

BUILDING THE FUTURE



Polyurethane Foam Core SIPs

Murus Polyurethane (PUR) SIPs were the first panels we produced, and is our signature product line, offering superior R-values per inch of thickness. With consistent insulation through composite construction, a building envelope constructed of Murus SIPs provides excellent air-tightness, resulting in significant savings on heating and cooling energy consumption. The PUR foam core provides the highest R-value per inch of thickness of any SIP foam core available. Murus PUR foam does not contain formaldehyde, CFC's, HCFC's, or other ozone-depleting compounds.

Tongue and Groove Profile

The molded tongue and groove edge profile ensures quick, proper alignment of panel-to-panel joints. Once installed and sealed with spray foam sealant, Murus PUR SIPs are distinguished by the continuous uniformity of insulation that is lacking in spline connection systems.

Cam-Lock System

The Murus patented cam-lock system saves considerable installation time over other SIP systems and can offer even greater time savings over conventional stud wall construction. Cam-locks are located every two feet along the panel's tongue and groove profile edge, and aid in providing a positive seal between panels, helping to eliminate moisture and air infiltration.

Proprietary Process

The Murus proprietary manufacturing method is a key component in creating our PUR panel's superior characteristics. The Uniform Dispersion Molding (UDM) method enhances the properties of the foam and creates the strongest possible bond between the skins. The liquid foam

is uniformly dispersed throughout the mold; the foam expands, bonds, and cures under 12 to 14 psi. UDM produces uniform foam density and spherical cells throughout the foam core ensuring superior, uniform strength as compared to elongated, rice-shaped cells found in polyisocyanurate lamination foams.

Electrical Chase

During manufacturing, Murus embeds a standard electrical chase horizontally in the panel's foam core. Three standard chase heights are available. Additional heights can be easily added – for example, a dedicated chase for countertop receptacle switches or communication wiring.

Fire Resistance

Murus PUR foam cores have a Class 1 fire resistance rating – the highest rating available for combustible materials.

Lifetime Warranty

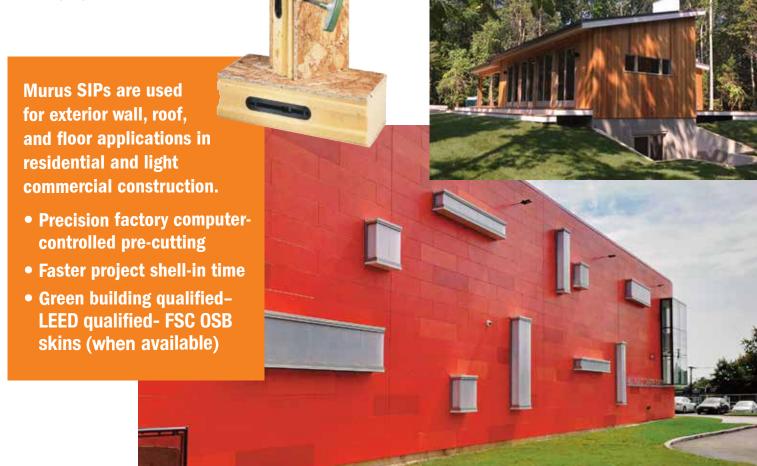
A lifetime warranty covers our Polyurethane SIPs against delamination. Contact Murus for complete warranty information.

Product Testing and Certification

Listed with NTA.

2145	2155	2165
4-5/8	5-5/8	6-5/8
48	*	*
4, 6, 8, 9, 10, 12, 14, 1	6, 18, 20, 22, 24	
3.95	4.15	4.35
osed Cell Foam		
Class 1	**UL723	
27	34	41
	4-5/8 48 4, 6, 8, 9, 10, 12, 14, 1 3.95 losed Cell Foam Class 1	4-5/8 5-5/8 48 * 4, 6, 8, 9, 10, 12, 14, 16, 18, 20, 22, 24 3.95 4.15 losed Cell Foam Class 1 **UL7.

^{*}Specification or value is the same as the OSB-2145PUR Panel Panel. Class ${\bf 1}$ is the highest rating available for combustible materials.



^{**}UL723 is not necessarily a representation of performance in an actual fire

EPS Foam Core SIPs

Murus Expanded Polystyrene (EPS) SIPs are a high quality, competitively priced alternative to conventional construction, offering energy efficiency and superior R-values. Murus EPS SIPs are available in a variety of thicknesses, in 4-foot and 8-foot widths, in lengths up to 24 feet.

