

# To Stick-Build or Panelize?

*Panelization can ease management burdens and sometimes save money*

by Joseph Carusone

For years, most builders have relied to some extent on premanufactured building components. Who doesn't use prehung doors or manufactured trusses? What builders assemble and glaze their own windows?

Until recently, only large production builders found it economical to have the entire shell built in a factory. But that is changing. Over the past few years, we have seen a surge in demand for panelized housing components in the Northeast.

A shrinking skilled-labor pool and a more competitive marketplace are making various types of prefab building more appealing to smaller builders. The options range from preassembled wall sections, customized to any design, to complete modular buildings delivered to the site—with appliances and wallpaper.

Whether a rural jack-of-all-trades or a suburban "briefcase builder," builders may find definite advantages in

complete the shell.

Finally, some companies offer modular housing, in which almost all of the building, including interior finish work, is done in the factory. The house is shipped to the site in two sections (or four, for a two-story), and clamped together.

## Assessing Your Needs

You should analyze several factors before deciding to purchase components:

- How available is labor in your area? What about the quality and cost?
- What volume of business do you realistically anticipate? Do you want to do more?
- Are you able to produce or easily obtain plans and engineering to meet local and state building codes?
- Do you need help with marketing? Do you need more prospects? A sales edge?
- What image do you wish to project?

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using panelized components. Either type of builder should ask the same question: "Can panelized housing improve my performance and my profit, and can it make my business life more manageable?"

## Variety of Services

The decision to use panelized housing is really a matter of degree—to what extent should your company rely on premanufactured components?

Several types of component companies exist in the Northeast. Some produce components in conjunction with building-material suppliers, and some operate as separate businesses. The most commonly available components are, of course, floor and roof trusses, but many companies also offer wall parts—such as headers with jacks—or sectional wall panels. Wall panels are available with or without sheathing, and are typically custom-manufactured for each house. A few companies will build the walls in one piece up to about 40 feet long, with siding and insulation applied.

Another type of company offers not only the components, but complete building-material packages as well. These manufacturers, such as our own company, typically provide design and engineering services, along with marketing support and brand-name recognition.

The material packages contain panelized components such as wall sections, precut components such as joists and rafters, and the necessary siding, roofing, windows, and other accessories to

The potential benefits from using manufactured components or complete house packages are many. Most important, a small builder can build more houses with the same crew, or the same number of houses with a smaller crew by using pre-built and pre-cut components.

Typically, all door and window openings are already framed in. This allows a builder with a three- or four-person crew to erect the shell of a 1,500-square-foot house in a single day, once the foundation is in. The house can be weathertight—with roofing, windows, and doors in place—in a work week.

Faster assembly reduces interest costs on construction financing. Quicker building also reduces exposure to weather and theft on the building site.

Good quality work can be done with less experienced help than in stick-built construction. All that's really required is one experienced carpenter—whether it's the contractor or a foreman—plus a small crew of helpers and laborers. The homes can be small and plain or large and complex.

The quality of the work is equal to that of the best builders. Because all components are built and assembled in jigs, the cuts are precise and the assemblies are square. Materials are dry, and are assembled with corrugated fasteners that hold better than nails. Individual components, such as pre-cut joists, are preselected, so the builder does not have to reject any pieces.

The more sophisticated companies provide the small builder with fixed prices and guarantees that the materials

delivered will complete the job—that you won't, for example, run out of roofing shingles. These guarantees make it much easier for the builder to bid quickly and accurately. Some companies also help the builder estimate the quantities of other materials needed to complete the house.

The larger panelizers—those offering complete house packages—can also be a big help with code compliance. Home manufacturers have the engineering and architectural staff to stay abreast of state and local codes, and to negotiate with code officials when conflicts arise. They can provide complete sets of plans stamped by engineers, along with energy audits and the required detailing.

In addition, larger companies can offer the builder marketing aids, including sales catalogues, signs, customer leads, and design services. The better companies also offer technical backup, and, if required, arbitration. Our company, for example, recently provided free arbitration to resolve a payment problem on a job that, due to a conflict, was never completed. The contractor was paid, and no one went to court.

