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Legacy report on the 2000 International Building Code®, the 2000 International Residential Code®, the 2002 Accumulative Supplement to the International Codes™, the 1998 International One- and Two-Family Dwelling Code®, the BOCA® National Building Code/1999, the 1999 Standard Building Code®, and the 1997 Uniform Building Code™

DIVISION 06—WOOD AND PLASTICS
Section 06120—Structural Panels

DIVISION 07—THERMAL AND MOISTURE PROTECTION
Section 07210—Building Insulation
Section 07220—Roof and Deck Insulation

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1.0 SUBJECT

- 1.1 Expanded Polystyrene (EPS) Boards
1.2 Engineered Structural Panels

2.0 PROPERTY FOR WHICH EVALUATION IS SOUGHT

- 2.1 EPS Boards
2.1.1 Surface-burning characteristics
2.1.2 Attic and crawl space installation
2.1.3 Thermal performance
2.2 Engineered Structural Panels
2.2.1 Structural
2.2.2 Fire-resistance

3.0 DESCRIPTION

3.1 EPS Boards

EPS boards are rigid expanded polystyrene foam boards molded at Plymouth Foam Inc.'s Newcomerstown, OH plant. The boards are intended for use as a nonstructural substrate behind exterior weather coverings on the exterior walls of buildings and structures, on the interior surface of exterior walls, below concrete slabs, in roofing applications, and on the exterior and interior face of foundation walls.

The boards are manufactured with beads supplied by Styrochem International (ER-5687), Nova Chemical (ESR-1798), BASF Corporation (NER-479), and Huntsman Corporation (ESR-1634) at nominal densities of 0.70, 1.00, 1.25, 1.50, and 2.00 lb/ft³ (11.21, 16.02, 20.03, 24.03, 32.04 kg/m³). The designation for each density are PPI Type XI, PPI Type I, PPI Type VIII, PPI Type II, PPI Type IX. The insulation

boards are manufactured in varying thicknesses and sizes.

3.1.1 Surface-Burning Characteristics

EPS Board has a flame spread index (FSI) not exceeding 75 and a smoke-developed index (SDI) not exceeding 450 when tested in accordance with ASTM E 84 in the configurations as follows:

Table with 4 columns: Bead Manufacturer, Bead Type, Maximum Density (lb/ft³), Allowable Thickness (in.). Rows include Nova Chemicals Inc., Styrochem, Huntsman, and BASF with various bead types and densities.

SI: 1 inch = 25.4, 1 lb/ft³ = 16.02 kg/m³

EPS Boards [2 inch (51 mm) maximum thickness and maximum 2.00 lb/ft³ (32 kg/m³) density, 3 inch (76 mm) maximum thickness and maximum 1.00 lb/ft³ (16 kg/m³) density, or 5 inch (127 mm) maximum thickness and maximum 1.00 lb/ft³ (16 kg/m³) density], are permitted to be installed exposed in attics or crawl spaces that are used only for service of utilities. The 2 inch (51 mm) maximum thickness is limited to BASF Type BF or BLF, Huntsman Grade 54, and NOVA Type M77 or M97 beads. The 3 inch (76 mm) maximum thickness is limited to BASF Type BF or BLF, Huntsman Grade 54 beads. The 5 inch (127 mm) maximum thickness is limited to NOVA Type M77 or M97 beads.

3.1.2 Thermal Performance Values

EPS Boards have been tested in accordance with ASTM C 518 and demonstrated the following stabilized R values at 1.0 inch (25.4 mm) thickness and 75°F (24 °C) mean temperature.

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Board Type	Nominal Density (lb/ft <sup>3</sup> )	R-Value/Inch of Thickness
Type I	1.00	3.6
Type VIII	1.25	3.8
Type II	1.50	4.0
Type IX	2.00	4.2

SI: 1 lb/ft<sup>3</sup> = 16.02 kg/m<sup>3</sup>

### 3.1.3 Attic and Crawl Space Installation

Boards manufactured from the same beads as the EPS Board were tested in a room corner fire test of  $\frac{1}{4}$  inch (6.4 mm) plywood sheathing to demonstrate the use of EPS Board in attics and crawl spaces without protective coverings. See Section 4.4 of the report

### 3.2 Engineered Structural Panels

Engineered Structural Panels are factory-assembled wood faced structural insulated panels (SIPs) with expanded polystyrene (EPS) as the core material. The panels are intended for use as load bearing wall, roof, and floor components. The panels vary in size from 4 to 8 ft (1.2 to 2.4 m) in width and 8 to 28 ft (2.4 to 8.4 m) in length. Panel core thicknesses range from  $3\frac{5}{8}$  to  $11\frac{3}{8}$  inch (92 to 289 mm). Wall assemblies are limited to core thicknesses of  $3\frac{5}{8}$  and  $5\frac{5}{8}$  inch (92 and 143 mm). The panels can be used individually or connected to form larger sections and assemblies.

The panels consist of one layer of  $\frac{7}{16}$  inch (0.438 mm) minimum thickness oriented strand board (OSB) facings complying with DOC PS 2-92. The facing is bonded to the EPS core with a urethane or isocyanate adhesive and cured under factory controlled conditions. The EPS core material is EPS board Type 1 with a 1.00 lb/ft<sup>3</sup> (16.02 kg/m<sup>3</sup>) nominal density.

