term performance.

Project Overview:

- 16,000 sq ft of Foundation Bases
- 16,000 sq ft of Structural Frame

Tools and Resources:

- 5 x Ground Crew
- 1 x Crane & Operator
- 1 x Genie Boom Lift
- Assorted Hand Tools



Erected in 28 hours 1,143 square feet per hour

Project Overview:

- 6,000 sq ft Foundation Bases
- 6,000 sq ft Structural Frame
- 300 sq ft Wall Panel Samples

Tools and Resources:

- 8 x Ground Crew
- 2 x Cranes & Crane Operators
- Assorted Hand Tools



Erected in 4 hours 3,000 square feet per hour

Project Overview:

- 3,052 sq ft Foundation Bases
- 3,052 sq ft Structural Frame
- Column extensions –raising
- ceiling heights

Tools and Resources:

- 3 x Ground Crew
- 1 x Crane & 1 x Crane Operator
- Assorted Hand Tools



Erected in 5 hours 1,221 square feet per hour



LODESTAR STRUCTURES BUILDING COMPONENTS

Precast Concrete Building Foundation Modules

Installation

- Installed on a prepared level base
- Suitable for below-grade or at-grade applications

Structural Performance

- Supports multi-level structures
- Provides a stable and durable foundation system



Connection System

- Structural modules are secured using an engineered bolted connection system

Precast Concrete Building Building Modules

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Precast Concrete Architectural Wall Panels

Installation

- Hung on the structural modules using proprietary metal connection brackets

Design Flexibility

- Architectural details and window or door openings can be cast directly into the wall panels.



Connection System

- Engineered bracket connections enable rapid, secure installation while maintaining precise alignment.

Prefabricated Light-Gauge Metal Wall Panels

Off-Site Manufacturing

- Prefabricated clip-on metal-frame wall panels
- Factory-built with insulation and exterior sheathing

Integrated Openings

- Custom window and door openings incorporated during fabrication



Custom Window & Door openings



Mounting Bracket Integration for Rapid Installation

Rapid Installation

- Mounting bracket integration enables fast and efficient on-site installation

Precast Concrete Floor Panels

Structural Performance

- Engineered precast floor panels provide a durable structural floor system.
- Designed for precise fit and efficient on-site assembly.

Key Benefits

- Accelerated installation
- Reduced on-site labour
- Factory-controlled quality



Rapid Installation

- Rapid sit-in-place installation using standard lifting equipment.

Precast Concrete Roof Panels

Functional Performance | Key Benefits

- Provides a durable rooftop surface.
- Supports rooftop patios, gardens, and building services.
- Durable and long-lasting protection.
- Multi-functional rooftop applications.



Installation

- Installed as the final layer of protection on the building rooftop.

