



EXTRUDED POLYSTYRENE (XPS) RIGID FOAM STRUCTURAL INSULATED SHEATHING

EZSHEATH™ Structural Insulated Sheathing is a composite structural insulated sheathing panel designed for use as exterior sheathing in residential wood-framed walls. It provides structural reinforcement, continuous insulation, and an air and water barrier (when used with required accessories, See “EZSHEATH™ Installation Guide”) in a single panel to meet residential building code requirements.

EZSHEATH™ is a composite board made of FOAMULAR® NGX® Extruded Polystyrene (XPS), a closed-cell rigid moisture-resistant rigid foam board sandwiched between polycarbonate layers to create a lightweight durable nail base for structural sheathing applications.



EZSHEATH™

STRUCTURAL INSULATED SHEATHING

Features



Combines structure, continuous insulation, and air & weather protection in one step



50% lighter than traditional OSB



Moisture resistant



Holds nails tight, even in extreme temperatures and humidity

Physical Properties¹

PROPERTY ²	TEST METHOD	VALUE
Thermal Resistance, ³ R-Value hr·ft ² ·°F/Btu (RSI, °C·m ² /W) @ 75°F (24°C) mean temperature	ASTM C518	5
Flexural Strength*, minimum psi (kPa)	ASTM C203	>50
Water Vapor Permeance, maximum perm (ng/Pa·s·m ²)	ASTM E96	<0.1
Flame Spread (Ceiling) ^{4,5}	ASTM E84	<25
Smoke Developed ^{4,5}	ASTM E84	<450
Service Temperature, maximum °F (°C)	-	165°F

1 1 inch boards were tested for all properties shown.

2 ASTM C578 testing results pertain to the foam core only.

3 R means the resistance to heat flow; the higher the value, the greater the insulation power. This insulation must be installed properly to get the marked R-value. Follow the manufacturer's instructions carefully. If a manufacturer's fact sheet is not provided with the material shipment, request this and review it carefully. R-values vary, depending on many factors, including the mean temperature at which the test is conducted and the age of the sample at the time of testing. The U.S. FT requires the R-value of home insulation to be measured at 75°F mean temperature. R-value claims should always be compared at the same mean temperature. Because rigid foam plastic insulation products are not all aged in accordance with the same standards, it is useful to publish comparison R-value data. The R-value for FOAMULAR® NGX® XPS insulation is provided from testing at mean temperatures of: -4°C (25°F), 4.4°C (40°F), and 24°C (75°F), and aging techniques of 180-day real-time aged (as mandated by ASTM C578) and accelerated aging "Long-Term Thermal Resistance" (LTTR) per CAN/ULC S770-03."

4 Foam core only.

5 These laboratory tests are not intended to describe the hazards presented by this material under actual fire conditions.

6 See technical bulletin for attachment requirements.

Standards, Codes Compliance

- Meets ASTM E2357 Air Leakage Resistance.⁷
- Tested to ASTM E331 Water penetration Resistance.⁷
- Tested to ASTM E72 Racking Testing.⁷
- Tested to ASTM E330 Structure Performance requirements⁷

[7. See technical bulletin.](#)

Limited Warranty

EZSHEATH™ Panels have a 30-year limited warranty that maintains 90% of its thermal R-value, moisture resistance, and delamination. See “EZSHEATH™ Panel Limited Warranty” for complete details, limitations, and requirements.

Product Data Section

THICKNESS (IN)*	R VALUE	PRODUCT DIMENSIONS*
		THICKNESS X WIDTH X LENGTH (IN)
0.5	3	0.5 x 48 x 96
		0.5 x 48 x 108
		0.5 x 48 x 120
1	5	1 x 48 x 96
		1 x 48 x 108
		1 x 48 x 120
2	10	2 x 48 x 96
		2 x 48 x 108
		2 x 48 x 120

*Nominal dimensions

Technical Information

- Can be installed directly to studs to meet construction and service-loading conditions. A licensed design professional should verify all loading and bracing requirements.
- Reversible and can be installed with either face out.
- See EZSheath Installation Instruction for requirements
- Can be installed using a pneumatic nailer or similar product. See installation instructions for settings and required nailing pattern.
- Fastening pattern requirements per project specific loading- see EZSheath Structural Design Guide
- Has a maximum service temperature of 165°F.
- Taped panels should be covered within 60 days to avoid product degradation from UV exposure.
- Meets ASTM E331 and E2357 as an air and water barrier when sealed with EasySealR® and FlashSealR® per installation instructions. Taped panels should be covered within 180 days to avoid product degradation from UV exposure.
- All construction should be evaluated for the necessity to provide vapor retarders. See current ASHRAE Handbook of Fundamentals.
- This product is combustible. A protective barrier or thermal barrier is required to separate this product from interior living or conditioned spaces as specified in the appropriate building code.

Tested in accordance with ASTM E331 Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference

Tested in accordance with ASTM E2357 Standard Test Method for Determining Air leakage of Air Barrier Assemblies

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OWENS CORNING FOAM INSULATION, LLC
 ONE OWENS CORNING PARKWAY TOLEDO, OH 43659 USA
1-800-GET-PINK®
www.owenscorning.com