#### 3.2.1 Structural

Engineered Structural Panels have been tested for axial, transverse and racking loads in accordance with ASTM E 72. The panels are permitted to be used as a structural member that is permitted, in the applicable code, to be combustible when designed and installed in accordance with this report.

#### 3.2.2 Fire-Resistance-Rated Assembly

Engineered Structural Panels have been tested as a component of a fire-resistance-rated assembly in accordance with ASTM E 119. The panels are permitted to be used as a component of a fire-resistance-rated wall assembly when installed as described in Section 4.5 of this report.

## 4.0 INSTALLATION

### 4.1 General

Plymouth Foam Inc. EPS Boards and Engineered Structural Panels shall be installed in accordance with the manufacturer's published installation instructions subject to the conditions of this report. Where manufacturer's published installation instructions differ from this report, this report shall be null and void. Current copies of the manufacturer's published installation instructions and this report shall be available at all times on the job site during installation.

### 4.2 EPS™ Board

EPS Boards are permitted for use as exterior perimeter insulation around concrete slab edges, foundation walls, crawl spaces, and under flat concrete slab-on-grade construction. The boards are permitted to be used as roofing insulation and in EIFS systems when listed as a specific component of the assembly or system, in a current report issued by the ICC-ES.

The boards shall not be used structurally to resist transverse or vertical loads. The boards shall not be used as exterior stud wall bracing. Wall bracing shall be provided in accordance with the applicable code.

EPS Boards shall not be used as a nailing base for exterior siding material. Nailing shall be made through the foam boards into the wall studs or nailable sheathing.

### 4.3 Engineered Structural Panel

Engineered Structural Panels are connected to each other at the panel edges with OSB, dimensional lumber, or I-joist splines. The splines are applied with an EPS compatible sealant and fastened with 8d box nails or 14 gauge  $1\frac{1}{2}$  inch (38 mm) staples at 6 inches (152 mm) on center.

The top and bottom plates of the panel are dimensional wood plates, grade No 2 SPF or better, sized to match the core thickness and inserted into the factory cut plate pockets and fastened to the facing material with 8d box nails or 14 gauge  $1\frac{1}{2}$  inch (38 mm) staples at 6 inches (152 mm) on center. A EPS compatible sealant is applied along the baseplate prior to the panel placement.

Panels, at the time of their erection and placement, shall be covered on the exterior by a water-resistive barrier in accordance with the requirements of the applicable code. The exterior of the wall and roof panels shall be covered with an approved exterior wall or roof covering, respectively. Installation methods shall be in accordance with the manufacturer's published installation instructions subject to the approval of the code official.

Openings in the wall panels without headers shall be limited to a maximum of 48 inches (1219 mm) in width and the allowable load shall not to exceed the load specified in Table 2 of this report. For openings greater than 48 inches (1219 mm) in width, loads shall not exceed the header loads as indicated in Table 5 of this report.

For loads greater than those specified in Tables 1, 2, 3, 4, and 5 the specific condition shall be framed by conventional methods in accordance with the requirements of the applicable code.

### 4.4 Attics and Crawl Space Application - EPS Board

EPS Boards are permitted to be used in attics and crawl spaces without protective coverings required under 2603.5.1.6 of the 1999 *Standard Building Code*®, Section 2603.4.1.4 of the *BOCA National Building Code/1999*, Section 2602.4 of the 1997 *Uniform Building Code*, Section 317.2.3 of the 1998 *One- and Two-Family Dwelling Code*, Section 2603.4.1.6 of the 2000 *International Building Code*, and Section R318.2.3 of the 2000 *International Residential Code*.

EPS Boards are permitted to be installed exposed in attics or crawl spaces that are used only for service of utilities in the configurations as follows:

Bead Manufacturer	Bead Type	Maximum Density (lb/ft <sup>3</sup> )	Allowable Thickness (in.)
Nova Chemicals Inc.	M77	1.0	5
	M77	2.0	2
Huntsman	Grade 54	1.0	3
	Grade 54	1.75	2
BASF	BF	1.0	3

SI: 1 inch = 25.4, 1 lb/ft<sup>3</sup> = 16.02 kg/m<sup>3</sup>

Foam board as described above is permitted to be installed without the ignition protective coverings under the following conditions:

- 4.4.1 entry to the attic or crawl space is limited to service of utilities;
- 4.4.2 there are no interconnected attic or crawl space areas;
- 4.4.3 air in the attic or crawl space is not circulated to other parts of the building;
- 4.4.4 the board thicknesses and densities are limited as stated above; and,
- 4.4.5 ventilation of the attic or crawl space is provided in accordance with the applicable code.

#### 4.5 One-Hour Fire-Resistance-Rated Bearing Wall Assembly - Engineered Structural Panel

Panels consisting of a maximum  $5\frac{5}{8}$  inch (143 mm) thick Type I EPS core laminated between two sheets of  $\frac{7}{16}$  inch (11.1 mm) thick, Exposure 1, OSB facers and two layers of  $\frac{5}{8}$  inch (15.9 mm) thick Type X gypsum wallboard on each face of the panel are permitted as a component of a one-hour fire-resistance-rated wall assembly.

