FOAMULAR® NGX® 150

EXTRUDED POLYSTYRENE (XPS) RIGID FOAM INSULATION

Owens Corning® FOAMULAR® NGX® 150 Extruded Polystyrene XPS Rigid Foam Insulation is a closed-cell, moisture-resistant rigid foam board well suited to meet the needs of a wide variety of building applications.[1] FOAMULAR® NGX® 150 Polystyrene XPS Rigid Foam insulation is great for many construction applications such as basement walls, crawl space walls, cavity walls, insulating sheathing, and other applications.[1]

1 Not for use in flat or low-slope roofing. For low-slope roofing applications, use FOAMULAR® NGX® THERMAPINK® 25 Extruded Polystyrene (XPS) Rigid Foam Insulation.

Features

SUPERIOR MOISTURE RESISTANCE

DURABLE

EASY TO CUT, FORM & FIT

Standards, Codes Compliance

- Meets ASTM C578 Type X
- Tested to ASTM E330 per ANSI/ABTG FS100 for sheathing applications
- UL Classification Certificate U-197, Certification is available at www.owenscorning.com/U197
- Code Evaluation Report UL ER8811-01, Report is available at www.owenscorning.com/UER8811-01
- ASTM E119 Fire Resistance Rated Wall Assemblies
- Meets California Quality Standards; HUD UM #71a

Applications

- Cavity walls
- Wall sheathing
- Weather-resistant barrier (when joints are sealed)[2]
- Perimeter/foundation walls
- Basement walls (cannot be left exposed and must be covered by thermal barrier such as gypsum drywall)

2 When installation instructions are followed. Refer to ASTM E2357 and ASTM E331 Technical Bulletins and installation instructions by construction type.

Limited Warranty

FOAMULAR® NGX® XPS insulation limited lifetime warranty maintains 90% of its R-value for the lifetime of the building and covers all ASTM C578 properties. See "FOAMULAR® NGX® Extruded Polystyrene Insulation Lifetime Limited Warranty" for complete details, limitations, and requirements.

Physical Properties[3]

PROPERTY	TEST METHOD[4]	VALUE
Thermal Resistance,[5] R-Value, hr•ft²•°F/Btu (RSI, °C•m2/W) @ 75°F (24°C) mean temperature	ASTM C518	5.0 (0.88)
@ 40°F (4.4°C) mean temperature		5.4 (0.95)
@ 25°F (-3.9°C) mean temperature		5.6 (0.99)
Long-Term Thermal Resistance, LTTR-Value,[5] minimum hr•ft²•°F/Btu (RSI, °C•m²/W) @ 75°F (24°C) mean temperature	CAN/ULC S770-03	5.0 (0.88)
Compressive Strength,[6] minimum psi (kPa)	ASTM D1621	15 (104)
Flexural Strength,[7] minimum psi (kPa)	ASTM C203	40 (276)
Water Absorption,[8] maximum % by volume	ASTM C272	0.3
Water Vapor Permeance,[9] maximum perm (ng/Pa•s•m²)	ASTM E96	1.5 (86)
Dimensional Stability, maximum % linear change	ASTM D2126	2.0
Flame Spread[10, 11]	ASTM E84	10
Smoke Developed[10, 11]	ASTM E84	175
Oxygen Index,[11] minimum % by volume	ASTM D2863	24
Service Temperature, maximum °F (°C)	-	165 (74)
Linear Coefficient of Thermal Expansion, in/in/°F (m/m/°C)	ASTM E228	3.5×10^{-5} (6.3×10^{-5})

3 Properties shown are representative values for 1-inch-thick material, unless otherwise specified. Extruded Polystyrene Insulation may exhibit different physical properties based upon thickness. Certain physical properties are listed by minimum and maximum values per ASTM C578. For details on specific test methods, please contact Owens Corning at 1-800-GET-PINK.
4 Modified as required to meet ASTM C578.
5 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. FTC 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 three mean temperatures, 25°F, 40°F, and 75°F, and from two aging (conditioning) techniques, 180-day real-time aged (as mandated by ASTM C578) and a method of accelerated aging sometimes called "Long-Term Thermal Resistance" (LTTR) per CAN/ULC S770-03.
6 Value at yield or 10% deflection, whichever occurs first.
7 Value at yield or 5%, whichever occurs first.
8 Data ranges from 0.00 to value shown due to the level of precision of the test method.
9 Water vapor permeance decreases as thickness increases.
10 These laboratory tests are not intended to describe the hazards presented by this material under actual fire conditions.
11 Data from Underwriters Laboratories Inc.® classified. See Classification Certificate U-197.

