

September/October 2001

"Can Wall Panel Production Grow Your Production" by Brigit Frank

QUESTION: What's been around for more than 40 years? Could significantly grow your business? And, isn't an area that most component manufacturers have as a specialty?

ANSWER: Wall Panel Production

It seems appropriate to start this way because the topic of wall panel construction seems to be somewhat of a mystery to companies in our industry considering how long it has have been around. There is an indifference toward this type of product among component manufacturers that is difficult to explain. Currently, only 24 percent of WTCA members produce wall panels. However, several factors are changing this growing product area and making the possibility of adding a wall panel line to the average truss manufacturing business a tangible option.

The production of wall panels is a natural extension of the truss manufacturer's business. Both products have the same benefits and selling points for your existing customers: They are both predesigned, quality products that save time and increase the accuracy of the completed construction.

The problem with wall panels appears to be one of poor public relations. Their use simply hasn't gained the industry acceptance that other components have been able to achieve. Builders don't understand their benefits and, even worse, they sometimes see problems with their use instead of solutions.

These concerns among homebuilders stem from one fear—design changes. Most builders and contractors can understand the benefits of having products accurately built by professionals, and most comprehend why it is better to construct wall panels at the factory instead of exposing them to harsh weather conditions. But what happens if someone wants to move a window?!

According to Dan Holland, President of Clearspan Components, "Design changes are always cheaper before production begins. Having framers stand around at a jobsite can actually be more expensive than making changes to panels." Pat McGowan of Brunsell Lumber & Millwork agreed, adding that, "Builders need to be trained on the use of wall panels." Both feel that educating the builder about wall panels is probably the most important step to gaining their acceptance in the industry. If the builder requests it, Brunsell Lumber goes as far as sending a "trainer" to jobsites to educate the framers on the proper way to set the panels.

Despite this common type of argument against the use of wall panels, this fear is unfounded in today's market. There have been many changes and improvements in wall panel production in the past five to ten years, primarily due to advances in software and machinery, that make it worthwhile to give this product line a new look.

THREE CONVINCING ARGUMENTS IN FAVOR OF WALL PANELS

1. The Labor Market: As every business owner is aware, the pool of qualified labor in the construction industry is shrinking. This trend is alarming because it is not following the familiar ebb-and-flow pattern of the past. There are simply fewer skilled workers, despite the fact that the construction industry is still in a period of booming growth.

	Stick Frame	Component	Savings
Total man hours to frame the walls of a 2600 sq. ft. house	93 hrs	26.5 hrs	66.5 hrs
Total Jobsite Man-Hour Cost @ \$20/hour for Average Framing Crew Labor for the wall framing	\$1860	\$530	\$1330

WALL PANEL MAN HOURS:
STICK FRAME VS. COMPONENTS
CLICK ON IMAGE FOR LARGER VIEW

Lanny Morris of Triad/Merrick Machine feels that this tight labor market will provide a demand for wall panels. "As labor costs continue to go up and the skill of the labor force continues to go down," Morris explained, "wall panel production will become the widely accepted form of residential and commercial construction."

WTCA's Framing the American Dream® project illustrates the labor saving benefits of wall panels mentioned by Morris (see table). In this project, the stick frame house took 66.5 hours longer to frame than the house using wall panels! This is looked at in even more depth in Considerations for Contractors Building with Wall Panels, a new addition to WTCA's Truss Technology in Building series. Both documents are great to use to educate builders about using wall panels. This time savings will be very attractive to builders as the available number of workers who are skilled at stick framing continues to shrink.

2. Grow Your Business: Once a company is established in a community, the owner begins exploring possible ways to grow the business. In most cases, adding wall panel production may be the next logical step. The technology for wall panel production is similar to a truss manufacturer's existing set-up, and the current truss customer base will be the target for the new product line.

