

Modular Homes:
The New Face of Home Building



**Modular
Building
Systems
Council**



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What Is A Modular Home?

Modular homes offer consumers quality construction methods that take advantage of modern technology. Contrary to a conventionally-built home, which is assembled on the home site, piece by piece and exposed to the elements throughout the entire construction process, modular homes are constructed in segments (called “modules”) in a climate-controlled factory by skilled craftsmen using precise machinery and methods.

Before a modular home leaves a factory, it is inspected by an independent third-party agency to ensure it meets your state building codes. Built to withstand the rigors of ground transportation and being lifted into place by a crane, many modular homes are typically built to stronger standards than conventional homes. For example, most modular homes are built with more framing materials and utilize multiple engineered methods to fasten these materials.

Once the main modules of your new home are constructed in the factory, complete with attached walls, floor, ceiling, wiring, plumbing, and interior fixtures, they are transported to your home site and placed on a permanent foundation by a crane. Depending on the size of your new home, it could be fully set on-site and weather tight in as little as one day.

Being constructed in a climate-controlled environment ensures that your new modular home will have consistent, level floors, square frames, and virtually no margin of error in finishings and trims.



Modular construction combines factory technology with centuries-old building techniques to produce a cost-effective, efficient, and beautiful home.





The Benefits of Your Modular Home

Speed of Construction

Among the most popular benefits of modular construction is quick turnaround between groundbreaking and occupancy. Some owners are able to move into their homes just months after initial contact with their modular home builder. Many custom modular homes are built in just a fraction of the time a comparable custom site-built home could be constructed. For home buyers who prefer to move into their new home sooner rather than later or who live in an area with a shorter building season and fickle weather, modular construction offers a timely solution.

Quality Control

One of the greatest advantages to modular construction is control. Building homes in a factory setting allows for more consistent quality due to uniform construction processes, training techniques, and inspections.

Factory assembly lines have been embraced by Americans for decades because of the efficiency of the process. Modular home manufacturers apply those efficiencies to the home building industry. Each worker in the modular plant has been trained to do a particular job and through experience, has become an expert in that one aspect of home construction. In site-built construction, most contractors' employees do a range of jobs from framing to roofing to installing floor covering. They may or may not be skilled to any one home building task, and are instead doing everything.

Modular home buyers can always be assured their home meets or exceeds all state building codes. All modular homes are inspected by an independent, third-party home inspection agency before the home leaves the factory. Once a modular home is erected on-site, it is again inspected, this time by a local building inspector, to ensure that the new home is built with the quality and structural integrity required in your community.



Cost Control

There are many factors that may make modular homes more cost-effective than site-built homes. Modular home producers are able to purchase materials in bulk and store those materials for a longer amount of time than most conventional builders. When material costs increase, so does the savings of bulk buying.

Modular homes also control home building costs after the modules leave their production facility. Weather delays, which cost both the home builder and buyer time and money, are reduced significantly. Also, there is less theft of building materials on a modular construction site; once the home is set on its foundation, it is more complete and secure.

Design Flexibility

While most modular home manufacturers have a portfolio of home plans, there are limitless design possibilities when planning your new modular home. Most architects and designers use computer-assisted design (CAD) programs to accurately sketch customizations into a floor plan. The modular industry takes CAD to another level; not only can your customizations be designed through computer software but the program will communicate your designs to the machinery in the manufacturing facility, ensuring your custom home design is built accurately and precisely.

Energy Efficiency

The construction process of many modular homes allows for easier identification and filling of gaps around pipes, electrical outlets, windows, doors, and exterior sheathing. Not only does this make many modular homes tighter, but allows for less air infiltration and advanced energy efficiency, resulting in lower heating and cooling costs for the homeowner.





History of Modular Homes

Modular construction, often considered the future of the home building industry, has roots near a century old. Two significant events in the first thirteen years of the 20th century have lead directly to the evolution of today's modern modular home.

