

The foam core insulation has extremely low vapor permeability, and no physical degradation over time. The SIP system is 15 times more airtight than typical wood-frame construction resulting in much less energy loss. That puts SIP construction on better terms with the environment throughout its total life cycle, making it a key component of sustainable building practices and qualifying SIPs for most green building programs.

SIPs look to me like they would be extremely airtight. Will I need mechanical ventilation in a SIP structure?

Definitely! All advanced technology building systems require mechanical ventilation. These systems bring fresh air into the building and exhaust moisture-laden and stale air to the outside. Not only is ventilation practical, but it's a code requirement in many areas.

Are SIPs as strong & durable as traditional stick frame?

Yes. Not only do test results show panels are stronger, but their strength & durability are often proven after natural disasters. SIPs structural characteristics are similar to a steel I-beam. The skins act like the flanges of an I-beam, and the rigid core provides the web of the I-beam configuration. In addition to SIPs natural strength, each custom SIP package is individually engineered to assure that the strength and durability meets or exceeds building code guidelines. Also, IB Panels has an ICC-ES number for its product. ICC-ES is an evaluation agency for product strength & durability. Their reports are generated for support with the IRC (International Residential Code). These tests are easily recognized even by some of the most code-

How are electrical wiring and plumbing installed?

Wire chases are formed in the inner core of the foam. These chases or channels are very similar to conduits. Electricians can use fish tape to help with the wiring process. Wiring a SIP structure avoids compressing insulation or having to drill through each stud. Plumbing is typically installed within interior walls, not exterior walls. Where exterior wall vent pipes are necessary, plumbing chases can be formed within the foam core of a SIP wall.

How do SIPs react to fire?

Fire requires three components to burn: fuel, ignition and oxygen. The lack of air within a solid foam core of SIPs greatly reduces its ability to burn effectively. SIPs have passed every standard fire test required of wood based or type V construction. A key element of fire safety is the protection of SIPs. SIPs can achieve a one hour fire rating with a double 5/8" type-x gypsum wallboard.

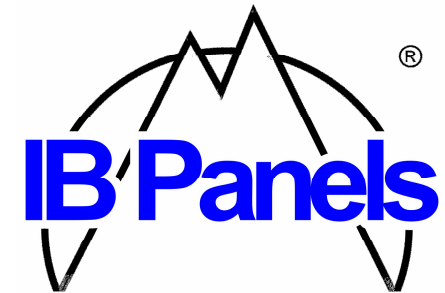
Would you like to get started or find out more?

Go to our website at ibpanels.com or contact any of the IB Panels representatives:

Eric Lott eric@ibpanels.com

Bob Sewell bob@ibpanels.com

Jay Markle jay@ibpanels.com



"The only way to build!"



PO BOX 723
50 W 100 S
Jerome, ID 83338

Phone: 208-324-7184
Fax: 208-324-6740
Toll Free: 888-799-1398
ibpanels.com

What would you do with the money you save?

Who is IB Panels?

IB Panels is a manufacturer of Structural Insulated Panels (SIPs). Here at IB Panels, we pride ourselves on excellent customer service, dynamic innovation and being a manufacturer of high quality SIPs since 1995.

I am in the process of building a home. I had a friend tell me to check into SIPs. What are SIPs?

Structural Insulated Panels (SIPs) are Expanded Polystyrene (EPS) foam sandwiched between two sheets of Oriented Strand Board (OSB). They are high-performance components used for load-bearing floors, walls and roof, in residential and commercial application. The EPS foam provides the extreme insulation. The OSB provides the strength & durability. The lamination between the two elements binds together for a superior unit. The results are building components that are strong, predictable, energy efficient and cost effective.

What makes your SIPs different?

1. IB Panels remains actively involved with research & development for a better product to further enhance a positive SIP experience..
2. Our never-ending dedication to customer service.
3. Our SIP wall systems join together using a patented metal spline system. These splines are fabricated into the panels at the factory, which allow you to have a quicker assembly, true foam to foam connection for air-tightness, and greater durability in stiffening the connection between panels.

Can you explain how SIPs affect the comfort level of the structure?

Customers that live in SIP homes report a greater experience in comfort levels. They have lower heating/cooling costs, and reduce a majority of the outside noise. There is less air infiltration (drafting), which in turn, provides a greater ease at maintaining/controlling indoor temperatures. The walls are straight and the floors are less likely to squeak. You can hang a picture anywhere on a panel wall, and not have to look for stick-framing studs. These are some of the many benefits of a SIP structure. The over-all occupancy experience equates to a higher level of comfort.

With the rising cost of energy, I want to build a house that is more energy efficient. Do SIPs help to save energy? Will I notice the difference?

Absolutely! Oak Ridge National Laboratory has proven in the "Whole-Wall R-Value" controlled testing that SIPs are up to 50% more energy efficient in direct comparison to traditional stick-framing. Structural Insulated Panel Association states that SIP structures are 15 times more air-tight than typical wood-frame construction. In short, SIPs have less energy loss than conventional stick frame construction.

Note: Government sponsored programs such as Energy Star recognizes SIPs as a key component in achieving Energy Star certification. IB Panels focuses on helping Energy Star Builders achieve maximum end results.

Even with high monthly mortgage payments, an energy efficient SIP home will save you money every month. Some lenders are willing to "stretch" debt to income qualifying ratios up to 2% for homeowners purchasing energy efficient homes, meaning homeowners can borrow more on the same amount of income. Here is an example:

	Non Energy Efficient Home	Sip Home
Purchase Price	\$250,000	\$253,000
Down Payment	\$50,000	\$50,600
Loan Amount	\$200,000	\$202,400
Interest	5.50%	5.50%
Monthly Payment	\$1,136	\$1,149
Average Monthly Utility	\$180	\$90
Total Expenses	\$1,316	\$1,239
Monthly Savings	\$0	\$77

What are the R-Values of the SIPs manufactured by IB Panels?

6-3/8" panel thickness at 25 degrees = 25.03 R-Value
8-3/8" panel thickness at 25 degrees = 33.18 R-Value
10-1/2" panel thickness at 25 degrees = 41.88 R-Value
12-7/8" panel thickness at 25 degrees = 50.04 R-Value

Can you briefly explain green building?

Green building means improving the way that homes and homebuilding sites use energy, water, and materials to reduce impacts on human health and the environment. In short, building green is implementing techniques that allow us to be environmentally friendly and less taxing on our natural resources, in both short term and long term settings.

In addition to the lower energy use of SIP buildings resulting in fewer carbon emissions, SIPs are made with environmentally safe materials including oriented strand board (OSB), foam insulation and sealants. OSB skins are made using smaller, faster growing tree species such as aspen and southern yellow