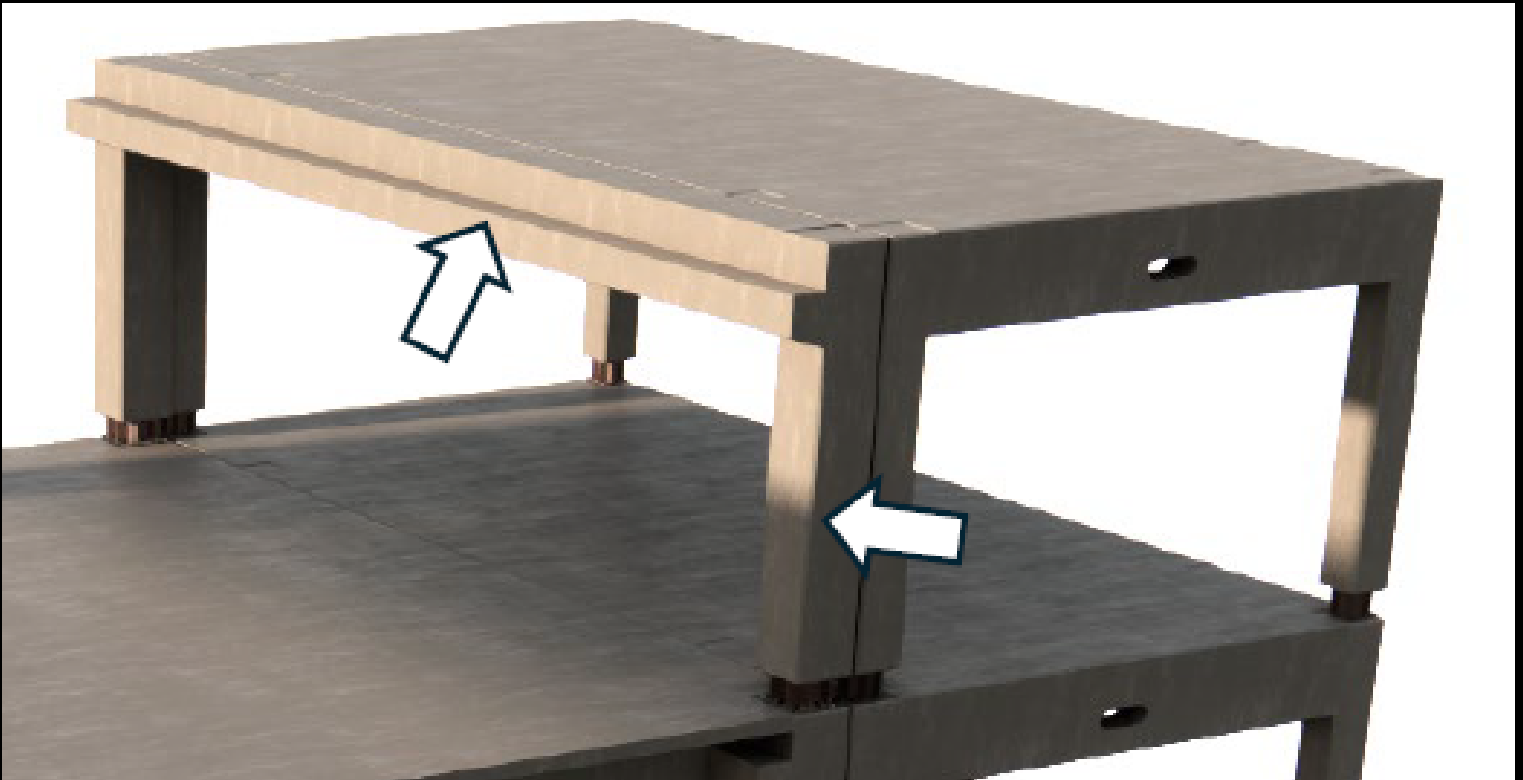
2D Beams

Function

- Supports custom-length T-Slabs and other infill slab alternatives.

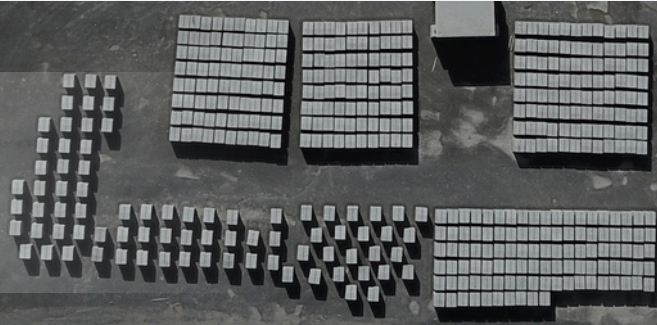
Key Benefit

- Creates a flexible structural support system.



Installation

- Installed between structural building modules.