Finally, the small builder should consider the advantages of associating with a brand-name manufacturer. Many customers are more comfortable purchasing a home from a name they recognize.

## Potential Risks

Buying components or entire packaged homes does not get the contractor off the hook, because the panel manufacturer cannot replace carpentry skills. Builders are still responsible for the quality of the finished product. Even precision-cut panels and products can turn into a shoddy house in the hands of unskilled or careless tradesmen.

If you want to eliminate all skilled labor on site, modular housing might be the way to go. But that limits you to simple stock designs, and leaves you with almost no control over the end product.

With some panel manufacturers, you

will be limited to the stock plans they offer. Others are flexible. Builders who specialize in custom homes must look for suppliers willing and able to panelize custom designs.

## How Economical?

Labor rates determine the savings a panel manufacturer can offer. If builders can find inexpensive skilled labor locally, and are buying components from an area with high labor costs, then the savings may be nonexistent.

But if they are buying from a supplier who has low labor costs, and if their own labor pool is small and expensive, the savings can be considerable. Labor rates tend to be higher in and around metropolitan areas. If an urban contractor can find a rural panelizer, he or she stands to realize the greatest savings.

The builder should also consider site accessibility. Can the supplier's truck get close to the foundation? Will the company stage deliveries to suit the contractor's schedule—or will the load be dropped off all at once?

Some panelizers use cranes, while others expect the building crew to unload the materials. Eight- to 12-foot wall panels can be handled by a couple of workers, but for large beams, full-length walls, or other large assemblies, the builder may want to rent a crane for a day.

In 1985, nearly one-third of all new housing starts used some panelized components. Small builders everywhere are learning to use the services of panel manufacturers to boost their profits and to ease the management burden.

The trend is clear: As skilled labor becomes more scarce, codes more complex, and markets more competitive, panelized components will gain wider acceptance. ■

Joseph Carusone is vice president of *North-ern Homes*, Glens Falls, N.Y., which sells panelized custom homes.

## Panelizers in the Northeast

*The following is a list of companies in the Northeast and Mid-Atlantic states that panelize custom home designs. Most also offer stock designs.*

*A complete directory of housing and component manufacturers, the Red Book of Housing Manufacturers, is available from LSI Systems, Inc., 11-A Village Green, Crofton, MD 21114, 301/721-3838. The cost is \$60 per region, or \$140 for the U.S.*

Acorn Structures, Inc.  
P.O. Box 250  
Concord, MA 01742  
617/369-4111

American Standard Homes  
P.O. Box 4908  
Martinsville, VA 24115  
703/638-3991

Coastal Structures, Inc.  
P.O. Box 2646  
South Portland, ME 04106  
800/341-0300

Green Island Homes  
Center St.  
Green Island, NY 12183  
518/273-5473

Hilton Lifetime Homes  
P.O. Box 69  
Leola, PA 17540  
717/656-4181

Interstate Prepanelized Structures  
P.O. Box 530  
Honeoye, NY 14471  
716/229-2500

Kingsberry Homes  
P.O. Box 228  
Ft. Payne, AL 35967  
603/286-8792 (New England rep)

K-K Homes, Inc.  
Sunburst Homes,  
Div. of K-K Home Mart  
420 Curran Hgwy.  
North Adams, MA 02147  
413/663-3765

Luxury Homes, Inc.  
P.O. Box 277  
Bomoseen, VT 05732  
802/468-5045

New England Homes  
P.O. Box 1138  
Portsmouth, NH 03801  
603/436-8830

Nickerson Homes  
Main St.  
Orleans, MA 02653  
617/255-0200

Northern Counties Lumber, Inc.  
P.O. Box 97  
Upperville, VA 22176  
703/592-3232

Northern Homes  
51 Glenwood Ave.  
Glens Falls, NY 12801  
518/798-6007

Professional Building Systems  
Airport Industrial Pk.  
Glens Falls, NY 12801  
518/792-1048

Ward Component Systems, Inc.  
1300 Piccard Dr.  
Rockville, MD 20850  
301/948-0333