

DRYWALL CLAD PANELS



Drywall Clad Panels are an energy efficient alternative to conventional framing, insulation, sheathing and other building systems. They are load-capable insulated panels used as walls, roofs, and floors in residential, commercial and institutional buildings. SIPs provide the exterior sheathing, insulation, structure, & interior base finish in one unit, and are available 4' wide and 8' wide in a broad range of thicknesses and lengths.

Components & Features:

Interior and Exterior Skins:

7/16" thick, HUD-PS2-grade, Exposure 1, Oriented Strand Board

Interior Finish:

1/2" thick plaster-base gypsum drywall, often called "blueboard"

Core Materials:

EPS: Expanded Polystyrene, 1.0 lb/cuft, 1 in. is R-3.8

XPS: Extruded Polystyrene, 1.6 lb/cuft, 1 in. is R-5.0

NEO: Neopor Polystyrene, 1.15 lb/cuft, 1 in. is R-4.7

PIR: Polyisocyanurate foam, 2.0 lb/cuft, 1 in. is R-5.7

Features:

- Reduces Heating and Cooling Costs
- Fast Installation Reduces Labor Costs
- Uses Renewable Wood
- Recycled / Recyclable Foam Insulation

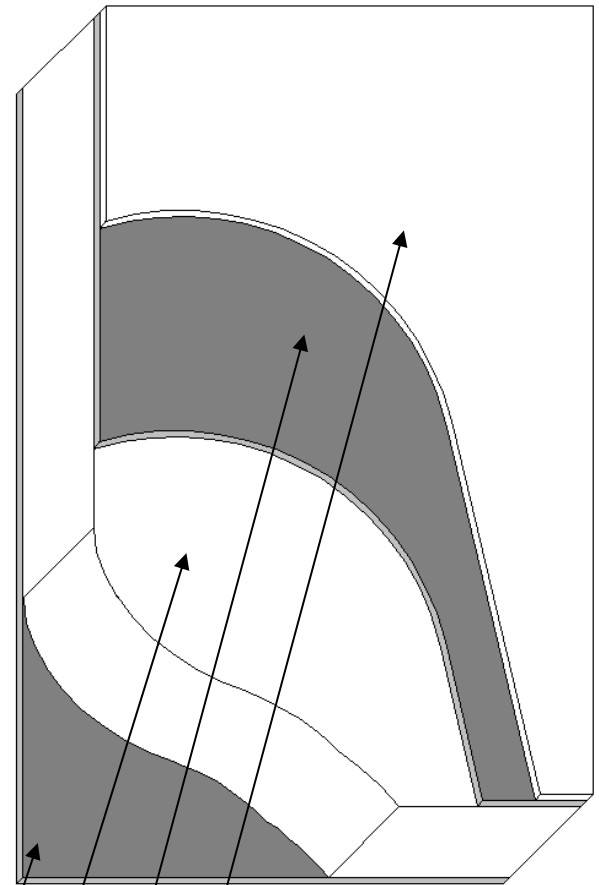
Availability:

- 3.0 through 25.0 inches thick
- 4ft by 6, 7, 8, 9, 10, 12, 14, 16, 18, 20, 22, & 24ft
- 8*ft by 8, 10, 12, 14, 16, 18, 20 & 24ft
- Optional pre-cut services
- Optional embedded nailers
- Optional custom skins
- Optional wire chases
- Optional Code Listing NTA FRD-031609-25 (EPS and NEO Only)

*Drywall only available in 4' widths and up to 16' lengths: 8ft wide panels will have drywall seams and drywall attached by screws not laminated

Manufacturing & Quality Control:

Foard Panel manufacturing meets ICC-ES AC-10. Independent review and approval of procedures and plant operations by registered, third party, ISO Guide 65/17065:2012 accredited inspection agency.



Interior Finish: 1/2" Drywall

Interior Skin: 7/16" OSB, PS2

Core: EPS, NEO, XPS, or PIR
In Various Thicknesses

Exterior Skin: 7/16" OSB, PS2

20 Year Limited Warranty:

Foard Panel Inc. warrants to the buyer that Foard Panels will not delaminate in normal use as the result of a defect in materials or manufacturing for 20 years from the date of purchase. See full warranty for details.

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SIP Properties at Standard Thicknesses

