

Residential Off-Site Construction: Misconception vs. Reality

Builders, architects, and homeowners are often unfamiliar with off-site construction, and there are a number of benefits (and outdated misconceptions) that this fact sheet discusses. Off-site construction refers to the construction of a building in which various parts are fabricated in an off-site factory and later transported to a destination site for final construction and assembly. The construction industry would benefit greatly from broader adoption of this sustainable, efficient, and flexible method of quality construction.

Misconceptions of Off-Site Construction

Only Refers to Mobile Homes/Manufactured (HUD) Housing

Misconception: Off-site construction is solely represented by mobile homes (transportable prefabricated structures, completely built in factory with a permanently attached chassis base).

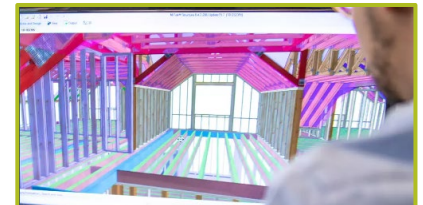
Reality: Off-site construction offers fabrication methods that result in homes that are indistinguishable from site-built homes when complete.



Creates Cookie Cutter Designs

Misconception: Off-site construction utilizes repetitive methods of building design that result in home uniformity.

Reality: Off-site construction allows variability and customization.



Has Confusing Regulations

Misconception: Off-site construction results in a problematic inspection process.

Reality: Clear inspection protocols exist for both off-site and on-site inspections. [Read More](#)



Lacks Flexibility

Misconception: The on-site coordination required to assemble a prefabricated home is difficult.

Reality: The coordination and management of a home constructed both off-site and on-site is more efficient due to the simultaneous preparation of the foundation (on-site) and the prefabricated home components (off-site), resulting in a **20-50 percent shorter schedule**. [Read More](#)

Realities of Off-Site Construction

Residential Off-Site Construction Offers a Variety of Quality Methods that Suit Many Requirements

Pre-cut

The most common use for pre-cut methods is for roof trusses, but pre-cut systems can be used to construct an entire home. Pre-cut lumber can be labeled and keyed to construction drawings for easy on-site assembly:



Panelized

This house is built from panels constructed at an off-site location. The structurally-insulated panels pictured to the right are frequently used for their energy efficiency and durability:



Modular

The modules used to construct this house include walls, floors, windows, and doors. Most of the electric, plumbing, and heating is installed in the factory and then connected on-site:





Realities of Off-Site Construction

Off-Site Construction Utilizes Modern Technology to Create Homes that Are

Energy Efficient

- Materials are cut and used in controlled factory environment that allows for cost-effective construction processes that maximize efficiency and quality.
- Precision cutting **allows for tighter fits and better seals between materials.**
- Energy efficient building methods, such as easy-to-install continuous insulation, **reduce thermal bridging.**

Built to Meet Local and State Building Codes

- Off-site construction has been found to have **half the defect rates** of on-site construction. In best class practices, quality-controlled factory environments and industry standardization have resulted in a **defect-free rate of over 95 percent.** ([The Official Revolution in Construction, 2019](#))
- May utilize **third-party inspection** programs for quality control and assurance,
- Remote virtual inspections can **facilitate required off-site inspections.** Code officials are being trained and familiarized with separate factory and on-site inspections.

Customizable

- Advanced off-site technology utilizes 3-D design software that gives customers creative control to **customize the internal and external design** of their prefabricated home.

Timesaving

