

BENEFITS OVERVIEW

SIP Benefits for Buyers

• **Two years ago, Norm Abrams of This Old House stated on TV and wrote in articles that he wouldn't build his own house any other way than with SIPs. See the reasons below.**

Extremely strong structure. There is considerable evidence that homes with SIP wall and ceiling panels have survived natural disasters like hurricanes, tornadoes, straight-line winds, and earthquakes better than traditional stick-framed homes right next door. The interlocking design of the system allows it to harness the strength as one total unit instead of individual components.

Lower energy bills. Tests show that between 58% and 72% less energy should be needed to heat and cool a home with SIP wall and ceiling panels. In tests by Oak Ridge National Laboratory, SIP walls outperform fiberglass walls by over 50%.

Improved comfort. Thanks to extra R-values and tight construction, the wall and ceiling surfaces in a SIP home will stay the desired temperatures as well as provide a building with superior acoustic isolation from it's environment.

Indoor Air Quality. The best indoor air quality is found in homes that are tight and equipped with upgraded mechanical ventilation. We include the Renewable Air Exchange System in our package which connects to your HVAC and not only filters the air but also has a thermal barrier to maintain temperature.

Green building product. On a life-cycle basis, a more energy-efficient house built with SIPs will be less damaging to the environment, in terms of overall resource consumption. Because of their prepackaging, remnants of material can be efficiently collected and recycled at the factory than on the job site. Also, there is no lumber is used in a Steel SIP home and the foam core is composed of a non-toxic material.

Freeze proof. What happens if the power goes down? During the late 1990s, several New England SIP homes survived over a week without power or a wood stove and never came close to freezing.

Interactive systems benefits: For example, a more energy-efficient home may cost slightly more to build but in turn can be heated and cooled with smaller equipment that costs less to install.



SIP Benefits for Builders

• **SIPs can be a little intimidating to builders who haven't used them. But experienced SIP contractors sing their praises. Many have switched exclusively to panels, citing the following reasons for their decisions.**

Speed of construction. You can order the panels with all pre-cutting performed in a factory. They show up on the jobsite all pre-numbered, ready for assembly corresponding to numbers laid out on a set of shop drawings. On most jobs you should be out of the weather and dried in sooner. Time is money.

Fewer framers. A crew can consist of one lead framer assisted by minimally skilled helpers. Whenever a job involves craning panels up to frame a roof, it helps to have two people familiar with panels: one on the roof and one on the ground.

Shell installation option. We have regular crews who will install a shell on your foundation for you to finish. Or, as is necessary in most cases we can have a team to take your projects from the point of architectural plans to a turn-key home. We look forward to training qualified crews to work with our system.

Rigid frame. It's easy bracing SIP walls. In fact, once you have two corner panels up, you can lean a ladder against the panels when needed.

Less jobsite waste. If you've ordered a set of panels with a rough openings for windows and doors pre-cut at the factory, the only true waste you'll have is taking a few cases of empty tubes of adhesive caulk containers to the dump.

Less theft. While 2x4s and 2x6s are prone to "walking off" unsecured job sites, panels are too specific to the site's building system to be worth hauling off somewhere else. Also due to the quick build, the builder will have a secure lockable shell to store his equipment and tools in.

Cost competitive. In the design stage the structure can be optimized for use of panels, the most experienced SIP builders then say a house framed with SIPs should cost about the same as a house framed with comparably sized dimensional lumber, and maybe even a little less when factors such waste management, labor, holding costs, etc. are factored in. In construction, time = money, and the quick ease and precision build from start to finish is key.

Easier to hang drywall. There is solid backing for all drywall against exterior walls, which means there is less cutting, faster attachment, and less waste material. This also applies to the lessened need for shimming in other finishing areas such as molding and studs.

Fewer framing callbacks. Wall panels go in plumb, square and straight. Once in place, a SIP won't warp, twist or check.