Unlocking the Power of Prefab
Everyone deserves to live in a well-designed space they’re proud to call home.
Severely underbuilding new housing is creating an affordability crunch. The US has a shortage of 4-5 Million new homes, leading to 49% of renters & 27% of homeowners to be cost-burdened.

We don’t have enough tradespeople to build new housing. We’re short 430,000 construction workers today; 40% of whom will retire in the next decade.

The housing we’re building is making our climate worse. 40% of global emissions are attributed to RE Industry.
The **Module Building System** is a scalable way to deliver better homes, anywhere.

Using **Module’s Building System**, existing housing providers radically expand their capacity, and 100s of new real estate development companies form.

Module’s Network of Manufacturing facilities create 100s of jobs in underserved communities, providing onramps to bring women & people of color into the trades.

1000s of new homeowners and renters live in affordable, all-electric, sustainably built product. Module homes reduce carbon footprint, and drastically lower utility/maintenance costs.
All-Electric
Factory-Built
Infill Housing
Our product is aimed for the missing middle.
Our Building System unlocks the power of prefab.

**More Efficient**
Fewer subcontractors, more consistent labor, and systems in place to double check for quality.

**Climate-protected**
No delays from weather or rain-soaked material. Construction happens indoors, with a roof overhead.

**Less Waste; Less Lumber**
When lumber is at an all-time high, make the most of every $.

**Quality Control**
The factory starts production while sitework is happening -- speeding up the process and reducing delays.
Creating new housing with Module: Reducing risk & creating lasting housing.

**Step 1**
Pre-Development

We jointly evaluate whether your project makes sense to be built by Module.

**Step 2**
Pre-Construction

We produce final drawings, secure building permits, and lock-in pricing for the factory-built components.

**Step 3**
Construction

We build the homes in the factory, deliver and install them with a crane, and complete any finish work.

**Step 4**
Post-Construction

We monitor utility performance of the home and occupant comfort, secure certifications, and coordinate warranty-related items.

We enable *housing providers* to build durable, net zero ready, well-designed homes 40% faster.
We’ve got lots of lots...

- 30,000 vacant lots in the urban core.
- Pittsburgh lost half its population when the steel industry died.
Positioning Prefab for Pittsburgh’s needs.

1. Remediate Blight

2. Increase Equity
   a. Affordable Homeownership
   b. Minority & Women-owned contracting

3. Promote Sustainability
“RIGHT-SIZED,” USER CENTERED DESIGN

- Permeable parking pad
- Open living area with large windows & lots of natural light
- Aging in place Transitionless Concrete floor
- High ceilings
- Aging in place wider paths of circulation
- Large deck
Black Street: Mixed Income Housing

Affordable For-Sale (80% AMI)

Market Rate For-Sale

Two-family incl. built-in “ADU”
Black Street: Pre-development & Ground-breaking

Summer 2019

November 2019
Black Street: Factory Production and Installation

February 2020

March 2020
Black Street: Finishing and Ribbon Cutting

June 2020

August 2020
Case Study: Black Street
Time is Money; We build up to 40% faster than traditional construction.
We deliver significant savings for the developer

### Value Prop

<table>
<thead>
<tr>
<th>3 Home Development: Module vs. Traditional Site-Built (445 Day Timeline)</th>
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<tbody>
<tr>
<td><strong>Excavation &amp; Foundations</strong></td>
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<tr>
<td>MODULE</td>
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<tr>
<td><strong>Vertical Construction</strong></td>
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<tr>
<td>MODULE</td>
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<tr>
<td><strong>Finish Work (On-Site)</strong></td>
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<tr>
<td>MODULE</td>
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### Indirect Cost Savings over 172 days

- **$10,560** - Reduced interest payments - Completing the project faster means 6 months fewer monthly payments on a construction loan.
- **$10,800** - Rent - Leasing up earlier brings in two quarter’s worth of additional revenue.
- **$1,800** - Utilities - Reduce utility payments by six months during construction.
- **$6,250** - Staff Time - Spend less on project management staff due to shorter project duration.

**$29,410 Total per unit savings**

[Read the case study](#)
80% more energy efficient, with lower lifecycle costs.
Putting $$$ back in homeowners’ pockets.

- All-Electric, no fossil fuels onsite.
- Solar-ready Design
- Enhanced ventilation system = better indoor air quality
- High performance building envelope.

- $46,800 savings over 30 year mortgage.

Energy Bill Comparison

<table>
<thead>
<tr>
<th>Annual Energy Bills</th>
<th>Module Home</th>
<th>Average Home</th>
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<tbody>
<tr>
<td>$0</td>
<td>$1,156</td>
<td>$2,752</td>
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<tr>
<td>$1,000</td>
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$1,596 / year
Scaling our Impact Beyond PGH
We’re Developing a Hub & Spoke Supply Chain Strategy
Regional Production Hubs with pricing power supply Last Mile Facilities to assemble & install.

1. Production Hub
   - Regional Factories
   - Producing Structural & MEP components.
   - Ship to Last Mile

2. Last Mile Facility
   - Local Warehouse Facilities
   - Assemble Components, and finish units (painting, appliances, tile).
   - Ship to Job site

3. Project Site
   - Last Mile Crew handles installation of units.
   - Finishes out vertical construction.
Our goal:
Open 5 Urban Modular- Factories

Good Jobs & Local Ownership
Provide living wage and opportunities for local ownership at each facility.

Focus on Equity
Fostering a culture where women & people of color thrive.

Prioritize Affordable Housing
Offer preferred terms to those building new affordable housing.
Phase 1: Last Mile Lab - PGH

Fueling innovation in the homebuilding industry while furthering Module's mission to create a more diverse, equitable, and inclusive way to build new housing.
Developing better solutions, from homebuilder to homeowner.

We will test new building products and installation methods for the modular housing industry. Alongside our Innovation Partners, we are creating case studies on “factory-friendly” products & materials.

Research Areas

- Interior Finishing
- Exterior Finishing
- MEPs
Building the future of the construction workforce.

Workforce Training Program

We’re partnering with the Trade Institute of Pittsburgh to launch a training program teaching skills specific to the offsite construction industry focused on women & people of color.

- 6 week program
- Build Backyard Homes
- Apprenticeship Opportunities
Phase 2: Module PGH Production Facility

The 60,000 - 80,000 sq ft factory in Pittsburgh will build 200 homes annually and create 95 clean, advanced manufacturing jobs.
Phase 3: Open other regional facilities.
Join us on the journey to deliver better housing!

www.modulehousing.com

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We’ve delivered a dozen new homes across various markets and product types.