The double layers of  $\frac{5}{8}$  inch (15.9 mm) thick Type X gypsum wallboard shall be installed vertically, with the base layer positioned with vertical joints staggered 24 inches (610 mm) minimum from panel connections. The base layer is secured to the OSB with  $1\frac{5}{8}$  inch (41 mm) long 6d cupped-head wallboard nails, spaced 24 inches (610 mm) on center vertically and 16 inches (406 mm) on center horizontally. The wallboard face layer is installed over the base layer with joints staggered 24 inches (610 mm) and fastened through the base layer to the panel with 2 inch (51 mm) long 6d cupped-head wall board nails, spaced at 12 inches on center vertically and 16 inches (406 mm) on center horizontally, staggering the fasteners 6 inches (152 mm) from the base layer screws. Each layer of wallboard is fastened to the panel 8 inches (203 mm) from the perimeter edges, 12 inches (305 mm) on center. Face layers of gypsum wallboard shall have joints taped and screw heads treated with joint compound. The maximum allowable axial load is 2200 lb/ft (32107 N/m) for fire-resistance-rated wall assemblies.

#### 4.5.1 S Wall Panels

The panel connection consists of two  $\frac{7}{16}$  inch (11.1 mm) thick OSB faced surface splines, nominally 4 inches (102 mm) in width, installed vertically between adjacent panels along the long edge. The splines are secured to the OSB facing material with 8d box nails or 14 gauge  $1\frac{1}{2}$  inch (38 mm)

staples spaced 6 inches (152 mm) on center. The top and bottom plates (nominal 2 inch thick dimensional lumber of grade No. 2 SPF or better) are installed in precut plate pockets in the top and bottom of the panels. The top and bottom plates are secured to the OSB face material using 8d box nails or 14 gauge  $1\frac{1}{2}$  inch (38 mm) staples spaced 6 inches (152 mm) on center. A  $\frac{1}{2}$  inch (12.7 mm) wide bead of latex caulk shall be applied to all spline and plate surfaces in contact with the EPS core.

#### 4.5.2 L Wall Panels

The panel connection consists of two nominal 2 inch (51 mm) dimensional lumber studs, grade No 2 SPF or better. The studs are joined together using 16d coated sinker nails, spaced 24 inches (610 mm) on center and staggered along the stud length. The double studs are installed in precut recesses between adjoining panels and secured to the OSB faces using 2 inch (51 mm) long 6d common nails or 14 gauge  $1\frac{1}{2}$  inch (38 mm) staples spaced 6 inches (152 mm) on center. The double top and single bottom plates (nominal 2 inch thick dimensional lumber of grade No. 2 SPF or better) are installed in precut plate pockets in the top and bottom of the panels. The top and bottom plates are secured to the OSB face material using 2 inch (51 mm) long 6d common nails or 14 gauge  $1\frac{1}{2}$  inch (38 mm) staples spaced 6 inches (152 mm) on center. The lower top plate is secured to the stud ends with two 16d sinker nails per end and the upper top plate is fastened to the lower top plate with 16d sinker nails spaced 16 inches on center and staggered along the top plate length. A  $\frac{1}{2}$  inch (12.7 mm) wide bead of latex caulk shall be applied to all spline and plate surfaces in contact with the EPS core.

#### 4.6 Structural Design Charts - Engineered Structural Panel

Tables 1, 2, 3, 4, and 5, of this report prescribe the maximum allowable spans and loads for the Engineered Structural Panels.

#### 5.0 IDENTIFICATION

Plymouth Foam Inc. EPS boards and Engineered Structural panels (SIPs) as described in this report are identified by a label or stamp bearing the manufacturer's name, the bead manufacturer, the bead type, the board density, the quality control agency, PFS Corporation for SIPs, or Underwriters Laboratories, Inc. for EPS boards, and this ICC-ES legacy evaluation report number (NER-665) for field identification. EPS boards shall indicate the flame spread and smoke indices.

#### 6.0 EVIDENCE SUBMITTED

- 6.1 Manufacturer's published descriptive literature, and specifications dated 2002.
- 6.2 Pacemaker Plastics Co., Inc. Quality Control/Quality Assurance Manual for Engineered Structural Panels (SIP's), dated February 20, 2002, revised August 15, 2002, signed by representatives of Pacemaker Plastics Co., Inc. and PFS Corporation.
- 6.3 Pacemaker Plastics Co., Inc. Quality Control Manual for EPS boards, dated August 2002, signed by representatives of Pacemaker Plastics Co., Inc. and Underwriters Laboratories, Inc.

