# **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 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 NER-1038 (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

# Interior Finsih: 1/2" Drywall Interior Skin: 7/16" OSB, PS2 Core: EPS, NEO, or PIR In Various Thicknesses Exterior Skin: 7/16" OSB, PS2

### **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.

### 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.

# DRYWALL CLAD PANELS



	SIP Properties	at S	Stand	dard	Ihi	ckne	esse	S			
	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									
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	ı	0.08	ı	-	1
	Weight (lb/sqft)	5.3	5.6	5.9	5.9	6.2	ı	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									

# DRYWALL CLAD PANELS



Foam Core Properties									
		Test Method	EPS	NEO	PIR				
General	Density (lb/cuft)	ASTM D1622 or C303	1.0	1.15 <sup>1</sup>	2.0				
	Dimensional Stability (% Change)	ASTM D2126	<b>2</b> <sup>2</sup>	<1.5 <sup>1</sup>	24				
	Max. Custom SIP Thickness (in.)	-	25.00	25.00	12.25				
Thermal	R-Value of 1 inch thickness (75 °F)	ASTM C518	3.8 <sup>2,3</sup>	4.7 <sup>1</sup>	5.74				
	R-Value of 1 inch thickness (40 °F)	ASTM C518 or C578	4.2 <sup>2,3</sup>	5.0 <sup>1</sup>	-				
	U-Value of 1 inch thickness (75 °F)	ASTM C518	0.26 <sup>2,3</sup>	0.21	0.17				
	U-Value of 1 inch thickness (40 °F)	ASTM C518 or C578	0.24 <sup>2,3</sup>	0.20	-				
Strength	Compressive 10% Deformation (lbs/sqin)	ASTM D1621 or C165	10 <sup>2,3</sup>	14 <sup>1</sup>	20 <sup>4</sup>				
	Permeability (perm inches)	ASTM E96	5.0 <sup>2,3</sup>	3.1 <sup>1</sup>	<1.04				
	Absorption (% volume)	ASTM C272	4.02	1.1 <sup>1</sup>	<1.04				
	Application Limiting Temperature (°F)	ASTM D3278	167 <sup>2,3</sup>	165 <sup>1</sup>	250 <sup>4</sup>				
Fire Characteristics	Rating	-	Class I	Class I	Class I				
	Smoke Developed	E84	450 <sup>2</sup>	25 <sup>1</sup>	220 <sup>5</sup>				
	Flame Spread	E84	25 <sup>2</sup>	5 <sup>1</sup>	50 <sup>5</sup>				
ပ်	Toxicity of Combustion Products	Same as wood or Cardboard							

<sup>&</sup>lt;sup>1</sup> Opcore G Thermal Insulation, NEO 5300plus from opcodirect.com/library accessed 7/22/2020

https://7b3594cf-cefc-42f2-baa2-29e9e14e3022.filesusr.com/ugd/1c896f\_023e9eff61ce41078ace42059431c500.pdf

<sup>&</sup>lt;sup>2</sup> Opcore Thermal Insulation, EPS from opcodirect.com accessed 7/22/2020

https://7b3594cf-cefc-42f2-baa2-29e9e14e3022.filesusr.com/ugd/1c896f\_b44302207ddf4a52b4b47377df847924.pdf

<sup>&</sup>lt;sup>3</sup> Polar Industries, EPS Data Sheet from polarcentral.com/knowledge-base accessed 7/22/2020 http://polarcentral.com/wp-content/uploads/2016/09/Polar-EPS-Properties.pdf

<sup>&</sup>lt;sup>4</sup> Hunter Panel H-Shield Data Sheet (April 2020)

https://www.hunterpanels.com/docman-categories/product-documents/hpanels/flat-products/39-h-shield-flat-polyiso

<sup>&</sup>lt;sup>5</sup> Hunter Panel Technical Department, October 31, 2014