murus®

STRUCTURAL INSULATING PANELS

BUILDING THE FUTURE

For Homeowners: Long-Term Energy Savings and Comfort

For Builders: Dramatic Efficiencies over Stick-Frame Construction

For Architects and Engineers: Fully Engineered and Tested; Easy Path to LEED Certification

Polyurethane, EPS, and NEOPOR® Foam Cores Available

Polyurethane Foam Core SIPs

Murus Polyurethane (PUR) SIPs were the first panels we produced, and provide the highest R-value per inch of thickness of any SIP foam core available. Murus SIPs provide exceptional air-tightness and significant savings heating and cooling the structure. The Murus PUR foam-core does not contain formaldehyde, CFC's HCFC's, or other ozone-depleting compounds.

Tongue and Groove Profile
The molded tongue and groove edge profile assures quick alignment of panel-to-panel joints. And, our spray-foam-sealed joint provides further energy and labor-saving efficiencies with continuous insulation uninterrupted by key or other wood spline connectors.

Cam-Lock System
The Murus patented Cam-Lock system saves considerable installation time over other SIP systems and even time savings over conventional stud wall construction. Cam-Locks are located every two feet along the panel's tongue and groove profile edge. Cam-Locks, in conjunction with spray-foam sealant, aid in providing a positive seal between panels, helping to eliminate moisture and air infiltration.

Proprietary Process
The Murus proprietary manufacturing method is key to creating our PUR panel's superior characteristics. Our Uniform Dispersion Molding (UDM) 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 generating 12-14 psi of pressure. UDM produces uniform foam density and spherical cells throughout the foam core, ensuring superior, and 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.

THE MURUS OSB-2100 PUR STRUCTURAL INSULATED PANEL

Series	2145	2155	2165
OVERALL THICKNESS (inches)	4-5/8	5-5/8	6-5/8
WIDTH (inches)	48	*	*
STANDARD LENGTHS (feet)	4, 6, 8, 9, 10, 12, 14, 16, 18, 20, 22, 24		
WEIGHT (lbs/sf)	3.95	4.15	4.35
Insulated Core: Polyurethane Closed Cell Foam			
CORE FIRE RATING	Class 1	**UL723	
SYSTEM R-VALUE	27	34	41
Skins: 7/16 inch oriented strand board (OSB), Exposure-1			
Other Panel Systems Available: See www.murus.com/products			

*Specification or value is the same as the OSB-2145PUR Panel Panel. Class 1 is the highest rating available for combustible materials.
**UL723 is not necessarily a representation of performance in an actual fire.

Murus SIPs are used for exterior wall, roof, and floor applications in residential and light commercial construction.

- **Precision factory computer-controlled pre-cutting**
- **Faster project shell-in time**
- **Green building qualified– LEED qualified- FSC OSB skins available**

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 from 4-1/2 to 16 or more inches and 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, cutting it to the desired core thickness, then pressure-laminating it to the panel skin surfaces. An extremely durable one-part structural urethane adhesive is used and is designed 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.

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
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THE MURUS OSB-2100/EPS STRUCTURAL INSULATED PANEL

Series	2145EPS	2165EPS	2185EPS	21105EPS	21125EPS
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				
WEIGHT (lbs/sf)	3.50	3.70	3.85	4.00	4.15
Insulated Core:	Expanded Polystyrene Foam				
CORE FIRE RATING	Class 1		**ASTM E84		
SYSTEM R-VALUE	15	23	29	37	45
Skins:	7/16 inches oriented strand board (OSB) Exposure-1				
Other Panel Systems Available:	See www.murus.com/products				

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

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

Lower your cost of ownership by building with Murus SIPs.

NEOPOR® EPS Foam Core SIPs

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

NEOPOR® EPS 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 NEOPOR® EPS.

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 NEOPOR® EPS 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.

THE MURUS OSB-2100/NEOPOR® EPS STRUCTURAL INSULATED PANEL

Series	2145NEO	2165NEO	2185NEO	21105NEO	21125NEO
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				
WEIGHT (lbs/sf)	3.55	3.75	3.90	4.05	4.20
Insulated Core: NEOPOR® Expanded Polystyrene Foam					
CORE FIRE RATING	Class 1		**ASTM E84		
SYSTEM R-VALUE	17	26	34	43	52
Outside Skins: 7/16 inch oriented strand board (OSB) Exposure-1					

* Specifications or value is the same as the OSB-2145NEO
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murus®
STRUCTURAL INSULATING PANELS

The Murus Company, Inc.
P.O. Box 220 · 3234 Route 549
Mansfield, PA, USA 16933
Toll Free: 800-626-8787 · Phone 570-549-2100
Fax 570-549-2101 · www.murus.com · info@murus.com