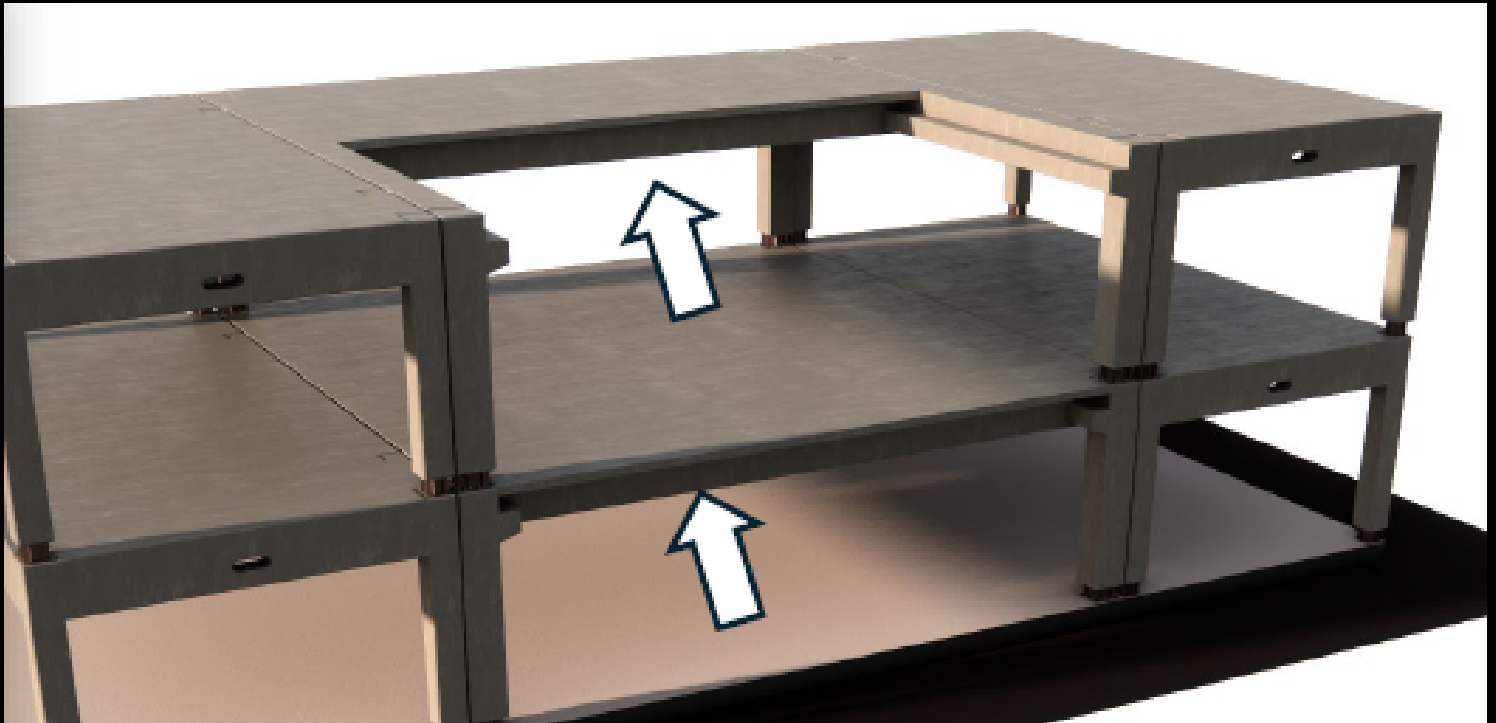
Infill T-Slab System

Integration

- Supported by Lodestar 2D Beams.

Key Benefit

- Maximizes open floor layouts and design flexibility.



Design Flexibility

- Accommodates custom infill lengths to achieve column-free spans.



APPLICATIONS ENGINEERED FOR EVERY PROJECT TYPE

RESIDENTIAL • COMMERCIAL • INSTITUTIONAL
INDUSTRIAL • HOSPITALITY

Multi-Unit - Residential Hospitality Commercial Institutional - Recreation



& more....

**WHY
LODESTAR?**

WHY LODESTAR?

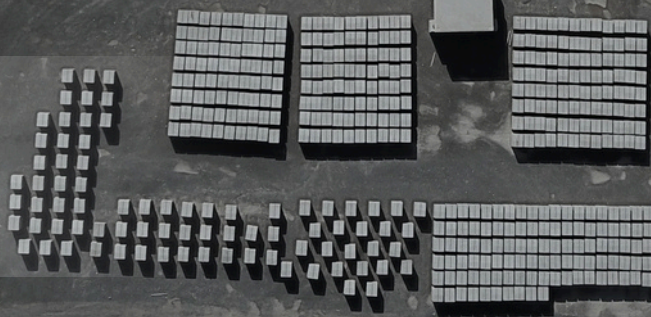
Meeting Today's Construction Challenges

Challenge

- Housing demand exceeds supply
- Aging buildings require renovation or replacement.
- Extreme weather and natural disasters increase rebuilding needs.

