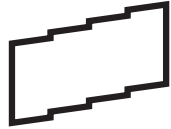




GBBN

PREFAB + AFFORDABLE INFILL

A GBBN STUDY



BUILDING WEALTH, BUILDING HOMES, SAVING CARBON.

Crisis & Opportunity

There is no easy fix to the affordable housing crisis. With cities facing affordable housing shortages of tens of thousands of units, any strategy must be multi-pronged. This study explores the potential of prefabrication to help overcome that deficit while recreating lost density within the fabric of existing neighborhoods. It seeks to define opportunities to foster community, enhance neighborhood identity, and build generational wealth with prefabricated, single family homes.

A modular affordable housing strategy offers the promise of:

- Building equity and generational wealth for homeowners,
- Improving energy efficiency and comfort through high-performance, prefabricated building components,
- Shortening construction timelines and reducing development costs,
- Enhancing and stabilizing neighborhoods with compelling design,
- Minimizing the environmental impact of new construction by reducing waste.

At the appropriate scale, a modular approach to affordable housing can be combined with Passive House design to reduce residents' energy burden by 70% while remaining economically viable.* Lower energy costs help keep homeownership within reach.

With renewed investment in affordable housing and home ownership at the federal, state, and local levels, now is the time to embrace bold, new designs. Now is the time for modular.

GBBN intends this study as a framework for partnering with developers, community development corporations, funders, and landbanks to revitalize infill sites in support of pedestrian-oriented neighborhood development. The framework is flexible and scalable.

**MIT Technology Review*

WHAT YOU NEED TO KNOW

HOW PREFAB CAN HELP.



Drive Down Costs + Speed to Market

Assembled from the same materials as any home, the size, massing, and material palette of prefabricated homes can be adapted to complement any streetscape. Built offsite, the assembly process minimizes human error, avoids weather delays, and can occur in parallel with site preparation.

The result: Homes are finished and occupied much more quickly than traditional construction; the rate of return on investment accelerates; and any premium associated with prefabrication is overcome.

Expedite Financing Process

Designed to ANSI 1171.1 and PHFA/OHFA accessibility requirements and adaptable to most sites, prefabricated, affordable homes can expedite the financing process, enabling communities to find development partners as they build generational wealth within their neighborhoods.

Deliver Quality

Assembled in a controlled environment, prefabrication minimizes error and waste, enables higher levels of scrutiny, and ensures the quality and performance of what is built. Good design ensures comfort and delight.

Invest in Equity + Sustainability

The same households that struggle to pay their rent or mortgage are also frequently burdened with unaffordable energy bills. By integrating passive strategies into their design, prefabricated, single family affordable homes can save their owners energy and money.

With standard designs that are adaptable to most infill sites, prefabricated housing can also ease LEED and Passive House certifications, helping to secure any incentives associated with them.

Prefabricated, affordable single family housing can also be used in conjunction with larger multifamily development to create more diverse, stable neighborhoods where residents are able to age in place.

An investment in sustainability is also an investment in equity.

BOLD DESIGN, ELEGANT INFILL

In an era of automation, digital technology, and new, sustainable building materials, prefabricated homes are not what they once were. They're better.

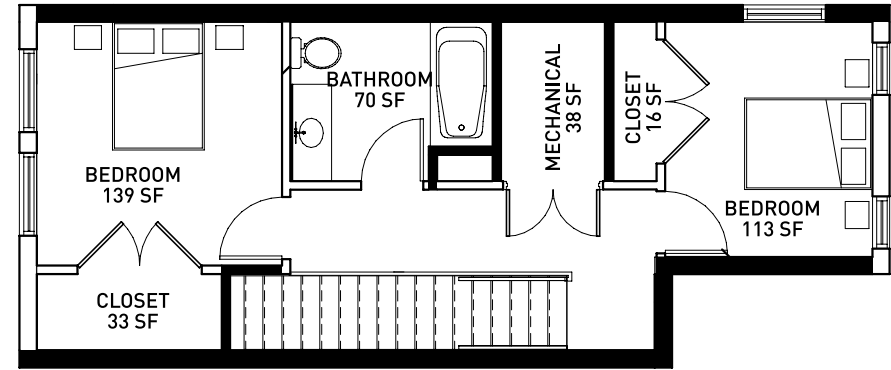
Widely embraced in the United Kingdom, Japan, China, and Scandinavia, modular design and prefabrication are speeding the delivery of low-cost, high-quality housing.

