

By Steven Stewart, Annandale Millwork Allied Systems

Pass it along

Using structural frame software to help builders be more successful

ZIG ZIGLAR, MASTER salesperson and motivational speaker, says: “You can get everything in life you want if you will just help enough other people get what they want.”

For service businesses such as building material supply and component fabrication, this certainly rings true. Our financial success comes from helping builders get what they want: homes and buildings constructed better, faster and with less waste. The greatest way we can do this, arguably, is by providing services and expertise they don’t necessarily have in house, rather than just by supplying them with products.

One way Annandale Millwork Allied Systems does this is by offering builders design and fabrication services for structural framing, which dealers all know is one of the most labor and material intensive parts of home construction.

We use a suite of integrated software tools to design and fabricate structural frame components that we pre-cut and label for ready installation at the home site. If you’re interested in expanding your yard’s offerings via such tools, read on. In this article I’ll provide an overview of some of the available software and the benefits that can be achieved. I’ll also provide some tips on getting started.



For us, using software technology is a continuation of a spirit of innovation started by our founder, William Frogale, 60 years ago. He was the first LBM professional in the Washington, D.C., metro area to develop and distribute pre-hung door units. By providing an easier way to build homes, and helping improve quality, save time, and reduce costs, he became a valued partner to builder customers. Today, the same types of benefits are possible with structural frames.

Framing Software

Structural frame product manufacturers have developed a host of software tools. As with anything, capabilities vary.

We evaluated a number of packages and selected Weyerhaeuser software as the best for our business. Their NextPhase Site Solutions include multiple programs for design, specification, and fabrication. For example, Forte software provides a fast and simple way to size joists, beams and columns. We use Javelin software for designing and specifying home structural frame members top to bottom. Stellar software then converts the design data into instructions for our computer-controlled saw.

With these tools we're able to offer builders precision end trimmed (PET) frame members to within 1/16" tolerances, pre-cut holes in joists for mechanical systems, and members with intersection marks. Each JobPack is delivered to the job site with a set of color-coded sheets corresponding to the pre-cut floor framing system. Builders can thus reduce cycle time, improve site safety, and minimize theft because fewer materials are left on site during down times.

Business Benefits

As it has become increasingly difficult for builders to earn a profit, dealers that provide them with ways to build better, faster, and with less waste have a clear competitive advantage.

For example, with PET framing, builders save time by not needing to cut numerous individual pieces to size. Plus, the frame members all fit together precisely, which helps reduce framing errors and costly callbacks. Pre-cut framing also reduces waste and associated disposal fees.

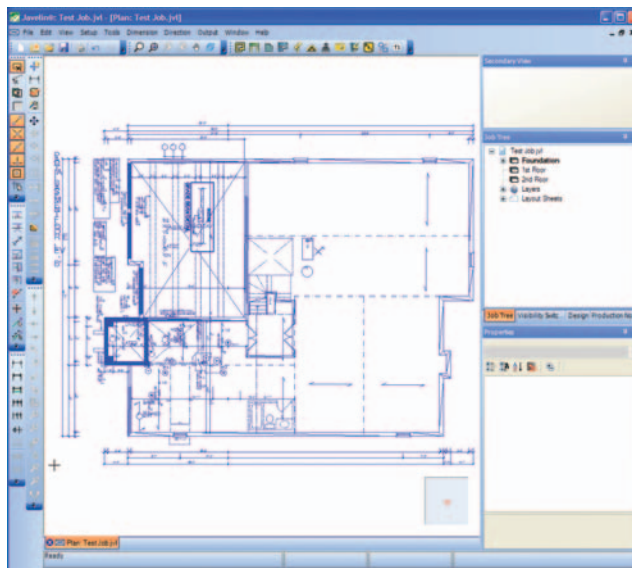
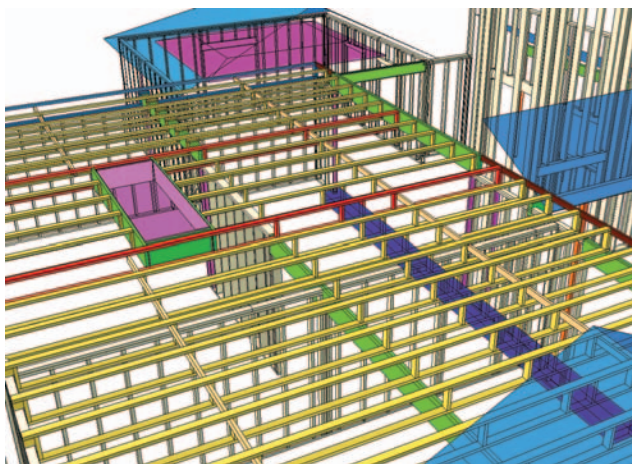
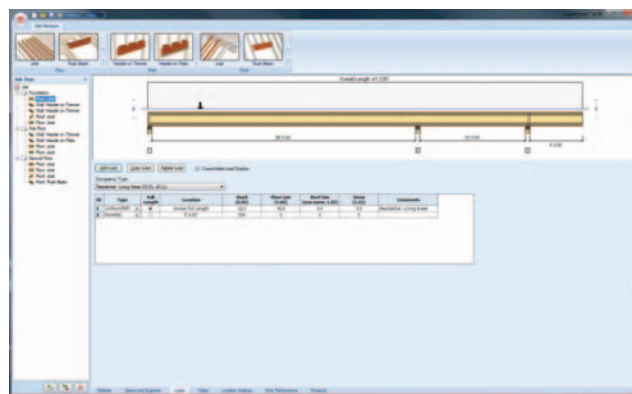
Many framers really like PET because it saves them time and money from cutting materials on site, helps reduce their liability since they're not running saws on the job, and lowers waste and associated disposal fees. Pre-cut framing materials also provide dealers a way to help builders meet new code requirements more easily. For example, as more jurisdictions adopt energy efficiency codes that require HVAC ducts to be located within conditioned spaces, this often means in practice that the mechanicals must run through the floor system.

