

FRAMING A HOUSE IN HALF THE TIME

USING PANELIZED COMPONENTS INSTEAD OF STICK FRAMING

A Conversation with Homebuilder Whit Smith on the Benefits of Panelized Construction

New building processes come and go, not always delivering on what they promise—just ask Whit Smith. He has tried a number of ways to reduce new home construction time and job waste, while looking to improve his bottom line and maintain high quality, but always came back to conventional framing. Then he considered panelized construction.



Whit Smith, President of Whit Smith Construction

Whit, President of Whit Smith Construction—a builder of custom homes and high-end townhomes in Omaha, Nebraska—discovered first-hand the benefits of using panelized components for structural framing versus stick-built construction. Recently, he tried an experiment in which he framed his most popular townhome model the traditional way, and several weeks later framed the same model using panelized floor and wall components. The results? The panelized house took less than half the time to frame and led to higher quality with less material waste, all while being more cost-effective.

Below, Whit shares his experience with building these two homes. For the panelized home, Millard Lumber of Omaha supplied the pre-built framing components, which were manufactured using services and software offered as part of Weyerhaeuser's NextPhase® Site Solutions.

What was it like framing the same home model using two different building techniques?

WS: We have three different townhome models and I had just stick framed the most popular one—the Santa Fe. It's a pretty big ranch house with a walkout basement and lots of fairly detailed framing, as opposed to a plain, rectangular house. It also has some interesting architectural elements. It took a little over a month to stick frame it.

About a month later we got in the loop and did another Santa Fe a couple of lots away using the NextPhase system and it literally took half the time—only 10 working days. I was just flabbergasted. Building different versions of the same model so close together with such a large difference in construction time made a pretty dramatic impression on me.

It was even more interesting because we started stick framing another home next door at the same time we started the NextPhase job. They were two different plans, but were both walkout ranches with almost the same square footage. To see

the comparison side-by-side as the two houses went up and the stick-built one taking longer was really an amazing thing to see. It really hit home with me.

Although the panelized house was built faster, what was the quality like?

WS: I think it's really a better structure. Everything was square and plumb. It really was a great job. In fact, I scrutinized it pretty heavily as it was going up and especially right afterwards because I just couldn't believe it could be put together as well as a stick-frame job. It was that habit where you think the old methods are the best.

Sometimes you don't discover problems with the framing until you do later things, like laying a tile floor in a small bathroom. If everything isn't square and plumb, you see the grout joints meandering off of square relative to the walls. Well, none of that was the case with the panelized house. That was pretty encouraging to me.

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So you think you'd try it again?

WS: Actually, since then I've only stick framed one and built four or five of the panelized homes. The one [home] that I didn't do with panels was because the owner couldn't get over the old stigma of a factory-built house. So instead of fighting that, I went ahead and stick framed it.

It wouldn't surprise me if I didn't do another stick-frame job. I don't have a reason to—I'm really a believer in this.

What about material waste—how do the two types of construction compare?

WS: With stick framing a home there is an incredible amount of waste. We put dumpsters on the job site and will regularly fill up three or four of them during framing—just wasted lumber. And there is no incentive for the framer to be frugal with the lumber because his bid is labor only—at least that's the way it is in Omaha. And I pay for the lumber separately, which is kind of a dumb system when you think of it.

With the NextPhase approach they are actually using computers to try to optimize the amount of lumber that goes into these things. There's really been a quantum leap forward in being more efficient with how you frame a house.

With all the green-building talk at the National Association of Home Builders and in the popular press, it's increasingly important to focus on reducing waste. Panelized construction really plays into that well, and I highlight that in my advertising.

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—Whit Smith

How did you decide to first try panelized framing construction?

WS: I go to the National Association of Home Builders meeting every year and I saw it there. The way panelized construction has often been approached is that the walls are put together with sheetrock and insulation and everything and then sent out. That just doesn't make sense to me. This new approach was just the framing members. I remember getting excited about the thought of that so I talked to another company first in Omaha who was doing it. I then ended up with Millard Lumber because I have long-standing relationships with them and they have always done a first-class job.

Do you consider yourself to be a fairly cutting-edge builder when it comes to new construction techniques?

WS: You know you try all these different things. I've probably been through the loop four or five times with new construction methods. They rarely are superior and for the same price (or less) as traditional methods. Some of them are superior and way more money, but aren't really anything that's going to catch on. With panelized framing, you have an example of something that is really clearly a superior way to do the task at hand and it's also less expensive because of the labor savings. I think that's the first time I've ever seen that happen in my career.

What insights would you offer other builders who are thinking of using panelized framing?

WS: I talk to other builders about it quite a lot at local meetings. Everybody is so focused on price that that is obviously the topic of conversation. Speed is probably number two. You're always on the time clock with a construction loan of some kind. If you take two weeks off of the duration of the job, you're not only getting your framing job cheaper, but you're also saving a grand or more in interest at the end of the job. Maybe twice that much with bigger projects.

Another thing is framers are really independent guys. It's often a difficult thing to get them scheduled in a timely manner and keep your job moving—partly because there's a shortage of framers in Omaha and a shortage of talent. You have to develop a relationship with these guys and start talking to them way ahead of time, and then sometimes you even sit there for another month waiting for them to come to your job. So the panelized framing is a tremendous improvement. You kind of delegate that problem off to your turnkey framing company and still spend less money.

It's also true that the framers in Omaha, since they're in short supply—not that I blame them, you know the free enterprise system—have been able to raise their price to an incredible degree. Houses that I framed for X dollars even seven years ago, would now cost me more than 2X to get stick framed. There's simply nothing you can do about it. But, if there's a more efficient way to get the task accomplished, I'm going to do it because it makes me more competitive and lets me sell more houses. And that's what it's all about, isn't it?

For more information and to see additional work by Whit Smith Construction, visit whitsmithconstruction.com. Learn more about Millard Lumber at millardlumber.com and Weyerhaeuser's NextPhase® Site Solutions at woodbywy.com.