Adding new types of components will turn a single company into a one-stop shop for builders in need of this type of convenience. Jerry Koskovich of The Koskovich Company explained the marketing logic of the situation as, "Today's truss fabricator is looking at how he can get a bigger piece of the project pie. Similarly, the project developer, in many instances, is looking to centralize his purchase and buy a package from a single source." Component manufacturers that can offer the service of this centralized purchasing will become their customer's first choice.

In addition, manufacturing wall panels helps to eliminate seasonal peaks and valleys for the manufacturer and builder. "By factory building walls," Morris commented, "There is no longer a need to worry about the length of the regional building season. The panelizer can frame walls 12 months a year." This will give a consistent base of income for component manufacturers in Northern and Central climates and also give builders a larger calendar for projects.

3. New Technology: As with all areas of the component industry, new software and equipment

are making the manufacturing process faster, easier and more accurate. This ensures a quality product that was unachievable a few years ago.

Suppliers to the component industry are willing to listen to customer requests and design equipment and software that meets production needs. Pat McGowan of Brunsell noted, "Software programs continue to get better. The software and equipment that is available is actually ahead of builder knowledge."

These advances seem to be coming at an explosive pace since the computer revolution. Koskovich explains, "The wall panel industry has, of course, existed for a long time...perhaps even longer than the truss industry. However, it's only been in the past decade that software and computer-aided design techniques have become readily available...[this] in my opinion, is creating new interest and opportunity for the truss fabricator."

CONCLUSION

The possibility of a new line of products for an existing company can open some exciting doors. However, component manufacturers must continue to educate customers on the quality of components—including wall panels. Dan Holland summed up this need saying that, "Clearspan isn't competing against wall panel manufacturers. Our competition is coming from stick framers."

Industry acceptance and understanding of the benefits and limitations of wall panels will be necessary to increase their use in the market. In exchange, the production of wall panels may offer component manufacturers the opportunity to increase their business and ensure that components are the future of framing.

"Wall Panel Checklist"

To minimize the risk of problems with the use of wall panels and the fear of having customers come away with a bad experience, WTCA has developed a checklist as part of its new TTB, Considerations for Contractors Building with Wall Panels, to guide builders through the process BEFORE the wall panels are manufactured.

HEIGHTS:

- Are wall heights Nominal or Standard?
- Provide all Elevations. Different ceiling heights do not necessarily mean different wall heights.
- Are there any Short Walls (e.g. around the stairwell)?
- Are there Floor Level Changes requiring changes in wall height?
- What are the Garage Foundation Curb Heights?

OPENINGS:

- What are all the Rough Opening Sizes?
- Are Transom/Half Round Windows shown clearly over windows and doors?
- Who is the Exterior Door Manufacturer and what is the Exterior Door Type?
- What are the Door Rough Opening Sizes?
- What is the Tub Clearance? This is best expressed as the overall stud-to-stud distance.
- What is the Fireplace Chase Wall Height and Sheathing Type?
- What is the Stair Rough Opening Size?
- What is the Interior Door & Window Casing Width? With wide trim, additional clearance may be needed between the rough opening and perpendicular walls.

GENERAL:

- Should the wall panels be built As Drawn or As Reversed?
- Are dimensions Out-to-Out of Stud or Out-to-Out of Sheathing?
- When the Plans Reference Brick or Stone, be sure to supply all necessary dimensions. Often the plans do not indicate the distance from the face of the brick to the face of the stud.
- What are the Header Sizes for Interior Bearing Walls?
- What is the Wall Sheathing Type?
- What is the Corner Bracing Type?
- Should the manufacturer provide Treated Bottom Plates for installation on concrete or masonry?
- What are the Placement Dimensions for all Interior Walls, including skewed walls?
- Will there be Multiple Studs for Concentrated Loads from Girders, Beams, etc.?
- Will there be Pockets for Racks/Beams? What are the location, size and elevation of these pockets?

Please be aware that there are other business considerations that are not part of this checklist. For instance, your company will assume more risk in its lumber purchasing by producing wall panels because low lumber costs make wall panels a less cost-effective choice for builders. This problem may be exacerbated if you don't work with the framer to properly plan the job. This can lead to call-backs and hurt your business.

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