There seems to be a lot of confusion about the new energy code requirements. The solution we provide is to the builder and their trades (specifically the mechanical company). Once they show us how their system is designed, we can collaborate with them to make sure the holes are in acceptable locations, pre-cut them, and provide the framers and mechanical installers with tools that improve the assembly and installation of the structural and mechanical systems.

Our customers have been really impressed with the NextPhase system. The range of structural frame materials and services we offer—powered by software—was key to

us retaining the business of D.R. Horton in Maryland. Another customer, Advantage Homes, is a smaller builder that wants to be on the forefront of new technologies. For such builders, our software offerings provide them an improved way to build that they in turn can highlight with their homebuyers.

In addition to providing direct benefits to builder customers, today's structural frame software also can help dealers and fabricators enhance their own operations, including processing materials faster and managing inven-



STRUCTURAL FRAME products manufacturers have developed software tools that help dealers improve service to builders. Pictured are screenshots from Weyerhaeuser's Forte and Javelin software programs.

(All photos by Weyerhaeuser)

tory better—both of which help control costs.

For example, the various software programs we use allow us to produce pre-cut framing packages much faster than is possible by hand. Just-in time ordering is a critical part of our business service to builders, and Javelin design software and Stellar fabrication software really help with this. We pride ourselves on fast turn-around—only two weeks from when a builder walks in with a rough sketch of the floor system until we deliver the JobPack of joists and other materials. This includes design of the floor and production of all the components. As a lean manufacturer, software helps us decrease production costs while improving quality.

Fabrication software also helps us better keep track of inventory and manage drops. We can now account for every cut, and use leftover pieces for blocking, etc., to optimize materials use and help eliminate costly scrap. The software is substantially more accurate even than our point-of-sale inventory tracking system, and helps us be accurate to within 1% to 2% every week.

Getting Started

Structural frame manufacturers can help you launch a range of design and fabrication software and services. In our case, Weyerhaeuser really helped us get off the ground and trained us to be self-supporting after the launch, and



SOFTWARE for design and fabrication enables dealers to pre-cut holes in joists, saving builders' time on the jobsite.



FLOOR JOISTS that are pre-cut and labeled reduce labor and decrease material waste.

they've been responsive to get our saw back up and running as quickly as possible, if any issues arise.

- When it comes to picking a software provider, here are some key questions to ask:

- What are the specific programs you offer?
- What measurable benefits have other dealers achieved using these tools?
- What training do you offer in software and fabrication operations?
- What do you do to help fabrication crews solve problems themselves without having to rely on you?
- What support do you offer to help get framers on board with using PET framing materials?
- What types of marketing support do you offer?

Additionally, it's very helpful to visit other dealers using structural frame software to see how their operations work. This can provide great insights on what's possible and on how to set up your own operations. As Ziglar says, "It's not what you've got, it's what you use that makes a difference."

— Steven Stewart is the design manager for Annandale Millwork Allied Systems, Winchester, Va. Incorporated in 1952, the company manufactures components systems and trim packages for builders in Virginia, Maryland, and Washington, D.C. Contact him via www.amcasc.com.