Lodestar Solution

- Rapid, scalable manufacturing accelerates project delivery.
- Precast concrete delivers a lifecycle over 3× longer than many traditional systems.
- Engineered for fire, moisture, insects, seismic activity, and extreme wind loads.



WHY LODESTAR?

Building Smarter

Challenge

- Skilled labour shortages.
- Construction complexity.
- Seasonal delays.

Lodestar Solution

- Factory-controlled manufacturing reduces dependence on specialized labour.
- Standardized components simplify design, manufacturing, and installation.
- Year-round production and installation improve schedule certainty.

WHY LODESTAR?

Building for the Future

Challenge

- Environmental responsibility.
- Regulatory compliance.
- Community resilience.

Lodestar Solution

- Relocatable, recyclable components with minimal material waste.
- Engineered components designed to meet building code requirements.
- Supports local manufacturing while enabling durable construction in urban, rural, and remote communities.

WHY LODESTAR?

THE LODESTAR ADVANTAGE

What You Gain

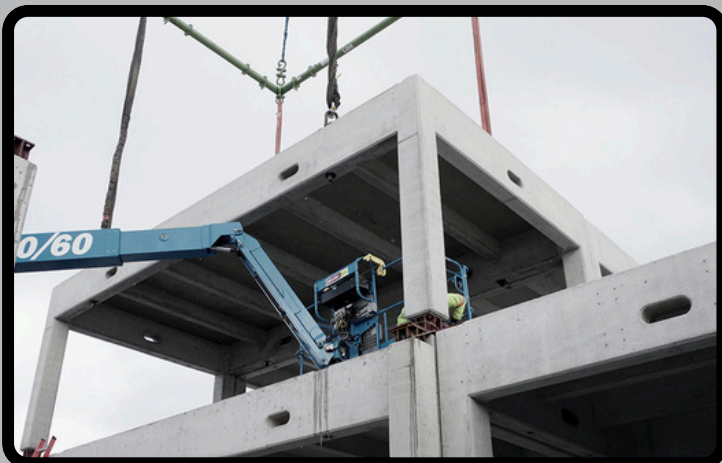
- Cost Certainty.
- Schedule Certainty.
- Quality Assurance.
- Construction Efficiency.
- Faster Project Delivery.
- Year-Round Construction.
- Building Resilience.

What You Reduce

- Schedule Risk.
- Material Waste.
- Labour Requirements.
- Weather Dependency.
- Site Management Complexity
- Equipment & Resources.
- Insurance & Risk Exposure.

WHY LODESTAR?

- ✓ Up to 90% Less On-Site Construction
- ✓ Minimal Labour & Equipment
- ✓ Shorter Construction
- ✓ Lower Project Costs
- ✓ Non-Combustible
- ✓ Proven Concrete Technology