In 1908, Sears Roebuck & Company began selling kit homes through its popular catalog. While these kit homes were not constructed in any way before reaching the home site, they were among the first homes to have their complete system of materials transported to a home site. A Sears home buyer could expect their kits, complete with 30,000 pieces and a 75-page instruction manual, to arrive via train.

In 1913, automotive pioneer Henry Ford introduced the assembly line concept at his automotive plant. Ford's revolutionary idea reduced the construction time of a new automobile significantly, while maintaining control and quality at each step of the process. Nearly a half-century later, the concepts introduced by Ford and Sears Roebuck & Company would be married at the dawn of the modular home industry.

In the 1950s, to meet the steady demand for new homes following World War II, companies began to produce homes in factories. These homes were equivalent to today's HUD-code or mobile homes and were not modular homes. But when a home manufacturer first produced a two-section home conforming to an applicable building code in 1958, the modular housing industry was formally born.

In the decades that followed, the modular housing industry worked hard to differentiate itself from the HUD-code home industry. HUD-code manufactured homes, often called mobile homes are built to a Federally-mandated (HUD) building code. Modular homes are built to meet all state building codes, erected on a permanent foundation, appreciate in value and are virtually indistinguishable from site-built homes.

Through the 1970s, most modular homes remained simple rectangular, two or four-module structures. But with the advent of computers and Computer-Assisted Design (CAD) programs, the modular industry began to move, literally, outside of the box.

Today's modular homes rival any site-built structure in design and functionality. Advancements in computer design and factory technology allow almost any custom home plan to be constructed as a modular home. For buyers interested in a fine-crafted home that can be built and completed in a fraction of the time as a conventional home, modular housing has become the preferred type of construction by many.



The Modular Building Systems Council, part of the National Association of Home Builders, is America's resource for modular construction. From connecting manufacturers with customers to helping builders convert to modular construction, the council has a wealth of information and experience with modular housing. The council is one of NAHB's Building Systems Councils, representing the systems-built housing industry across the country. For more information about modular home building or to find a manufacturer serving your area, visit <http://www.nahb.org/modular> or call 800-368-5242 x8576.



Why A Modular Home Is Right For You

The advantages of choosing to build a modular home do not end with the speed of construction, quality control, cost savings, or overall efficiency. It's about peace of mind and knowing that you have purchased a quality custom-built home to enjoy for years to come. Whether you're considering an expansive ranch, towering two story or mountain chalet, modular construction is a viable option for nearly every new home buyer or existing home owner. Today's modular designs and method of construction are ideal for "ground up" new home projects, additions, or remodeling of existing homes.

Building Your New Modular Home

Purchasing a new modular home is very similar to purchasing any type of new home. Step one is selecting the right builder. Most manufacturers depend on a network of reputable builders to work directly with interested home buyers for the length of the construction process. These independent contractors will guide you through the building process from start to finish. As your primary point of contact, they will help with floor plan selection or assist with custom designing a home that meets your needs and lifestyle. You will have the opportunity to select from an array of custom upgrades and options to truly personalize your new home. After plan and specification approval, your new modular home will be constructed in a climate-controlled manufacturing facility. Each phase of the building process will be closely monitored to meet high quality control standards and your expectations. Many builders and manufacturers encourage new modular home buyers to visit their manufacturing facility. Doing so will give you the opportunity to see first hand the quality craftsmanship and efficiency of modular construction. If the timing works out, you may even be able to watch your new home being built right in front of you! Upon construction completion at the factory a delivery and on-site finish schedule is established. You should work closely with your chosen builder while coordinating the completion of the on-site finish work.

If you need assistance in locating a modular builder in your area, you can contact a manufacturer directly and a company representative can direct you to the nearest builder serving your area. Begin your modular manufacturer search at www.nahb.org/modular.

