The Structural Insulated Panel Association (SIPA) is a nonprofit association representing manufacturers, suppliers, dealer/distributors, design professionals and builders committed to providing quality structural insulated panels (SIPs) for all segments of the construction industry.
WHAT ARE SIPS?

SIP = Structural Insulated Panel

- Composite structural panel
- Rigid foam core - EPS, XPS, or PU
- Structural facings - usually 7/16” OSB
- Structural adhesive
WHAT ARE SIPS?

- Rigid Foam Insulation
- Structural Facings
- Structural Adhesive
- Optional Electrical Chase
CHARACTERISTICS OF SIPS

* 2X6 @ 24" o.c. with batts with rounded shoulders, 2% cavity voids, no compression around wiring, paper facer stapled to inside of stud

Oak Ridge National Laboratory Studies

4” SIP wall outperforms 2x6 stud wall with R-19 fiberglass
Residential energy code compliance by 2015 and 2018 IECC

- Avoid prescriptive requirements for exterior insulation
- Total UA Alternative method using ResCheck
- OR -
- Performance method (HERS rating in 2015/18 IECC)
Structural code compliance - code reports

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**PRODUCT:** Structural Insulated Panels (SIP)

**DIVISION:** Wood and Plastics (06)

**SECTION:** Structural Panels (06 12 16)

**Report Holder**
SIPA
Structural Insulated Panel Association
Box 1699
Gig Harbor, WA 98335

Manufacturing Locations
EH Systems
710 FM 306
New Braunfels, TX 78130

Energy Panel Structures, Inc.
102 East Industrial Park
Graettinger, IA 51342

FischerSIPS, LLC
1800 Northwestern Parkway

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**ESREPORT™**

**ICC Evaluation Service, Inc.**

**ESR-1882**

Issued August 1, 2008

This report is subject to re-examination in one year.

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**ESR-2233**

Issued October 1, 2007

This report is subject to re-examination in two years.

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**PANELS:**

**TYPE S**

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**3.2 Materials:**

3.2.1 Core: The core material is Insulfoam Type I expanded polystyrene (EPS) foam plastic core material. The panels vary in size from 4 feet by 8 feet to 8 feet by 24 feet (1.2 m by 2.4 m to 2.4 m by 7.2 m). Panel thicknesses are from 3/4 inches (114 mm) to 12 1/4 inches (286 mm). The EPS is a Type I expanded polystyrene with a nominal density of 1 pcf (16 kg/m³) complying with ASTM C 576. The EPS has a flame spread index of not more than 75 and a smoke developed index of not more than 450 when tested in accordance with ASTM E 84.

3.2.2 Facing: Panel facing material is 2-1/4, 2-1/2, 3-1/4 or 3-1/2-inch (11.1, 12.7, 15.9 or 19.1 mm) thick Exposure 1, oriented strand board (OSB) with span ratings of Pu, Py, Pu, Py, respectively, and complying with the performance-rated span requirements, included in Article 518, Division 1.
SIP APPLICATIONS

- SIP walls and roof
- SIP walls with truss roof
- SIPS over timber frame
- SIPS and ICF
- Hybrid construction of any kind
Affordable, effective renovation applications

Historic home built in 1872 - 4,467 sqft conditioned space including basement, 1st and 2nd floors.
SIPs ready to assemble with all window and door openings precut made for smooth installation.

Beineke Residence, Marion, OH – HERS 47
SIP APPLICATIONS

Affordable, sustainable, cost-effective housing

South Chicago Work Force housing, Chicago, IL
SIP APPLICATIONS

Affordable, disaster-resistant, LEED Certified housing

Make it Right, New Orleans, LA
SIP APPLICATIONS

Modern, sustainable designs

Evoke Quadrant Model Home, Issaquah, WA

Ellmann Residence, Grand Haven, MI
SIP APPLICATIONS

Twin Mountain Home, Carroll, NH
HERS 32; 0.37 ACH

Christensen Residence, Clarkfield, MN
Timber frame
SIP APPLICATIONS

Engineering possibilities

Ward Home, Sioux Falls, SD

C Sharp, Oak Island, NC
SIP APPLICATIONS

Craftsman design

Kenilworth Bungalow, Minneapolis, MN
Inspiration Home, Olympia, WA
SIP APPLICATIONS

Long roof span
SIP APPLICATIONS

Air sealing and header
SIP APPLICATIONS

Complex designs made easy
www.SIPs.org