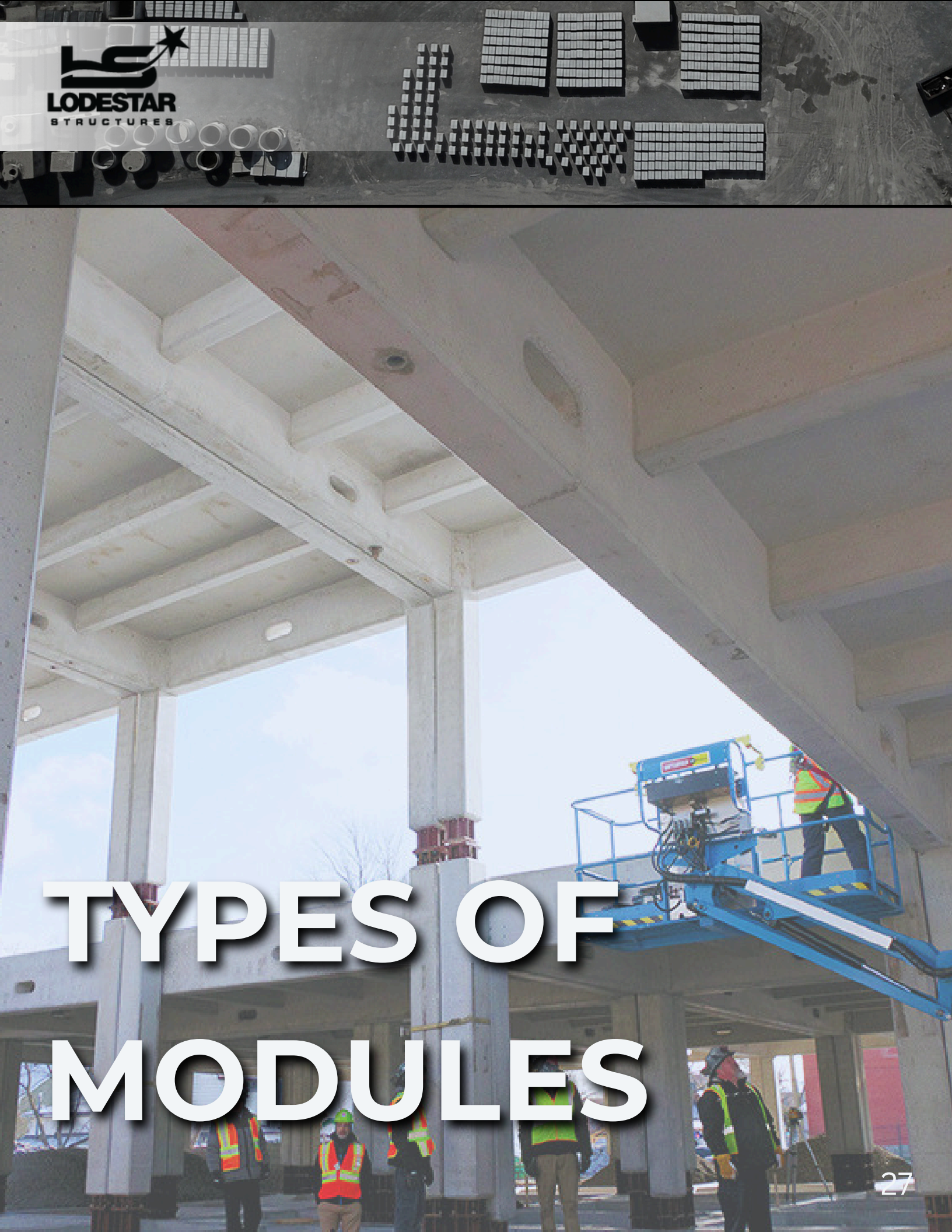


- ✓ Engineer Certified
- ✓ Scalable Manufacturing
- ✓ Factory Quality Assured
- ✓ Moisture Resistant
- ✓ Durable & Resilient
- ✓ Local Manufacturing & Workforce

**TRANSPORTATION
& DELIVERY**

Self-Load & Self-Offload Modules (no crane) | Self powered | Installs on traditional flat-deck trailers





The background image shows a large-scale construction project. In the foreground, several workers wearing high-visibility orange and yellow safety vests and hard hats are standing on a concrete floor. In the background, a blue scissor lift is extended, with a worker on it. The structure being built consists of large, light-colored concrete columns and beams, forming a grid-like framework. The sky is visible through the open spaces of the structure.