2 BEDROOM

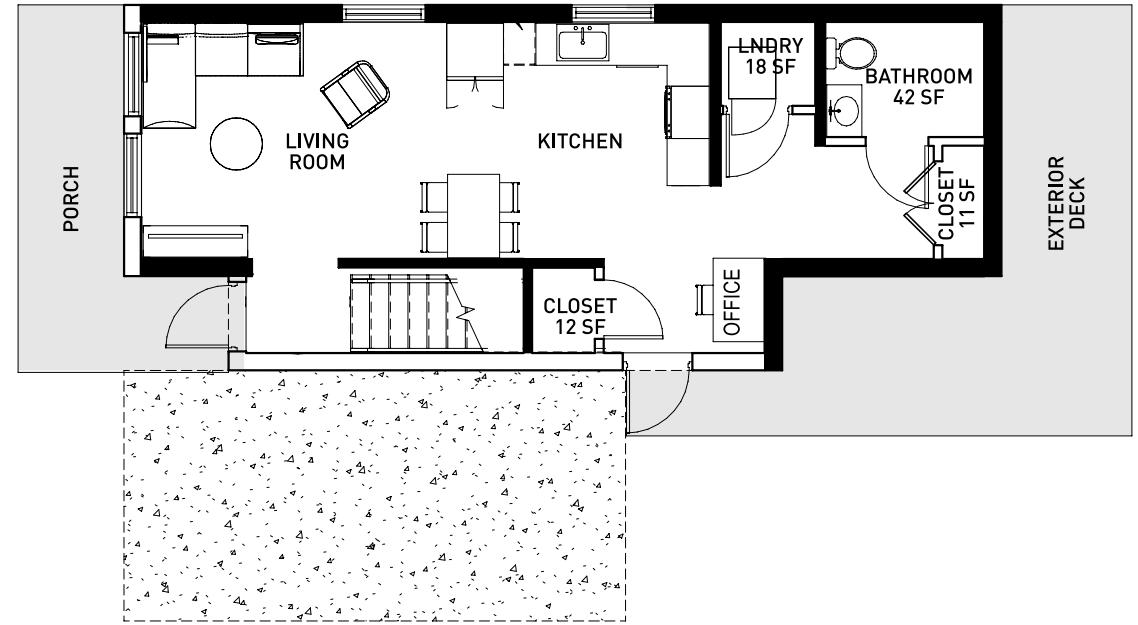
1,068 SF



SECOND FLOOR



FIRST FLOOR

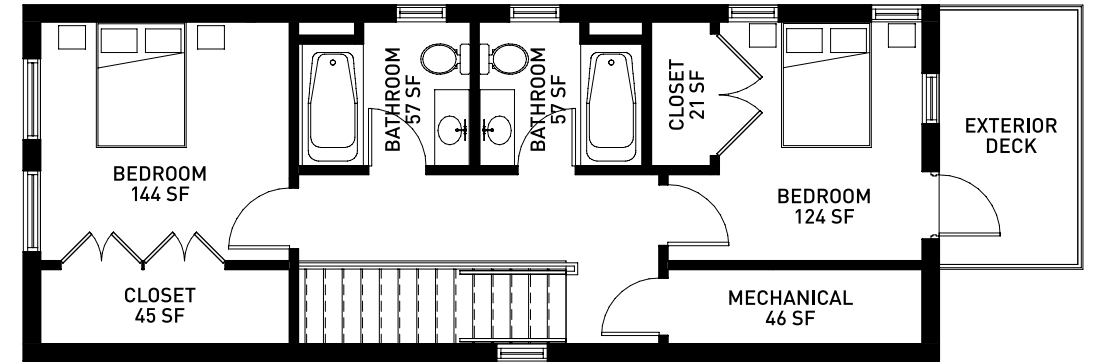


3 BEDROOM

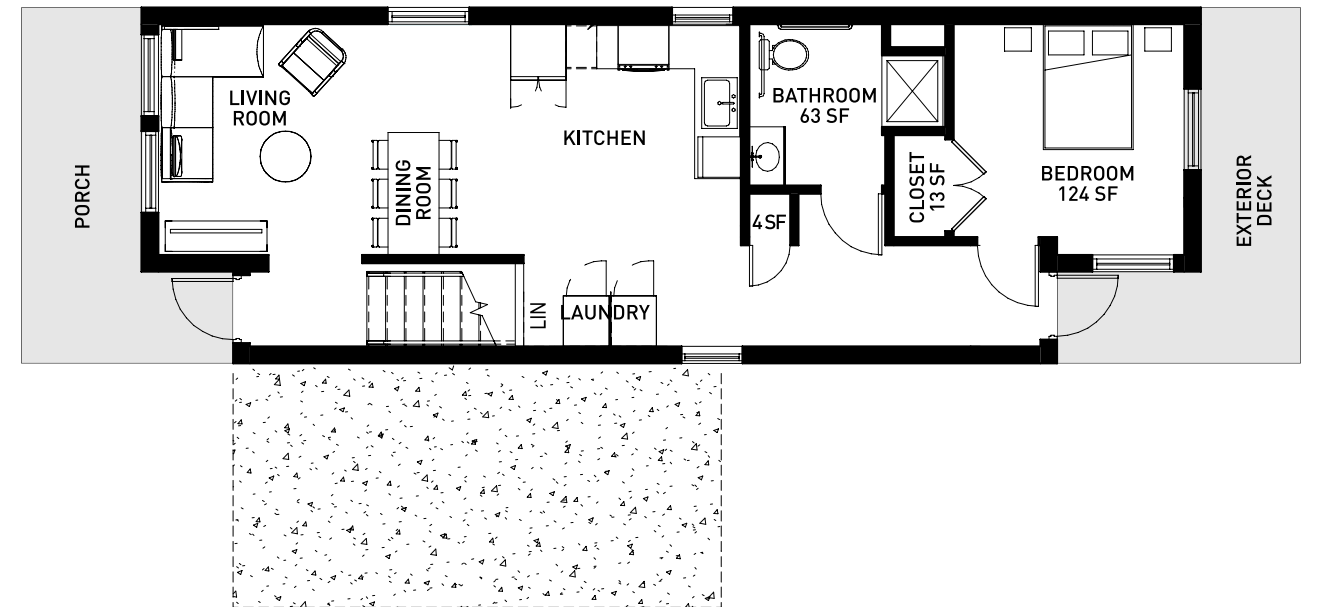
1,324 SF



SECOND FLOOR



FIRST FLOOR





A VARIETY OF SOLUTIONS FIND YOURS.

From panelized steel and wood wall assemblies to precast concrete to fully modular designs, prefabrication takes a variety of forms. And people choose them for many different reasons. GBBN has a breadth of experience with a variety of prefabrication techniques. For instance, when designing Tree Pittsburgh's new headquarters, we used fully modular design to minimize soil disturbance on a sensitive brownfield site while creating a tight exterior envelope. At the Edge on 4 in Louisville, we used a panelized steel stud assembly to speed the production of units, accelerating our client's return on investment.

Vanke Xinyuan
Panelized Construction



Edge on 4
Panelized Steel Wall
& Truss System



St. Ambrose Apartments
Fully Modular Design
LEED Silver



St. Ambrose Apartments
Modular Diagram



5th & Dinwiddie
Panelized Wood Wall System
Passive House Certified
(TRACKING)



Tree Pittsburgh HQ
Fully Modular Design
Net Zero Energy



Sample of

NATIONAL REGIONAL & LOCAL AWARDS

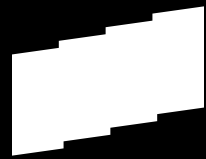


We work with visionaries to create spaces that **enhance experience and empower people.**

We combine technical mastery and creative tenacity to find design solutions that help organizations do their best work and achieve their goals.

We see architecture as more than just buildings, because positively impacting people is the most important thing we do.





**POSITIVELY
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THING WE DO.**



ENHANCE & EMPOWER