- 6.4 Omega Point Laboratories, Project No. 15813 - 110326, dated January 23, 2002, containing testing of the 8<sup>9</sup>/<sub>16</sub> and 12<sup>9</sup>/<sub>16</sub> inch SIP system in accordance with UL 1715.
- 6.5 Omega Point Laboratories, Project No. 15813 - 110186, dated January 21, 2002, containing testing of the SIPs with a double 2 X spline connection method in accordance with ASTM E 119.
- 6.6 Omega Point Laboratories, Project No. 15813 - 110457, dated February 26, 2002, containing testing of the SIPs with a block spline connection method in accordance with ASTM E 119.
- 6.7 PFS Corporation, Test Report #01-28, dated August 20, 2001, revised July 17, 2002, containing transverse load testing of structural panels with Type I EPS cores, in accordance with ASTM E 72.
- 6.8 Twin City Testing Corporation, Project No. 031552, dated May 24, 2002, containing transverse, axial, and racking load testing of various panels in accordance with ASTM E 72.
- 6.9 Twin City Testing Corporation, Letter, dated July 26, 2002, containing engineering analysis, signed and sealed by John D. Lee, P.E.
- 6.10 PFS Corporation, Letter, dated July 25, 2002, addressing how the fire-resistance testing performed on the 3<sup>1</sup>/<sub>2</sub> inch SIPs assembly applies to the 5<sup>5</sup>/<sub>8</sub> inch SIPs assembly, signed and sealed by Michael J. Slifka, P.E.
- 6.11 PMI Panels, Structural Calculations, dated July 22, 2002, containing a comparison between 8d nails and 14 gauge staples, signed and sealed by Joseph G. Pasma, P.E.
- 6.12 Radco, Report No. RAD-846, dated July 1988, containing thermal transmission testing.
- 6.13 Radco, Report No. RAD-887, dated December 1988, containing thermal transmission testing.
- 6.14 Radco, Report No. RAD-2868, dated September 2001, containing thermal transmission testing.
- 6.15 Radco, Report No. RAD-2872, dated September 2001, containing thermal transmission testing.
- 6.16 Radco, Report No. RAD-2878, dated September 2001, containing thermal transmission testing.
- 6.17 Radco, Report No. RAD-2884, dated September 2001, containing thermal transmission testing.
- 6.18 Radco, Report No. RAD-2536, dated June 2000, containing thermal transmission testing.
- 6.19 Radco, Report No. RAD-2340, dated October 1999, containing thermal transmission testing.
- 6.20 Radco, Report No. RAD-2457, dated April 2000, containing thermal transmission testing.
- 6.21 Radco, Report No. RAD-2444, dated April 2000, containing thermal transmission testing.

- 6.22 Radco, Report No. RAD-3015, dated April 2002, containing thermal transmission testing.
- 6.23 Radco, Report No. RAD-3016, dated April 2002, containing thermal transmission testing.

## 7.0 CONDITIONS OF USE

The ICC-ES Subcommittee for the National Evaluation Service finds that the Plymouth Foam Inc. EPS boards and Engineered Structural panels described in this report comply with or are suitable alternates to that specified in the 2000 *International Building Code*<sup>®</sup>, the 2000 *International Residential Code*<sup>®</sup>, the 2002 *Accumulative Supplement to the International Codes*<sup>™</sup>, the 1998 *International One- and Two-Family Dwelling Code*<sup>®</sup>, the BOCA<sup>®</sup> *National Building Code/1999*, the 1999 *Standard Building Code*<sup>®</sup>, and the 1997 *Uniform Building Code*<sup>™</sup>, subject to the following conditions:

- 7.1 EPS Boards shall be limited to use in buildings of combustible construction.
- 7.2 EPS Boards shall not be used as structural sheathing. Walls on which the foam plastic boards are applied shall be braced in accordance with the applicable code.
- 7.3 EPS Boards shall not be used as a nailing base for exterior siding materials. Nailing shall be made through the sheathing, into the wall studs or nailable sheathing.
- 7.4 EPS Boards shall be completely separated from the interior of the building by an approved fifteen (15) minute thermal barrier, except EPS Boards as permitted without thermal barriers as described in Section 4.4 of this report.
- 7.5 In jurisdictions which have adopted the 1999 *Standard Building Code*, the 2000 *International Residential Code for One- and Two-Family Dwellings*, or the 1998 *International One- and Two-Family Dwelling Code*, EPS Boards and Engineered Structural Panels shall be installed in accordance with Section 2603.3, Section R324.4, or Section 323.4 of the code, respectively.
- 7.6 The 1<sup>1</sup>/<sub>2</sub> inch (38 mm) diameter electrical chases in the Engineered Structural Panel core are limited to those which are factory installed and located 14 and 46 inches (356 and 1168 mm) horizontally from the bottom of the core and vertically along the centerline of the panel core.
- 7.7 Engineered Structural Panels fabricated with foam cores exceeding 5<sup>5</sup>/<sub>8</sub> inch (143 mm) in thickness are not permitted for use in wall, roof or floor assemblies except in jurisdictions which have adopted the 2000 *International Building Code*.
- 7.8 This report is subject to periodic re-examination. For information on the current status of this report, contact the ICC-ES.

TABLE 1  
STRUCTURAL INSULATED PANEL – ALLOWABLE TRANSVERSE LOAD<sup>1</sup>

Core Thickness (in.)	3-5/8			5-5/8			7-3/8			9-3/8		
	L/360	L/240	L/180	L/360	L/240	L/180	L/360	L/240	L/180	L/360	L/240	L/180
Span (ft)	Load (lb/ft <sup>2</sup> )											
4	71	114	136									
6	50	79	97	89	101	101						
8	29	44	57	64	76	76	71	76	76	72	72	72
10	24	35	46	39	51	51	58	61	61	61	61	61
12	18	26	34	32	41	41	44	46	46	50	50	50
14				24	30	30						

Notes to Table 1:

1. Load values for core thicknesses exceeding 5-5/8 shall apply only to assemblies in jurisdictions which have adopted the 2000 International Building Code.
2. For combined axial (see Table 2 for axial loads) and transverse loads the following equation shall apply:  
(design axial load/allowable axial load) + (design transverse load/allowable transverse load) ≤ 1
3. SI: 1 in. = 25.4, 1 ft = 304.8 mm, 1 lb/ft<sup>2</sup> = 47.88 Pa

