

Modular Homes Make Sense

Factory-built homes offer all the amenities of traditionally built homes, often at reduced cost and increased quality.

Modular homes are like the hybrid car of the house-building industry. They save money, they make sense, but they haven't caught on yet. General misconceptions keep many from considering going modular, and the confusion between modular homes and manufactured (mobile) homes has led to regulations and restrictions being placed by towns that have new home builders scared into going the traditional route. But the word is getting out. It turns out modular homes are in many ways superior to stick-built homes, and, once assembled, cannot be distinguished from their traditionally built counterpart.

What is a Modular Home?

"There is no such thing as a modular home," states Dave Boniello, Vice President of Sales and Marketing at Simplex Industries, a Pennsylvania-based modular home manufacturer. It is a matter of the literal meaning of the word modular, which insinuates a standardized unit or repeatedly used structural component. "The modular homes industry uses a system-built technology," Boniello explains. "The homes are built in a factory in a controlled environment. They are built in a system."



Direct from the factory. The first section of the Modular Mountain Retreat project house is lowered onto the foundation by a crane.

Simply put, a modular home is one that is built in a factory, usually in assembly-line fashion, and then transported to a site in large units. These units are then lifted from the transport by crane and rested on a pre-built foundation and fastened together. The entire process takes a fraction of the time it takes to build a house on-site, and the finished product can cost a good deal less.

Customize, Customize, Customize

"There is nothing you cannot do with a modular home." So says Chad Harvey, the Assistant Director of Government Affairs with the Modular Building Systems Association. Harvey, who splits his time between apprising Association members of any new industry regulations and seeking new ways to educate the public on the benefits of modular homes, is a firm believer in the industry he represents. "Anything you want in a modular home, you can have."



Workers at the Simplex Industries

Many people incorrectly equate modular homes with

manufactured or mobile homes. To these people a modular home is a one-size-fits-all boxy construct made of low-end materials and generic products. "The biggest public misconception on modular homes is that you can only build what is in the brochure," Boniello explains. The ability to fully customize is just one of many distinctions between modular and manufactured housing that Boniello wants the public to be clear on.

plant in Scranton, Pennsylvania, maneuver a section of the Modular Mountain Retreat project house into position for additional assembly work.

Modular homes today can be built to any specification and any size. From a simple one-and-a-half split-level ranch to a grand, three-bath, 3000+ square foot two story — the industry has it covered. And any amenity one can think of can be included. Think whirlpool bath in the master suite, [granite countertops](#) in the kitchen, or even structured wiring in every room. Although most modular home companies use the same product for each component of each house on the assembly line, it is still possible to substitute another brand to suit a homeowner's desires.

The Process of Building a Modular Home

Once a potential homeowner has decided to go with a modular home, there are a few steps to take that are relatively consistent regardless of which modular home building company one is working with.

First a homeowner must [select a modular home manufacturer](#). The majority of manufacturers are located on the East Coast, and some are very specific as to what states they will ship their homes. Since it is usually necessary to include a local builder or developer in the process it may be helpful to consult with this party for advice on manufacturers. Many local developers have established relationships with certain manufacturers, so this is a good place to start.



Weather-tight work conditions at the factory speed the modular home building process.

After a local developer and manufacturer have been decided on, the homeowner must choose a floor plan and select from a wide range of options. When these decisions have been made and an initial contract is signed, the manufacturer's engineering staff overlooks the plans and the [factory](#) can go to work on constructing the home.

Once the manufacturer has begun building the home in the factory, it is usually just a matter of weeks before the units are ready for transport. As the work in the factory is taking place, on-site construction of the home's foundation by the local builder is being done to ready the site for the arrival of the home. "Because the foundation is being laid on-site as the home is being built in the factory, the overall construction time is dramatically reduced," says Harvey.

The modular home is then shipped to the site on flatbed trucks. The units are then placed by crane onto the foundation, and the entire home is fastened together. At this point, the amount of time until the homeowner can move in depends on a number of things. "Some customers want to put on custom trims, or finish the basement," says Boniello. There are plumbing and electrical tie-ins to address as well. Completion time after the units have been placed can be anywhere from a couple weeks for simple designs to 90 days for complex custom jobs. The average completion time from initial order to move-in is roughly three months, compared to

an average completion time of about six months to a year for a site-built home.

Built-in Strengths

While this may seem a matter of opinion, there are a few areas in which modular homes have stick-built homes at-large beat. "Modular homes," Harvey declares, "are built with 20 to 30 percent more materials than typical stick-built homes because they have to withstand the transport from the factory to the site." In a FEMA (Federal Emergency Management Agency) study following the Hurricane Andrew in 1992, it was found that wood-frame modular homes in hard-hit Dade County, Florida, stood up to the devastating winds better than stick-built homes. The finding states: "Overall, relatively minimal structural damage was noted in modular housing..." The report also points out that the construction method of modular homes "provided an inherently rigid system that performed much better than conventional residential framing." The use of more materials also equals greater energy efficiency — another money-saver.



All in a day's work. In just a few short hours, the bare foundation now supports an almost complete home.

Controlling Costs

Modular homes are [built in a factory](#). This is a controlled environment that is unaffected by variables that plague site-built homes, such as poor weather and theft or vandalism. Not only does this cut down on construction time (which saves money) it can lead to a better product. A quality modular home is assembled using top-shelf products that can be purchased by the modular home manufacturer from suppliers in large quantities at reduced costs. "We're not ashamed of the products we use," says Boniello. "We can guarantee brand names. Site-builders use what's on-hand...what's available. They don't have a Purchasing Department who can source products like we can."

Modular homes are built to the state and local regulations of wherever the home is to be transported. In order to assure that each home passes inspection, every manufacturer's factory has third-party inspection. This means every step of the home's construction is reviewed and checked by inspectors who are up-to-date on the state and local codes of the home's final destination. "Our homes do not leave the factory until they meet or exceed state code," says Boniello.

Purchasing a modular home can save money. While it is impossible to affix an exact figure, Boniello suggests savings can be anywhere from 5 to 25 percent over building traditionally. Right now the modular home industry accounts for 7 to 8 percent of all new home sales. But that number is on the increase as the public becomes more educated on the superior qualities of the modular home. "Modular housing is coming into its own," Harvey summarizes. "The South and West coasts are largely untapped frontiers [for the industry]. There is no reason why sales won't continue to increase. The future outlook is very strong."

Text by Benjamin Hardy

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