Design Your Home for the Building Site

A number of new modular home owners already have their ideal home site purchased before settling on a home design. Modular construction is popular with existing landowners because many times your dream home site sits in an area where skilled labor is scarce or a short building season can significantly delay new home construction. In order to maximize the value of your property it is important to select the right home for your lot. Your design selection should complement the lot size, topography and surrounding homes. Your builder can add valuable assistance in the customization and design process.

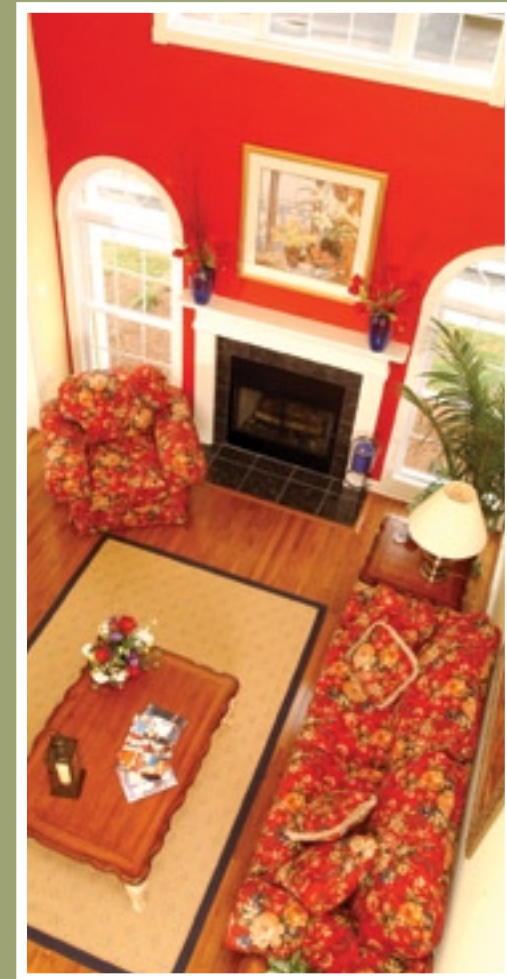
If you do not own land and are looking to purchase property you have the opportunity to select a site that will fit some of your existing design wants and needs. With the appeal of modular construction growing within building communities, there has been an increase in modular home neighborhoods and subdivisions. There are also many home sites available in existing subdivisions where your modular home can be constructed. Whether your building site is in a city, suburban, or rural setting, be sure you check with your local building and zoning departments for code requirements unique to the subdivision or area.

Remodeling, Additions & Teardowns Easier With Modular

Modular construction isn't just for building new homes anymore! The sophisticated construction type makes remodeling, building an addition, or a complete knockdown faster, easier, and more efficient.

If you are planning on knocking down an existing home and re-building on the same site, a modular home will displace you for just a few short months, allowing you to quickly move into your dream home.

Consult with a modular builder or manufacturer to determine how you can best take advantage of the speed, efficiency, and beauty of modular construction.





The “Hidden” Advantage of Modular Financing

A pleasant surprise to many home buyers appears during the construction financing stage of a modular home purchase.

Most construction times for modular homes are significantly shorter than conventional construction methods, therefore, home buyers can receive significant savings on interest costs incurred during the construction process!

Financing Your Modular Dream Home

Today’s modular home buyer has an array of financing options. Most mortgage companies make financing a modular home easier than ever and may even have departments or divisions specific to modular home financing. Just as you would research multiple modular manufacturers, be sure to consider all options when securing financing for your new modular home. While the financing process can vary slightly from company to company, many new modular home loans are construction-to-permanent loans that follow a general template similar to any new home purchase.

During the financing process, home buyers can expect to proceed through the loan application and underwriting stages just as they would for any other new home purchase. The appraisal process is also similar; in fact, a home appraiser is not limited by construction type when determining the value of your home. Comparables to your new home may likely be similar site-built homes with comparable square footage and design features.