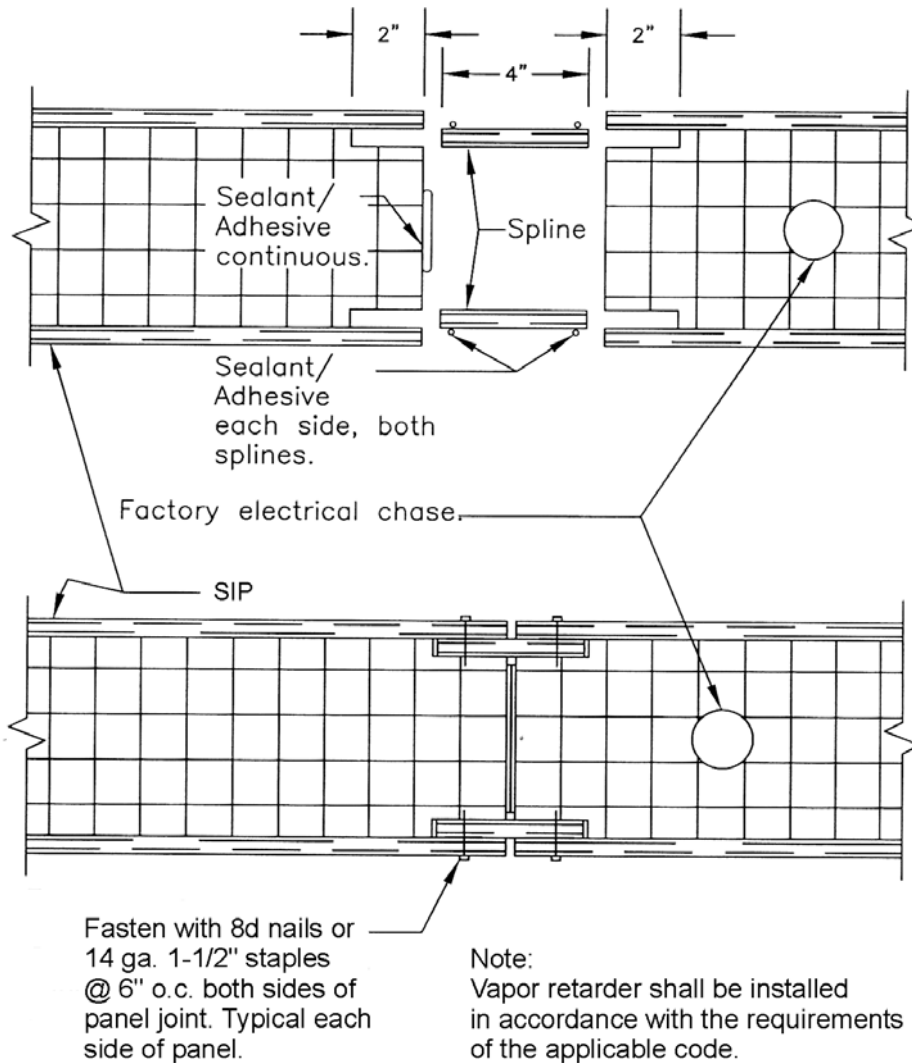


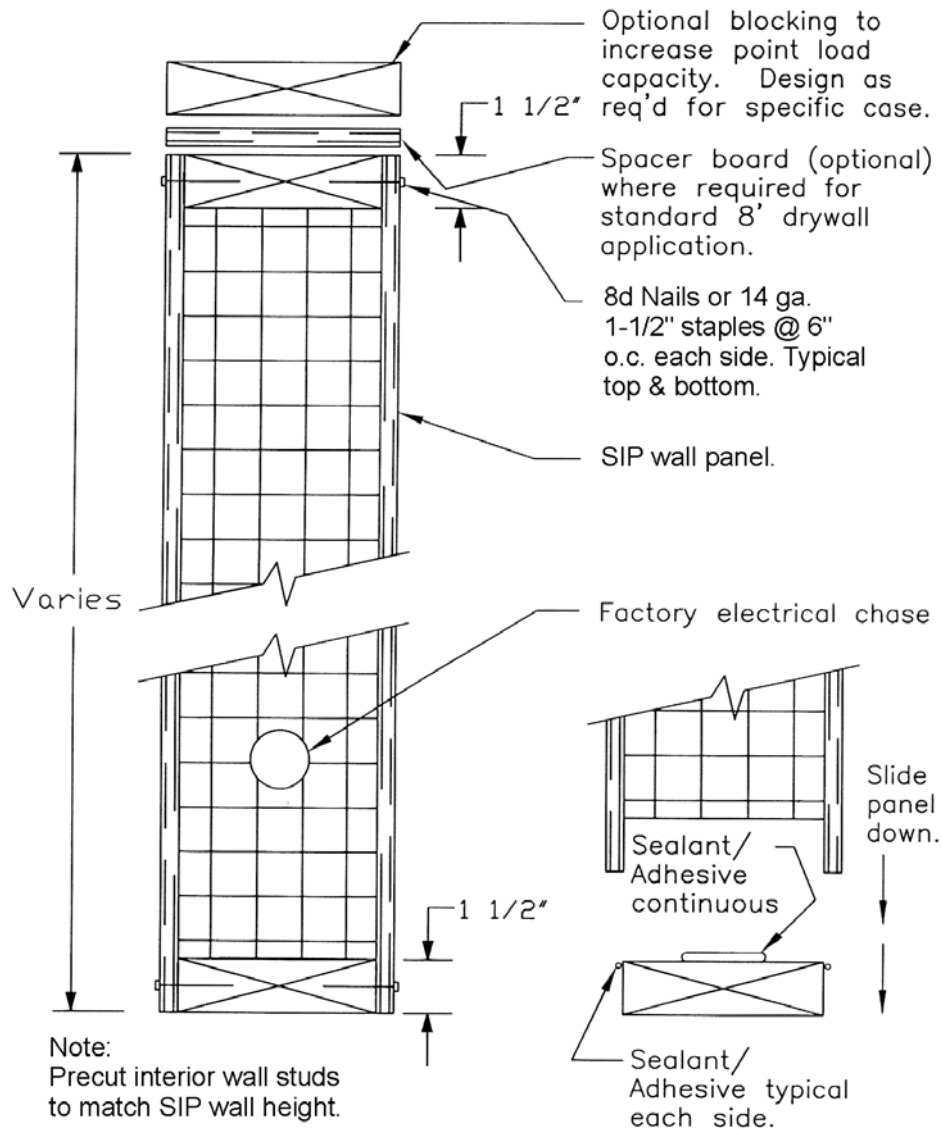
FIGURE 1\*

**TABLE 2**  
**STRUCTURAL INSULATED PANEL – ALLOWABLE LOAD**

Load Type	Span (ft)	Core Thickness (in.) <sup>1</sup>	
		3-5/8	5-5/8
Axial Load (lb/ft)	8	3300	3300
	10	4100	4100
Racking Shear (lb/ft)	8	181	181

**Notes to Table 2:**

1. Fire-resistance-rated wall assemblies as discussed in Section 4.5 of this report are limited to an allowable axial load of 2200 lb/ft.
2. For combined axial and transverse loads (see Table 1 for transverse loads) the following equation shall apply:  
 $(\text{design axial load}/\text{allowable axial load}) + (\text{design transverse load}/\text{allowable transverse load}) \leq 1$
3. **SI:** 1 in. = 25.4, 1 ft = 304.8 mm, 1 lb/ft = 14.59 N/m



Note: Use minimum grade SPF#2 for 2x plating.

**FIGURE 2\***

**TABLE 3**  
**STRUCTURAL INSULATED PANEL WITH DIMENSIONAL LUMBER SPLINES – ALLOWABLE TRANSVERSE LOAD <sup>1</sup>**

Core Thickness (in.)	5-5/8			7-3/8			9-3/8		
	L/360	L/240	L/180	L/360	L/240	L/180	L/360	L/240	L/180
Span (ft)	Load (lb/ft <sup>2</sup> )								
10	58	90	116						
12	45	70	90	73	112	119	95	124	124
14	32	49	64	57	87	100	82	110	110
16	27	41	54	41	61	80	68	96	96
18	22	32	43	34	51	66	56	80	83
20				27	40	52	44	65	70
22							32	49	57

**Notes to Table 3:**

1. Load values for core thicknesses exceeding 5-5/8 shall apply only to assemblies in jurisdictions which have adopted the *2000 International Building Code*.
2. Combined axial and transverse loads are beyond the scope of this report.
3. **SI:** 1 in. = 25.4, 1 ft = 304.8 mm, 1 lb/ft<sup>2</sup> = 47.88 Pa

