

The Modular System At Work

Delivering the American dream faster and with better quality.

In this new housing economy, the modular building system is coming into its own. That's because it allows small-volume independent builders to reduce their staffing even more. A manufacturer's staff of engineers, designers, marketing wizards and experienced tradespeople can be your staff—with no extra cost to you. You'll save on payroll and health, unemployment and worker's comp insurance costs.

Even more appealing are the new designs that manufacturers are building. In the last 10 years, this industry has dramatically expanded its construction capabilities. Long gone are the boxy configurations and ho-hum floor plans. CAD or computer aided design has changed that. Now cathedral or tray ceilings, open foyers, hardwood floors, custom cabinetry, built-ins, granite countertops and upscale lighting are all commonplace.

The shallow single-line 2/12 roof pitches of yesteryear are also but a distant memory. Today's modular homes can have 12/12 pitches with multiple roof lines, thanks to hinged roof systems, piggyback trusses and other configuration innovations that have come about. Cutaways, bump-outs and staggered configurations are breaking up the once boxy exteriors.

NO RETAIL PLEASE

Despite these technological advancements in design, manufacturers don't deal directly with consumers. That's where you come in, as the builder. Here's how it breaks down.

● **Builders**

Builders are responsible for working with buyers to make selections on the home's design and materials specifications. Modular homes today are completely custom, which gives independent builders an advantage over production builders who limit their clients to two or three designs in a subdivision.

● **Client Design Decisions**

Unlike site building, where design changes

throughout the long construction process, modular construction happens at warp speed. This is why clients have to make design and material decisions before construction starts.

● **Plan Approval**

Once plans are finalized, the modular manufacturer submits the plans electronically for approval to state-approved third-party plan review agencies, which ensure the home will meet building code requirements in the state where the home will be located. The manufacturer also contracts with third-party inspection agencies that are licensed by the states to perform the in-plant inspections. These third-party agencies place a label on the home that exempts modules from local inspection.

● **Factory Construction**

Modular homes are built in a factory setting where craftsmen use the latest tools and equipment and all raw materials are stored under roof, eliminating any water damage or mold issues. Structures leave the factory in sections that are up to 90% complete, wrapped in plastic to protect them from the elements. Structures typically come with bathrooms and kitchens fully finished, doors hung, and flooring and windows installed. Exterior treatments can run the gamut, from stucco and siding to brick, which can be applied on site.

● **Transporting Modules**

Carriers transport the modules to the job site, usually before the day of the set. These modules can be as large 16' wide and 64' long.

● **Set On Site**

Set crews or modular installers are either provided as part of a manufacturer's operation or they are subcontracted by the builder. These crews fly the modules in with the help of a crane, complete roof sections and make the home weather tight—often in a matter of hours.



Courtesy of The Modular Housing Training Institute.

FINAL FINISHES

Builders then complete final turnkey finishes, which includes water, sewer hookups, HVAC and mechanical, and framing of garages and porches (sometimes these are panelized to speed construction). Buyers are able to move into their new home just two or three months after signing a contract. This short construction cycle is what's appealing to many builders and buyers, since it reduces interest on construction financing and adds predictability to what is often an unpredictable process. ■

MODULARS AREN'T MANUFACTURED HOUSING

It's easy to confuse modular homes with manufactured housing, since both originate in a factory environment. However, these two forms of construction have separate building codes and market their homes to far different buyers.

Modular homes are built to the prevailing national or statewide building code—the same code site-built housing follows. Moreover, modular homes are valued and appraised the same as site-built structures.

In contrast, manufactured homes are built to the less stringent U.S. Department of Housing and Urban Development (HUD) performance code. These homes are built for the affordable housing market and many communities have restrictions on where they can be placed. They are often valued as personal property (so they depreciate, instead of appreciate like real property). After transportation to the homeowner's site, these single or double-wide HUD-code units remain on wheels or metal chassis.