

PANEL DESCRIPTION



STEEL SIP Structural Insulated Panel With a Metal Skin on Both Sides

The Oceansafe Panels are pressure-laminated composites of baked, polyester-coated steel or aluminum coil sheets that have been roll formed to produce a patented locking system; and computer cut and routed expanded polystyrene foam (EPS). These elements are laminated under pressure with an adhesive to produce a panel exhibiting high performance structural and insulative properties.

The panels are custom laminated from white or ivory, cedar wood grain embossed aluminum coil, smooth aluminum coil, or 25 gauge smooth coated galvalume steel.

Panels shall be 2" to 12" in overall thickness with an EPS foam core density of 1.5 lb./cubit ft.. A lb. density panel will support loads up to 72 lbs. per sq. ft. combined with various wind loads in excess of 150 M.P.H.

The foam core performs as a thermal barrier with thermo transmission of 0.0588 BTU/(sq. ft. hr. OF). On average every panel has a thermal resistance value of R-4 per inch.

The panel is available in various skins ranging from aluminum to steel to a galvalume blend and width of 48" and lengths up to 53 ft. Tolerances for the panels are: width - 1/16", length 1/ 4", thickness - 1/16".

The weight of a standard 4' x 8' x 4" .025 gauge steel panel is approximately 71.27 lbs. or 2.2273 lbs./sq. ft.

Even though the panels are light, the system is structurally superior to conventional stud frame methods. The panel's high capacity to resist loads is due to the double "T" type beam design and the continuous interface of the walls and roof.

Our Steel Structural Insulated Panel (SIP) combines the energy efficiency of foam core building panels with a unique joint design that adds strength to the wall and roof units and simply snaps together. This panel design virtually eliminates gaps in the wall and roof. There is less settling or compressing, less moisture absorption or dust saturation, and considerably fewer cavities that permit convection or air circulation than in conventional framing methods.

The internal fastening system provides a sealant reservoir, which protects the sealant from harsh elements. Deterioration of the sealant is reduced over time, which ensures that a waterproof bond is maintained. The patented connect on design also allows for a continuous foam interface for maximum energy savings.

