



FOAMULAR® NGX™ 350

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.

FOAMULAR® NGX™ 350 contains the additional benefit of being manufactured with a blowing agent formulation that delivers a 90% reduction to Global Warming Potential (100 year), including the complete elimination of HFC 134a.1

1 Compared to FOAMULAR® 350 products

Product Features







DURABLE



EASY TO CUT, FORM & FIT

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-S701.1-17 |

Additional Performance Information

| PROPERTY | VALUE | TEST METHOD | |
|--|---|----------------------|--|
| Thermal Resistance ³ | 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 ⁴ | 35 psi (240 kPa) | ASTM D1621 | |
| Compressive Modulus (typical) | 1480 psi (10204 kPa) | ASTM D1621 | |
| Flexural Strength ⁵ (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 | ASTM D2842 | |
| 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) | - | |

³ 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)
4 Values at yield or 10% deflection, whichever occurs first.

5 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 |

 ${\sf FOAMULAR@NGX^{\it m}\,350}\ is\ shipped\ in\ units\ containing\ four\ individually\ shrink-wrapped\ packages$

Certifications and Sustainable Features

- Certified by SCS Global Services to contain a minimum of 20% recycled content pre-consumer
- GREENGUARD Certified products are certified to GREENGUARD standards for low chemical emissions into indoor air during product usage. For more information, visit ul.com/gg
- Product specific Type 4 UL Environmental Product Declaration (EPD) and Transparency Brief certified by UL Environment
- 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 $^{\rm m}$ 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.

OWENS CORNING CANADA LP

3450 MCNICOLL AVENUE SCARBOROUGH, ONTARIO M1V 1Z5

1-800-GET-PINK® www.owenscorning.ca