TYPES OF MODULES

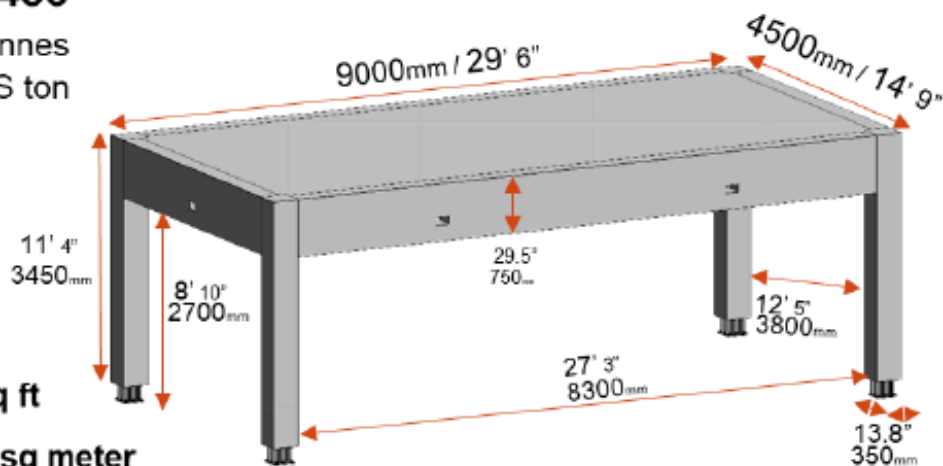
TYPES OF MODULES

Structural Building Module

MBU-436

28.21 tonnes
31.09 US ton

436 sq ft
40.51 sq meter

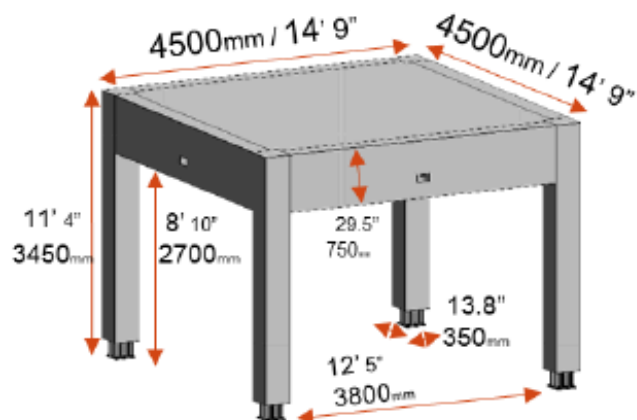


Structural Building Module

MBU-218

17.81 tonnes
19.63 US ton

218 sq ft
20.25 sq meter



TYPES OF MODULES

Structural Building Module

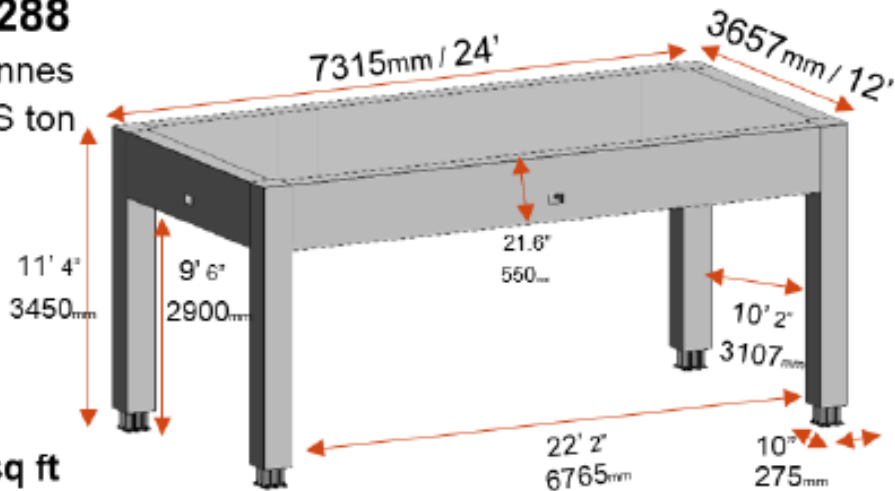
MBU-288

16.45 tonnes

18.13 US ton

288 sq ft

26.76 sq meter



Structural Building Module

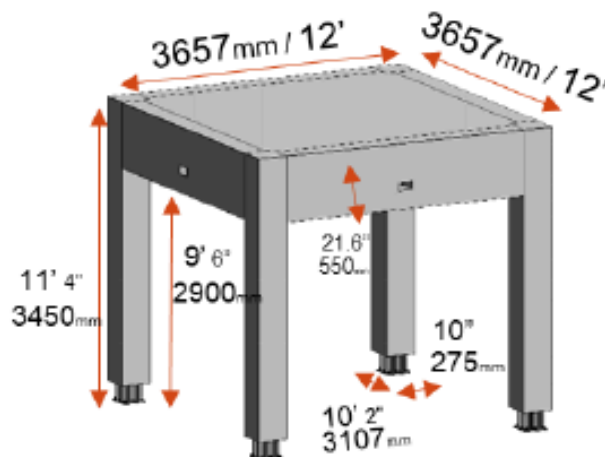
MBU-144

10.54 tonnes

11.62 US ton

144 sq ft

13.38 sq meter



HIGHLIGHTS





LET'S BUILD SMARTER, TOGETHER

From concept to completion, the Lodestar Building System delivers faster construction, engineered precision, and long-term performance for every project.