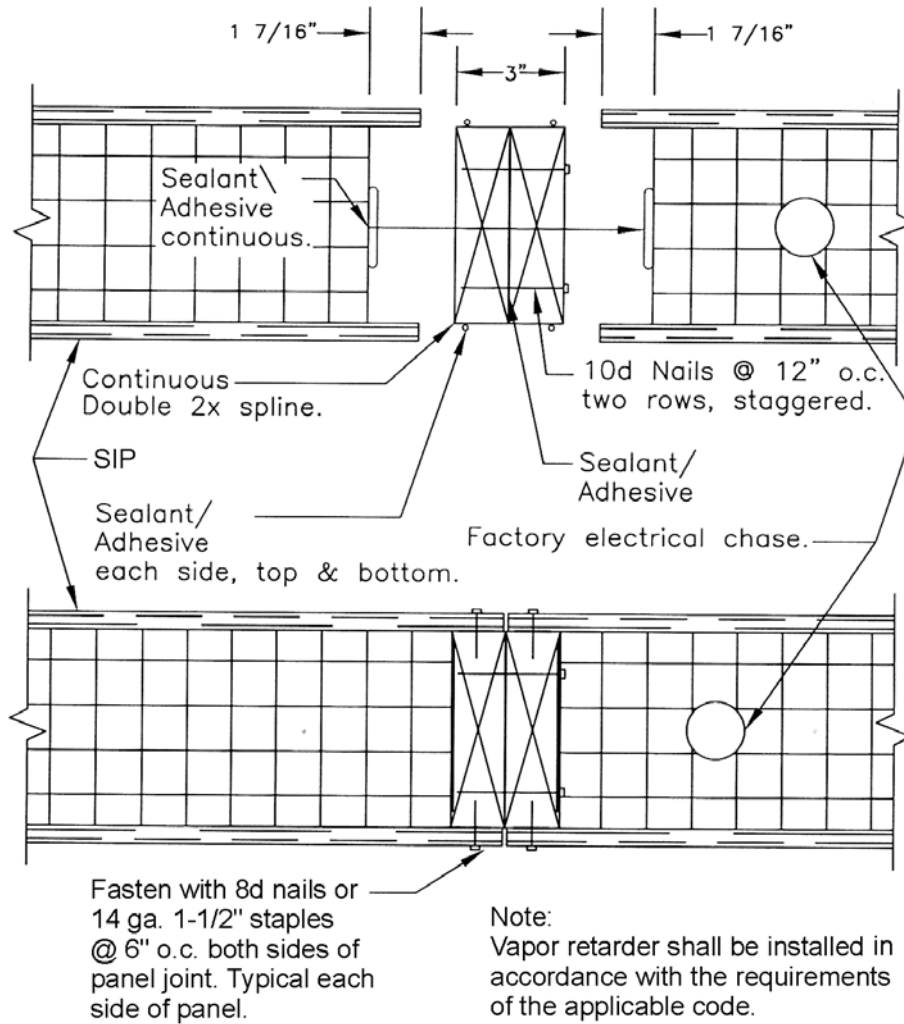


TABLE 3\*

TABLE 4  
STRUCTURAL INSULATED PANEL WITH WOOD I-BEAM SPLINE – ALLOWABLE TRANSVERSE LOAD <sup>1</sup>

Core Thickness (in.)	7-3/8			9-3/8			11-3/8		
	L/360	L/240	L/180	L/360	L/240	L/180	L/360	L/240	L/180
Span (ft)	Load (lb/ft <sup>2</sup> )								
14	52	69	69						
16	43	60	63	58	73	73			
18	33	50	57	47	63	64	64	68	68
20				35	52	54	55	62	62
22							45	57	57
24							36	51	51

Notes to Table 4:

1. Loads are limited to floor and roof assemblies in jurisdictions which have adopted the 2000 International Building Code.
2. Combined axial and transverse loads are beyond the scope of this report.
3. SI: 1 in. = 25.4, 1 ft = 304.8 mm, 1 lb/ft<sup>2</sup> = 14.59 N/m

