



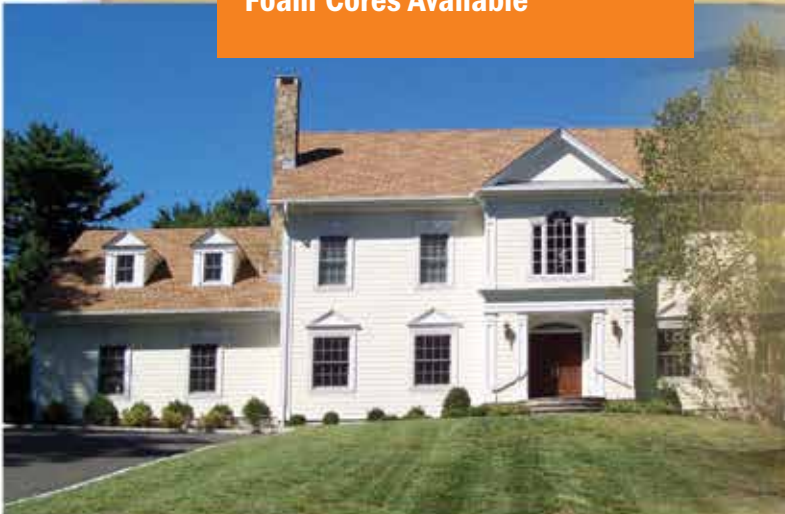
# BUILDING THE FUTURE

**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 GPS Foam Cores Available**



# 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

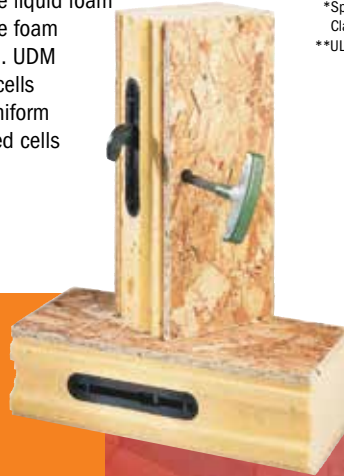
The molded tongue and groove edge profile ensures quick, proper alignment of panel-to-panel joints. Once installed and sealed with spray foam sealant, Murus PUR SIPs are distinguished by the continuous uniformity of insulation that is lacking in spline connection systems.

## 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.



**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 (when available)

## 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
<b>Insulated Core:</b> Polyurethane Closed Cell Foam			
CORE FIRE RATING	Class 1		**UL723
SYSTEM R-VALUE @ 75F	27	34	41
SYSTEM R-VALUE @ 40F	29	37	44
<b>Skins:</b> 7/16 inch oriented strand board (OSB), PS2, Exposure-1			
<b>Other Panel Systems Available:</b> See <a href="http://www.murus.com/products">www.murus.com/products</a>			

\*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.



# 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.



## 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.

### THE MURUS OSB-2100/EPS STRUCTURAL INSULATED PANEL

Series	2145EPS	2165EPS	2185EPS	21105EPS	21125EPS	21150EPS
OVERALL THICKNESS (inches)	4-5/8	6-1/2	8-1/4	10-1/4	12-1/4	15
WIDTH (inches)	48 or 96	*	*	*	*	48
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	3.80	4.00	4.20	4.40
<b>Insulated Core:</b> Expanded Polystyrene Foam						
CORE FIRE RATING	Class 1		**ASTM E84			
SYSTEM R-VALUE @ 75F	15	23	29	37	45	55
SYSTEM R-VALUE @ 40F	16	25	32	40	49	60
<b>Skins:</b>	7/16 inches oriented strand board (OSB), PS2, Exposure-1					
<b>Other Panel Systems Available:</b> See <a href="http://www.murus.com/products">www.murus.com/products</a>						

\* 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.**



# 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.

## 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.

### THE MURUS OSB-2100/GPS STRUCTURAL INSULATED PANEL

Series	2145GPS	2165GPS	2185GPS	21105GPS	21125GPS	21150GPS
OVERALL THICKNESS (inches)	4-5/8	6-1/2	8-1/4	10-1/4	12-1/4	15
WIDTH (inches)	48 or 96	*	*	*	*	48
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)	3.60	3.80	4.00	4.20	4.40	4.70
<b>Insulated Core:</b> NEOPOR® Expanded Polystyrene Foam						
CORE FIRE RATING	Class 1		**ASTM E84			
SYSTEM R-VALUE @ 75F	18	28	36	45	55	67
SYSTEM R-VALUE @ 40F	19	29	38	48	58	72
<b>Outside Skins:</b>	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.



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