Product and Packaging Data[12]

MATERIAL Extruded polystyrene closed-cell foam, ASTM C578 Type X, 15 psi minimum			PACKAGING Shipped in poly-wrapped units with individually wrapped or banded bundles					
THICKNESS (IN)	**PRODUCT DIMENSIONS THICKNESS (IN) X WIDTH (IN) X LENGTH (IN)**	**PALLET (UNIT) DIMENSIONS (TYPICAL) WIDTH (FT) X LENGTH (FT) X HEIGHT (FT)**	**SQUARE FEET PER PALLET**	**BOARD FEET PER PALLET**	**BUNDLES PER PALLET**	**PIECES PER BUNDLE**	**PIECES PER PALLET**	**EDGES**
1	1 x 24 x 96	4 x 8 x 8	3,072	3,072	8	24	192	Square Edge
	1 x 24 x 96	4 x 8 x 8	3,072	3,072	8	24	192	Scored Square Edge
	1 x 48 x 96	4 x 8 x 8	3,072	3,072	8	12	96	
	1 x 48 x 96 (Half unit)	4 x 8 x 8	1,536	1,536	4	12	48	
	1 x 48 x 108	4 x 9 x 8	3,456	3,456	8	12	96	Tongue & Groove
1½	1½ x 24 x 96	4 x 8 x 8	2,048	3,072	8	16	128	
	1½ x 48 x 96	4 x 8 x 8	2,048	3,072	8	8	64	
2	2 x 24 x 96	4 x 8 x 8	1,536	3,072	8	12	96	
	2 x 48 x 96	4 x 8 x 8	1,536	3,072	8	6	48	

12 Available lengths and edge configurations vary by thickness. Other sizes may be available upon request. Consult your local Owens Corning representative for availability.

Technical Information

- FOAMULAR® NGX® 150 Extruded Polystyrene XPS Rigid Foam Insulation is a non-structural material.
- FOAMULAR® NGX® 150 XPS Insulation can be left exposed for up to 60 days. During that time, some degradation or "dusting" of the polystyrene surface may begin. Once covered, the deterioration stops.
- FOAMULAR® NGX® 150 Extruded Polystyrene XPS Rigid Foam Insulation has a maximum service temperature of 165°F. For horizontal applications, always turn the black print side down. Do not cover FOAMULAR® NGX® XPS Insulation either stored (factory-wrapped or unwrapped), or partially installed, with dark-colored (non-white) or clear (non-opaque) coverings and leave it exposed to the sun. See "FOAMULAR® NGX® Extruded Polystyrene (XPS) Insulation Heat Buildup Due to Solar Exposure Technical Bulletin" for more information.
- This product is combustible. A protective barrier or thermal barrier is required as specified in the appropriate building code. For additional information, contact Owens Corning World Headquarters at 1-800-GET-PINK®.
- All construction should be evaluated for the necessity to provide vapor retarders. See current ASHRAE Handbook of Fundamentals.

Certifications

- Certified by SCS Global Services to contain pre-consumer recycled content.
- 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.
- Environmental Product Declaration (EPD) has been certified by SCS Global Services. Reference Registration # SCS-EPD-09753.
- Utilizing FOAMULAR® NGX® XPS insulation can help builders achieve green building certifications including the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED®) certification.
- UL CERTIFIED — See Bulk Shipment Certificate U-197 available at www.owenscorning.com/U197.
- FOAMULAR® NGX® 150 XPS Insulation has earned the EPA's ENERGY STAR certification.

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.com.

FOAMULAR® NGX® XPS insulation use 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:

- "FOAMULAR® NGX® XPS Insulation Environmental Product Declaration"

Disclaimer of Liability

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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.

RECYCLED CONTENT MATTERS

Scan to learn more

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