GET IN TOUCH

Phone: 613-546-6683

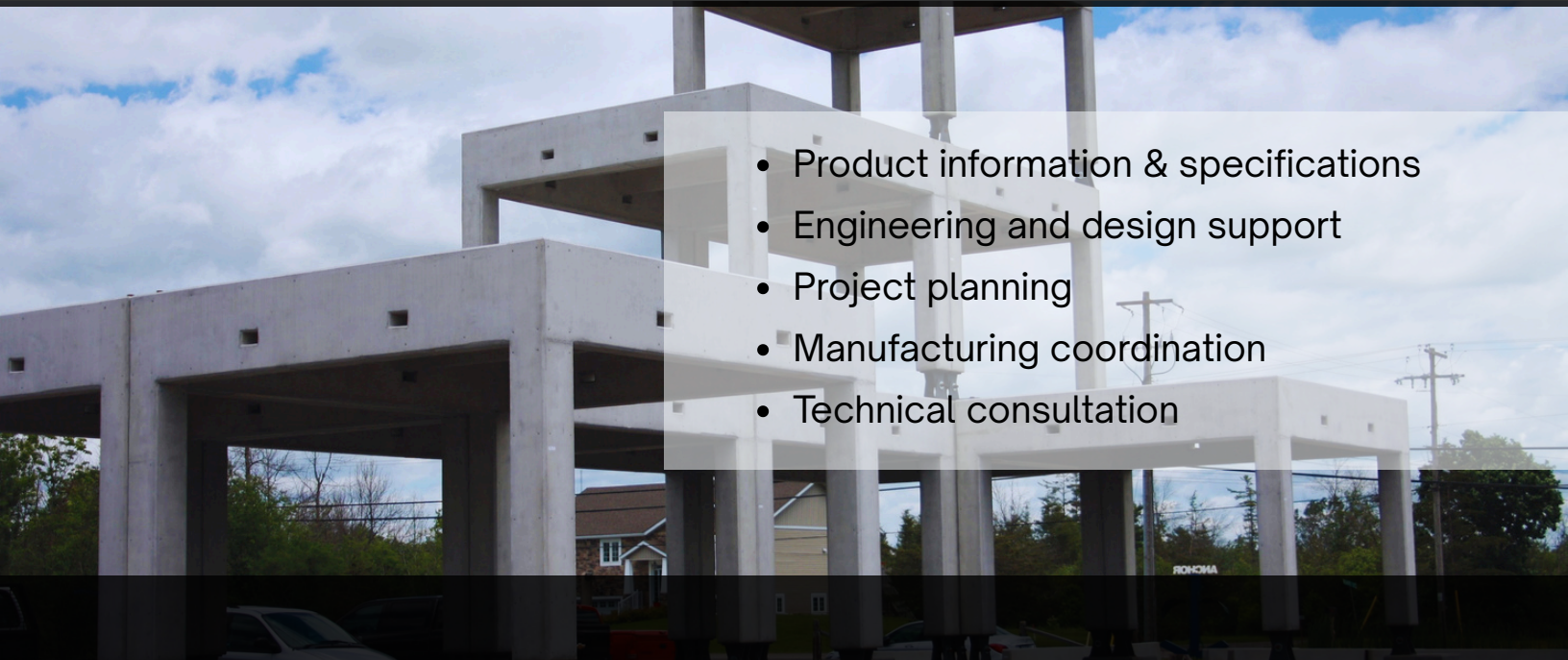
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CONTACT US

- 
- Product information & specifications
 - Engineering and design support
 - Project planning
 - Manufacturing coordination
 - Technical consultation