| Overall Thickness (in) | 3.38 | 5.00 | 7.00 | 8.75 | 10.75 | 11.00 | 12.75 | 13.38 | 15.50 | 16.50 | |
|------------------------|------------------------------|--|------|------|-------|-------|-------|-------|-------|-------|------|
| Core Thickness (in) | 2.00 | 3.63 | 5.63 | 7.38 | 9.38 | 9.63 | 11.38 | 11.88 | 14.13 | 15.13 | |
| EPS | R-Value @75° | 9.2 | 15 | 23 | 30 | 38 | 39 | 45 | 48 | 56 | 60 |
| | R-Value @40° | 9.9 | 17 | 25 | 32 | 41 | 42 | 49 | 52 | 61 | 65 |
| | Permeance (perm) | 0.69 | 0.56 | 0.46 | 0.40 | 0.34 | 0.34 | 0.30 | 0.29 | 0.26 | 0.25 |
| | Weight (lb/sqft) | 5.2 | 5.3 | 5.5 | 5.6 | 5.8 | 5.8 | 5.9 | 6.0 | 6.2 | 6.3 |
| | Size Availability 4ft Widths | 4, 5, 6, 7, 8, 9, 10, 12, 14, 16, 18, 20, 22, and 24ft | | | | | | | | | |
| | Size Availability 8ft Widths | 8, 10, 12, 14, 16, 18, 20, and 24ft | | | | | | | | | |
| XPS | R-Value | 11 | 20 | 30 | 38 | 48 | - | 58 | - | - | - |
| | Permeance (perm) | 0.49 | 0.35 | 0.26 | 0.21 | 0.17 | - | 0.15 | - | - | - |
| | Weight (lb/sqft) | 5.3 | 5.5 | 5.8 | 6.0 | 6.3 | - | 6.5 | - | - | - |
| | Size Availability 4ft Widths | 4, 5, 6, 7, 8, 9, 10, 12, 14, 16, 18, 20, 22, and 24ft | | | | | | | | | |
| | Size Availability 8ft Widths | 8, 10, 12, 14, 16, 18, 20, and 24ft | | | | | | | | | |
| NEO | R-Value @75° | 10 | 19 | 28 | 36 | 46 | 47 | 55 | 58 | 68 | 73 |
| | R-Value @40° | 11 | 20 | 30 | 38 | 48 | 49 | 58 | 60 | 72 | 77 |
| | Permeance (perm) | 0.59 | 0.45 | 0.35 | 0.29 | 0.25 | 0.24 | 0.21 | 0.20 | 0.18 | 0.17 |
| | Weight (lb/sqft) | 5.3 | 5.5 | 5.8 | 6.1 | 6.4 | 6.4 | 6.7 | 6.8 | 7.1 | 7.3 |
| | Size Availability 4ft Widths | 4, 5, 6, 7, 8, 9, 10, 12, 14, 16, 18, 20, 22, and 24ft | | | | | | | | | |
| | Size Availability 8ft Widths | 8, 10, 12, 14, 16, 18, 20, and 24ft | | | | | | | | | |
| PIR | R-Value | 13 | 23 | 35 | 45 | 56 | - | 68 | - | - | - |
| | Permeance (perm) | 0.33 | 0.21 | 0.15 | 0.12 | 0.10 | - | 0.08 | - | - | - |
| | Weight (lb/sqft) | 5.3 | 5.6 | 5.9 | 5.9 | 6.2 | - | 6.9 | - | - | - |
| | Size Availability 4ft Widths | 4, 5, 6, 7, 8, 9, 10, 12, 14, 16, 18, 20, 22, and 24ft | | | | | | | | | |
| | Size Availability 8ft Widths | 8, 10, 12, 14, 16, 18, 20, and 24ft | | | | | | | | | |

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SIP Core Properties

| | | Test Method | EPS | NEO | XPS | PIR |
|----------------------|--|---------------------------|-------------------|-------------------|------------------|------------------|
| General | Density (lb/cuft) | ASTM D1622 or C303 | 1.0 ⁵ | 1.15 ⁴ | 1.6 | 2.0 |
| | Dimensional Stability (% Change) | ASTM D2126 | 2 ³ | <1.5 ² | 2 | 2 |
| | Max. Custom SIP Thickness (in.) | - | 25.00 | 25.00 | 12.25 | 12.25 |
| Thermal | R-Value of 1 inch thickness (75 °F) | ASTM C518 | 3.8 ³ | 4.7 ⁴ | 5.0 | 5.7 |
| | R-Value of 1 inch thickness (40 °F) | ASTM C518 or C578 | 4.2 ³ | 5.0 ⁴ | 5.4 | - |
| | U-Value of 1 inch thickness (75 °F) | ASTM C518 | 0.26 ³ | 0.21 | 0.20 | 0.17 |
| | U-Value of 1 inch thickness (40 °F) | ASTM C518 or C578 | 0.24 ³ | 0.20 | 0.19 | - |
| Strength | Compressive 10% Deformation (lbs/sqin) | ASTM D1621 or C165 | 10 | 14 | 20 | 20 |
| | Permeability (perm inches) | ASTM E96 | 5.0 ³ | 3.1 ⁴ | 1.5 | <1.0 |
| | Absorption (% volume) | ASTM C272 | 4.0 ³ | 1.1 ⁴ | 0.3 | <1.0 |
| | Max. Service Temperature (°F) | ASTM D3278 | 160 | 165 ⁵ | 190 ⁶ | 250 |
| Fire Characteristics | Rating | - | Class I | Class I | Class I | Class I |
| | Smoke Developed | E84 | 125 | 25 ² | 165 | 220 ⁷ |
| | Flame Spread | E84 | 15 | 5 ² | 5 | 50 ⁷ |
| | Toxicity of Combustion Products | Same as wood or Cardboard | | | | |

¹ Hunter Panel. Accessed, 5/26/2013. http://www.hpanels.com/images/stories/pdfs/tech_bulls/Hunter_Recycled_Content.pdf

² Opcore G Thermal Insulation, NEO 5300plus from opcodirect.com/library accessed 8/24/2017

³ ASTM International Standards (2006). ICC. pp659-662. West Conshohocken, PA

⁴ BASF Technical Properties, January 18 2016.

⁵ BASF Safety Data Sheet: Styropor BF-222. Revised June 2007, Version 2.1.

⁶ Dow Material Safety Data Sheet: Styrofoam 4x48 Inch Panel Core 20 WN Extruded Polystyrene Foam Insulation. Issued January 2012.

⁷ Hunter Panel Technical Department, October 31, 2014.