

What are SIPs?

SIPs are the Building Material for the 21st Century.

Structural insulated panels (SIPs) are a high-performance building system for residential and light commercial construction. The panels consist of an insulating foam core sandwiched between two structural facings. SIPs are manufactured under factory-controlled conditions and can be fabricated to fit nearly any building design. The result is a building system that is extremely strong, energy-efficient, and cost-effective. Building with SIPs will save you time, money, and labor.

Benefits of Building with SIPs

Exceptional Thermal Performance

Once installed, SIP panels deliver unrivaled insulation and airtightness, which reduces energy costs over the building's lifetime. SIPs are known to be about 50% more energy-efficient than traditional timber framing. A SIP building envelope has minimal thermal bridging and delivers excellent airtightness, which lends itself ideally to LEED and net-zero-ready building standards.

Healthier Air Quality

A SIP home or commercial building allows better control over indoor air quality because the airtight building envelope limits incoming air to controlled ventilation which filters out contaminants and allergens. The SIP envelope doesn't have the voids or thermal bridging of conventional stick framing that can cause condensation leading to potentially hazardous mold, mildew, or rot.

Sustainability Credentials

SIPs are highly energy-efficient and therefore contribute positively to the environment by reducing CO2 levels. They also use significantly less energy during the manufacturing process compared to traditional construction methods and have lower embodied energy than traditional construction materials, such as steel, concrete and masonry.

Faster Construction with Less Labor

SIP walls and roofs are designed and precisely manufactured offsite. This allows the building to be assembled onsite quickly and made watertight in a matter of days. This reduces costs such as project management, scaffolding, framing labor and much more. A BASF time-motion study confirmed that SIP panels reduce jobsite labor needs by 55%.

Design Flexibility

SIPs can be engineered and fabricated to suit any building design, allowing architects and owners the flexibility and creative freedom to develop aesthetically pleasing spaces.

MgO Sips

MgO SIPS are the 21st century SIPS.

MGO SIPS contain no organic solvents, heavy metals, asbestos, oils or other toxic ingredients.