





EXTRUDED POLYSTYRENE (XPS) RIGID FOAM INSULATION

Owens Corning® FOAMULAR® NGX® 350 Extruded Polystyrene (XPS) Insulation is a closed-cell, moisture-resistant rigid foam board with high compressive strength designed to be used in protected membrane roof assemblies.

Product Features







DURABLE



EASY TO CUT. FORM & FIT



80% GLOBAL WARMING REDUCTION1

1 Impact measured over 100-year time horizon, as compared to legacy FOAMULAR® insulation. EPD can be found in the "Environmental and Sustainability" section on Page 2.

Basic Uses/Related Uses

· Commercial flat roof assemblies

Selection Criteria

- Protected membrane roofing applications
- Tapered boards by 3rd party
- · Moisture resistant (hydrophobic), long term durability
- · Compatible with modified bituminous, hot applied liquid rubber, thermoplastic, and EPDM waterproofing membranes

Performance Criteria

COMPLIANCE	CCMC Evaluation Listing No. 13430-L	CCMC
	Type 4	CAN/ULC-701.1-17

Additional Performance Information

PROPERTY	VALUE	TEST METHOD	
Thermal Resistance ²	RSI, °C·m²/W (R-Value, hr·ft²-°F/Btu) 5.0 (0.88) @ 24 °C (75 °F) mean temperature 5.4 (0.95) @ 4.4 °C (40 °F) mean temperature 5.6 (0.99) @ -3.9 °C (25 °F) mean temperature	ASTM C518 or C177	
LTTR: (Canada)	Min. LTTR RSI (m² °C/W) RSI: 0.86 @ 25.4 mm thickness RSI: 1.28 @ 38.1 mm thickness RSI: 1.70 @ 50.8 mm thickness RSI: 2.13 @ 63.5 mm thickness RSI: 2.59 @ 76.2 mm thickness RSI: 3.05 @ 88.9 mm thickness RSI: 3.52 @ 101.6 mm thickness	CAN/ULC-S770-15	
Compressive Strength ³	35 psi (240 kPa)	ASTM D1621	
Compressive Modulus (typical)	1480 psi (10204 kPa)	ASTM D1621	
Flexural Strength ⁴ (typical)	80 psi (552 kPa)	ASTM C203	
Dimensional Stability, Maximum	% linear change: 1.5	ASTM D2126	
Linear Coefficient of Thermal Expansion	6.3 x 10 ⁻⁵ mm/mm/°C (3.5 x 10 ⁻⁵ in./in./°F)	ASTM E228	
Water Absorption	(max % by volume): 0.30 (max % by volume): 0.30	ASTM D2842 ASTM C272 ⁵	
Water Vapour Permeance (typical)	0.3 Perms (17 ng/Pa.s.m²)	ASTM E96	
Water Capillarity	None	-	
Water Affinity	Hydrophobic	-	
Limiting Oxygen Index	min.: 24	ASTM D2863	
Non-combustibility	Combustible	CAN/ULC-S114	
Max. Service Temperature	74 °C (165 °F)	-	

- 2 The R-value for FOAMULAR® NGX® XPS Insulation is provided from testing at mean temperatures of: -3.9 °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).
- 3 Values at yield or 10% deflection, whichever occurs first. 4 Value at yield or 5%, whichever occurs first.

Technical Information

- Deliver FOAMULAR® NGX® XPS insulation products in their original factory-wrapped packaging.
- Exposure to exterior conditions during normal construction cycles is permitted. During that time some fading of color may begin due to UV exposure, and, if exposed for extended periods of time, some degradation or "dusting" of the polystyrene surface may begin. It is best if the product is covered within 60 days to minimize degradation. Once covered, the deterioration stops, and damage is limited to the thin top surface layers of cells. Cells below are generally unharmed.
- Prior to use of adhesives, sealants or other similar products with polystyrene boards, verify their compatibility with adhesive manufacturers.
- Caution: This product is combustible. A protective barrier or thermal barrier is required as specified in the appropriate building Code.
 Do not expose to open flames or any other ignition source during transport, handling, storage or use. 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.
- Place and adjust FOAMULAR® NGX® 350 XPS insulation boards on the roof membrane to obtain tight joints or lapped with two thicknesses of insulation. Make tight joints between each board and around roof drains, air ducts and framing passing through; where two layers are required, overlap all joints. Once insulation boards are installed, cover completely with a filter fabric and ballast, gravel, soil, prefabricated pavers or other finishes, having the required weight. Consult an Owens Corning Canada Technical representative for appropriate fastener and adhesive selections.

Availability

PRODUCT	THICKNESS	WIDTHS	LENGTHS	EDGES
FOAMULAR® NGX® 350 XPS	38 mm, 51 mm, 64 mm, 76 mm, 102 mm (1.5", 2", 2.5", 3", 4")	610 mm (24")	1220 mm (48")	Ship Lapped
	51 mm, 76 mm, 102 mm (2", 3", 4")	610 mm (24")	2438 mm (96")	Ship Lapped

FOAMULAR® NGX® 350 is shipped in units containing four individually shrink-wrapped packages.

Certifications and Sustainable Features

- Certified by SCS Global Services to contain a minimum of 20% recycled content pre-consumer #SCS-RC-01132.
- GREENGUARD Certified products are certified to GREENGUARD standards for low chemical emissions into indoor air during product usage. For more information, visit https://www.ul.com/qq
- Environmental Product Declaration (EPD) has been certified by SCS Global Services. EPD #SCS-EPD-09753.
- UL CERTIFIED See Bulk Shipment Certificate U-197 available at www.owenscorning.com/U197.
- Contributes to credits in green building programs such as LEED® and Green Globes. For further information see documents: LEED® v4 for Building Design and Construction and Owens Corning Impact Study - Leadership in Energy and Environmental Design (LEED® v4)

Environmental and Sustainability

Owens Corning is a worldwide leader in building material systems, insulation, and composite solutions, delivering a broad range of high quality products and services.

Owens Corning is committed to driving sustainability by delivering solutions, transforming markets, and enhancing lives. More information can be found at www.owenscorning.ca or www.owenscorninglibrary.ca.

FOAMULAR® NGX® XPS insulation uses blowing agents with zero ozone depletion potential.

Detailed environmental information on the lifecycle of this product can be found in product's Environmental Product Declaration.

Technical Services Available

For Canadian Technical inquiries, please contact our technical team at www.owenscorning.ca/contacttech.

Limited Warranty

FOAMULAR® NGX® XPS insulation limited lifetime warranty maintains 90% of its R-value for the lifetime of the building and covers all CAN/ULC-S701 properties. See FOAMULAR® NGX® Extruded Polystyrene Insulation Lifetime Limited Warranty for complete details, limitations, and requirements.

Disclaimer of Liability

Technical information contained herein is furnished without charge or obligation and is given and accepted at recipient's sole risk. Because conditions of use may vary and are beyond our control, Owens Corning makes no representation about and is not responsible or liable for the accuracy or reliability of data associated with particular uses of any product described herein. SCS Global Services provides independent verification of recycled content in building materials and verifies recycled content claims made by manufacturers. For more information, visit www.SCSglobalservices.com.

LEED® is a registered trademark of the U.S. Green Building Council.

Notes

For additional information, refer to the Safe Use Instruction Sheet (SUIS) found in the SDS Database via http://sds.owenscorning.com.









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