ENGINEERED PANEL DESIGNS, INC.

Energy Efficient Building Systems

WHY BUILD WITH SIPs?

- ***Three Times Stronger***

SIP panels are analogous to an "I Beam" where the OSB skins act as the flanges and the EPS acts as the web. This gives SIPs their structural integrity and strength. Three times stronger than the conventional building system, SIP built homes have withstood devastating storms such as tornadoes, hurricanes and typhoons, while other stick built structures around them were destroyed.

- ***Faster Construction Time***

SIP built structures take less time to erect because when you set a panel, you are combining four common building steps into one: framing, outer sheathing, insulation, and vapor barrier. The panels are pre-cut in our plant so they arrive at the job site cut to size, with all door & window openings, angle cuts and bevel cuts.

- ***Environmentally Friendly***

A SIP structure creates a tight, energy efficient building envelope that results in less air leakage and moisture build-up in your home, increasing comfort as it reduces dust infiltration and the pollutants that cause mold. This airtight quality allows you to reduce HVAC equipment leading to a reduction in energy consumption. SIPs are environmentally responsible because of their efficient utilization of material resources which produces less job site waste.

- ***Energy Efficient***

Oak Ridge National Laboratory tests prove SIPs homes consume less energy than conventional stick built homes. Because of their precision engineering, SIPs easily test 30-50% more energy efficient than the Model Energy Code. In an economy where we cannot control the cost of natural resources, SIPs enable you to reduce energy consumption in your home allowing you more control over your utility bills.

- ***Better Insulation Values***

Fiberglass insulation works like a furnace filter: air passes through the fiberglass freely while collecting dirt and dust, causing compaction. SIP panels are comprised of a solid core of Expanded Polystyrene (EPS), eliminating compaction of insulation material. The insulating properties remain constant over the life of the structure. This reduces the amount of air infiltration and thermal bridges. The panels come in varying degrees of thickness, ranging from 4 1/2 inches to 12 1/4 inches. The most commonly used panels and their R-Value are as follows:

- 4 1/2 inch – Wall panel – **R-17**
- 6 1/2 inch – Wall panel – **R-24**
- 8 1/4 inch – Wall/Roof panel – **R-32**

For more information on the advantages of building with Structural Insulated Panels, please contact Engineered Panel Designs, Inc. at (330) 668-1500. You may also visit our web site at www.epdsips.com.

1245 South Cleveland-Massillon Rd Suite 210 Akron, OH 44321 (330) 668-1500
E-Mail: contactus@epdsips.com
www.epdsips.com