When your modular home is being constructed, money is disbursed to the borrower and the builder/contractor in the same manner as it would be during any new home construction process. During construction, the borrower will typically make interest-only payments to the lender on the funds as they are disbursed. This is one of the greatest advantages of modular housing because the construction time frame is reduced during the financing process (see sidebar). Additionally, modular-friendly lenders will offer special funding options upon the scheduled delivery of the modular units to the building site.

If you have a construction-to-permanent mortgage, your lender will send a modification package to convert the loan after your home is constructed and the final home inspection is complete. Once the mortgage is closed and the closing costs are paid, you officially own your new modular home and begin making regular mortgage payments.

Enjoy living your dreams in your new modular home!



Find a listing of modular-friendly lenders online at www.nahb.org/modular.





By Land or By Sea: Modular Homes Go Anywhere

Dream homes rarely reach dream status without the right setting. But when your dream setting is surrounded by water, or high atop a mountain, or even outside the contiguous United States, is modular construction still a viable option? No matter where your dream home's location is, the answer is a resounding yes.

Bill Holztrager found his perfect site three years ago in Harbor Village on Bald Head Island, off the coast of North Carolina. Home to perhaps only 120 permanent residents, the island is a popular summer destination, making Holtztrager's second home both a vacation get-away and a hedge against retirement.



“It was an admittedly tight site, but it has these stunning views of the harbor, the Cape Fear River and a salt water marsh that’s just teeming with wild life,” says Holtztrager.

But with a building site reachable only by ferry or private boat, the typical troubles of building a home in a timely or financially feasible fashion multiplied exponentially. “You’d have to ferry both men and materials out and back; shipping materials out, bringing scrap and waste back. You’re paying freight on that both ways, as well as travel time for your building crews--when you can find them. And if you run out of something, you can’t just run out to the local lumber yard.”

Geography wasn’t the only challenge. Because the island is firmly in the center of “hurricane alley” where the Atlantic Ocean churns up fearsome storms in the warm summer months, the local building codes have a suitcase-sized list of engineering requirements and specifications to handle rain and wind. Then there was the architectural review board on the island, which has block-by-block covenants that cover everything from window sizes and exterior details to elevations. For these and other reasons, Holtztrager embraced modular technology to negotiate the labyrinth-like maze of logistical challenges.

Each of the four modular sections had to be kept to 12’-wide to fit on the 14’-wide barge, which ferried the sections and the crane to set them. “This was my first time using modulars and I can say it is pretty much easy street from a traditional builder’s point of view. The on-site execution went flawlessly,” said the home’s builder. “We had good weather conditions. And the set crews really knew what they were doing. It went together perfectly.”

Few Boundaries to Modular Construction

When a home site is accessible only by barge or treacherous roads, using modular construction seems counterintuitive. But many times when a home site is hard to reach, labor, materials, and time are also difficult to come by. In fact, when a home site is particularly difficult to access, modular is often the preferred method of construction.

Building Systems Councils members have experience shipping homes to out-of-the-way locations. Whether carefully placing home modules on a barge with less than two inches to spare on either end, placing modules gently on top of a cargo ship bound for Alaska, or even flying modules over mountains, BSC member modular manufacturers can get your home to your home site. The savings when comparing modular to site-built in these remote areas is often significant, allowing you more time and money to enjoy at your dream home site.

Think your dream home location is too precarious for modular construction? Consult a BSC member: www.nahb.org/modular

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Modular Means More Than Single-Family

Modular construction may be most popular in the single-family home market, but there is no limit to what type of project can be built with modular technology.

From developers looking to quickly take advantage of a favorable rental market to a school board concerned with its classroom size, modular construction can tackle any size project, including multifamily and light commercial.

Building Systems Councils modular manufacturers have taken on a variety of challenging multifamily and commercial projects that could have taken twice as long and cost twice as much had they been built on-site.

From traditional brick town houses, condominiums, mid-rise apartment complexes, school buildings, offices and more, modular manufacturers can complete nearly any multifamily or light commercial project conceivable.

When time and cost-control are of the essence, and quality construction matters, modular technology delivers.







Modular Building Systems Council

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