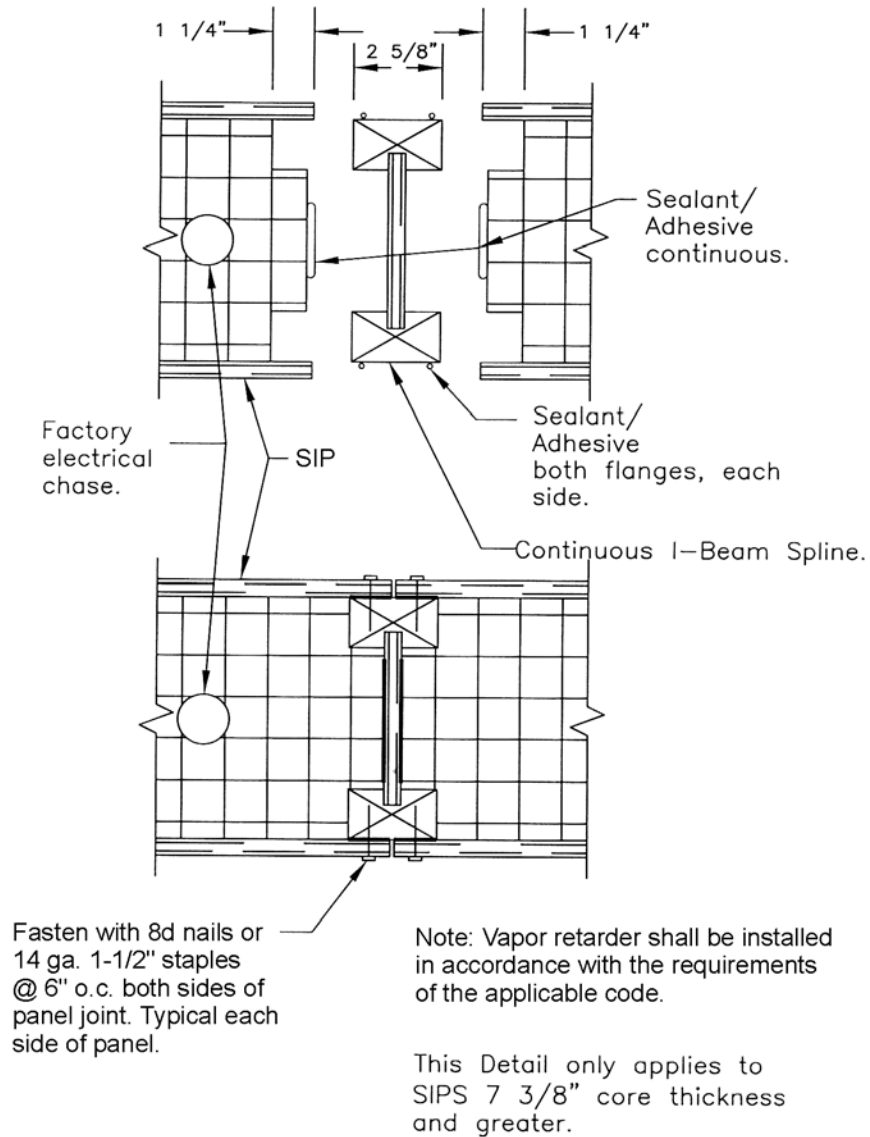


FIGURE 4\*

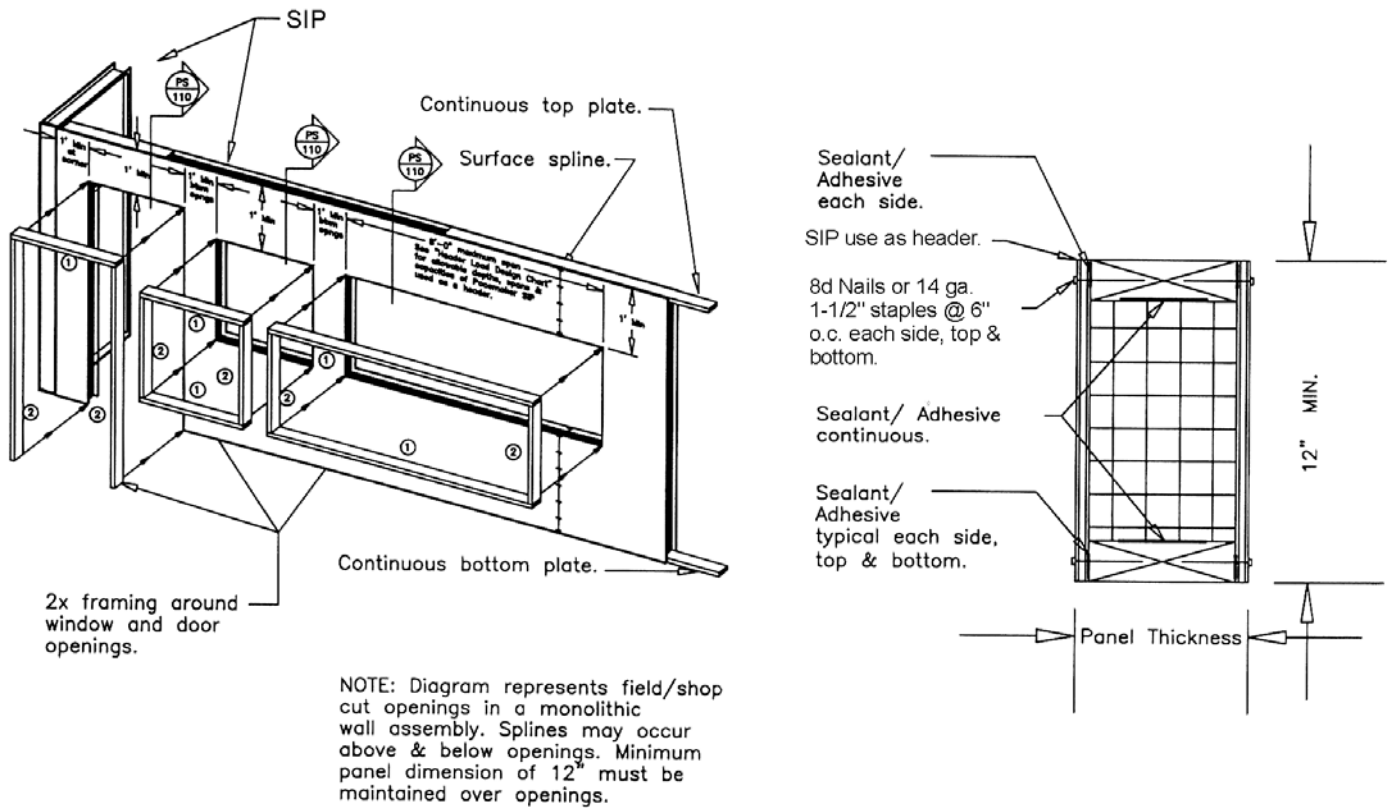


**TABLE 5**  
**STRUCTURAL INSULATED PANEL<sup>1</sup> WITH HEADER – ALLOWABLE LOAD**

Header Depth (in.)	12				18				24			
	L/480	L/360	L/240	L/180	L/480	L/360	L/240	L/180	L/480	L/360	L/240	L/180
Header Span (ft)	Load (plf)											
2	370	500	1078	1813	384	582	1160	1500	757	1255	1695	1695
3	344	485	879	1813	475	636	925	1095	737	986	1206	1206
4	317	470	679	742	566	689	689	689	717	717	717	717
5	283	386	513	544	482	574	574	574	630	630	630	630
6	248	302	346	346	398	459	459	459	543	543	543	543
7	211	256	305	305	356	400	400	400	472	472	472	472
8	174	210	264	264	313	340	340	340	401	401	401	401
9	161	187	214	214	295	308	308	308	345	345	345	345
10	148	163	163	163	276	276	276	276	288	288	288	288

**Notes to Table 5:**

1. Panel core thickness is limited to maximum 5-5/8 in.
2. SI: 1 in. = 25.4, 1 ft = 304.8 mm, 1 lb = 4.4 N



**FIGURE 5\***

\*THESE DRAWINGS ARE FOR ILLUSTRATION PURPOSES ONLY. THEY ARE NOT INTENDED FOR USE AS CONSTRUCTION DOCUMENTS FOR THE PURPOSE OF DESIGN, FABRICATION OR ERECTION.