The EPS manufacturing process expands the foam core material into a large block which is then cut to the desired core thickness and length. It is then pressure-laminated to the panel skin surfaces

using an extremely durable one-part structural urethane adhesive which is reacted to set under pressure. The resulting bond is stronger than the materials it laminates together.

Panel installation

EPS SIPs are installed using a key-spline connection system. Typical panel-to-panel connection is achieved using two plywood splines inserted into pre-routed spline grooves. Panels are manufactured with core dimensions that allow dimensional lumber to be incorporated for additional load-bearing support, if required.

2145EPS	2165EPS	2185EPS	21105EPS	21125EPS
4-1/2	6-1/2	8-1/4	10-1/4	12-1/4
48 or 96	*	*	*	*
10, 12, 14, 16, 18	3, 20, 22, 24			
24				
3.50	3.70	3.85	4.00	4.15
styrene Foam				
Class 1	**AS	TM E84		
15	23	29	37	45
	4-1/2 48 or 96 10, 12, 14, 16, 18 24 3.50 vstyrene Foam Class 1	4-1/2 6-1/2 48 or 96 * 10, 12, 14, 16, 18, 20, 22, 24 24 23 .50 3.70 styrene Foam Class 1 **AS	4-1/2 6-1/2 8-1/4 48 or 96 * * 10, 12, 14, 16, 18, 20, 22, 24 24 3.50 3.70 3.85 styrene Foam Class 1 **ASTM E84	4-1/2 6-1/2 8-1/4 10-1/4 48 or 96 * * * 10, 12, 14, 16, 18, 20, 22, 24 24 23, 50 3.70 3.85 4.00 styrene Foam Class 1 **ASTM E84

^{*}Specification or value is the same as the OSB-2145EPS Panel.
Class 1 is the highest rating available for combustible materials.

Electrical Chase

Electrical wiring is accommodated through horizontal electrical chases cut into the EPS core during panel manufacturing. Optional vertical chases can also be incorporated.

Fire Resistance

Murus EPS foam cores have a Class 1 fire resistance rating – the highest rating available for combustible materials.

EPS Warranty

A limited 10-year warranty against delamination. Contact Murus for full details.

Product Testing and Certification

Listed with NTA.

- Highly energy efficient with superior insulating values
- Excellent air-tightness for reduced energy consumption
- Superior living comfort
- Environmentally responsible

of ownership by building with Murus SIPs.



^{**}ASTM E84 is not necessarily a representation of performance in an actual fire.

GPS Foam Core SIPs

Murus offers graphite-enhanced NEOPOR® brand EPS from BASF as a value-added SIP foam-core alternative. GPS SIPs are available in a variety of thicknesses in 4-foot and 8-foot widths, and in lengths up to 24 feet.

GPS is a proprietary expanded polystyrene formulated by incorporating graphite into the EPS cell structure. The particles reflect and absorb thermal radiation, thus improving the ability of EPS to insulate (a 20% increase in R-value over standard EPS in the same thickness).

No CFC's, HCFC's, HFC's, or halogenated cell gases are used in the manufacture of GPS.

Electrical Chase

Electrical wiring is accommodated through horizontal electrical chases cut into the GPS core during panel manufacturing. Optional vertical chases can also be incorporated.

THE MURUS OSB-2100/GPS STRUCTURAL INSULATED PANEL 2145GPS 2165GPS 2185GPS 21105GPS 21125GPS OVERALL THICKNESS (inches) 4-1/2 6-1/2 8-1/4 10-1/4 12-1/4 WIDTH (inches) 48 or 96 STANDARD LENGTHS (feet) (48 inch Widths) 8 ,9, 10, 12, 14, 16, 18, 20, 22, 24 (96 inch Widths) up to 24 3.90 4.05 4.20 WEIGHT (lbs/sf) Insulated Core: NEOPOR® Expanded Polystyrene Foam CORE FIRE RATING **ASTM E84 SYSTEM R-VALUE 36 45 55 18 Outside Skins: 7/16 inch oriented strand board (OSB), PS2, Exposure-1

- * Specifications or value is the same as the OSB-2145GPS Class 1 is the highest rating available for combustible materials.
- **ASTM E84 is not necessarily a representation of performance in an actual fire.

Fire Resistance

Murus GPS foam cores have a Class 1 fire resistance rating – the highest rating available for combustible materials.

Warranty

A limited 10-year warranty against delamination. Contact Murus for full details.

Product Testing and Certification

Listed with NTA.

NEOPOR® is a registered trademark of BASF SE.











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