



FOAMULAR®& FOAMULAR® NGX® **CW25**

EXTRUDED POLYSTYRENE (XPS) RIGID FOAM INSULATION

Owens Corning® FOAMULAR® & FOAMULAR® NGX® CW25 Extruded Polystyrene (XPS) Insulation are closed cell, moistureresistant rigid foam boards designed for cavity wall applications. Pre-cut 16" wide boards yield fast, labor-saving installation in masonry unit installations.

FOAMULAR® NGX® CW25 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® CW25 blowing agent formulation.

Features







DURABLE



EASY TO CUT, FORM & FIT

Standards, Codes Compliance

- Meets ASTM C578 Type IV
- · UL Classification Certificate U-197
- · Code Evaluation Report UL ER8811-01
- ASTM E119 Fire Resistance Rated Wall Assemblies²
- · Meets California Quality Standards; HUD UM #71A
- 2 Visit www.owenscorning.com for more details

Limited Warranty

FOAMULAR® & 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® Extruded Polystyrene Insulation Lifetime Limited Warranty" for complete details, limitations, and requirements.

Physical Properties³

| PROPERTY | TEST METHOD⁴ | VALUE |
|--|--------------|---------------------------|
| Thermal Resistance, ⁵ | ASTM C518 | |
| R-Value, hr•ft²•°F/Btu (RSI, °C•m2/W) | | |
| @ 75°F (24°C) mean temperature | | 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, | CAN/ULC | |
| LTTR-Value, ⁶ minimum | S770-03 | |
| hr•ft²•°F/Btu (RSI, °C•m²/W) | | |
| @ 75°F (24°C) mean temperature | | 5.0 (0.88) |
| Compressive Strength, ⁶ minimum psi (kPa) | ASTM D1621 | 25 (172) |
| Flexural Strength,7 minimum psi (kPa) | ASTM C203 | 50 (345) |
| Water Absorption,8 maximum % by volume | ASTM C272 | 0.3 |
| Water Vapor Permeance,9 | ASTM E96 | 1.5 (86) |
| maximum perm (ng/Pa•s•m²) | | |
| Dimensional Stability, | ASTM D2126 | 2.0 |
| maximum % linear change | | |
| Flame Spread ^{10, 11} | ASTM E84 | 10 |
| Smoke Developed ^{10, 11} | ASTM E84 | 175 |
| Oxygen Index,10 minimum % by volume | ASTM D2863 | 24 |
| Service Temperature, maximum °F (°C) | - | 165 (74) |
| Linear Coefficient of Thermal Expansion, | ASTM E228 | 3.5 x 10 ⁻⁵ |
| in/in/°F (m/m/°C) | | (6.3 x 10 ⁻⁵) |

- Properties shown are representative values for 1" thick material, unless otherwise specified.
- Modified as required to meet ASTM C578.

 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 degrees F mean temperature. R-value claims should always be compare 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® & 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. Values at yield or 10% deflection, whichever occurs first.
- Value at yield or 5%, whichever occurs first.
- Data ranges from 0.00 to value shown due to the level of precision of the test method. 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

MATERIAL

Extruded polystyrene closed cell foam, ASTM C578 Type IV, 25 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 16 x 96 | 4 x 8 x 8 | 3,072 | 3,072 | 12 | 24 | 288 | Square |
| 1 1/2 | 1 ¹ / ₂ x 16 x 96 | 4 x 8 x 8 | 2,048 | 3,072 | 12 | 16 | 192 | |
| 2 | 2 x 16 x 96 | 4 x 8 x 8 | 1,536 | 3,072 | 12 | 12 | 144 | |
| 2 1/2 | 2 ¹ / ₂ x 16 x 96 | 4 x 8 x 8 | 1,152 | 2,880 | 12 | 9 | 108 | |
| 3 | 3 x 16 x 96 | 4 x 8 x 8 | 1,024 | 3,072 | 12 | 8 | 96 | 7 |

Product availability and lead times vary by region and by product. Consult your local Owens Corning sales representative for availability and lead times.

Technical Information

- FOAMULAR® & FOAMULAR® NGX® XPS insulation are nonstructural materials and must be installed on framing that is independently braced and structurally adequate to meet required construction and service loading conditions.
- FOAMULAR® & FOAMULAR® NGX® XPS insulation can be exposed
 to the exterior during normal construction cycles. 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 and
 still useful insulation.
- FOAMULAR® & FOAMULAR® NGX® XPS insulation have a maximum service temperature of 165°F. Install only as much FOAMULAR® & FOAMULAR® NGX® XPS insulation as can be covered in the same day. For horizontal applications, always turn the print side down so the black print does not show to the sun, which may at times act as a solar collector, raising the temperature of the foam under the print to an unacceptable level.
- Do not cover FOAMULAR® or FOAMULAR® NGX® XPS insulation, either stored (factory wrapped or unwrapped) or partially installed, with dark-colored (non-white) or clear (nonopaque) coverings, and leave it exposed to the sun. Examples of such coverings include but are not limited to filter fabrics, membranes, temporary tarps, clear polyethylene, etc. If improperly covered and exposed to the right combination of sun, time, and temperature, FOAMULAR® & FOAMULAR® NGX® XPS insulation deformation damage may occur rapidly. See "FOAMULAR® Extruded Polystyrene (XPS) Insulation Heat Build Up Due to Solar Exposure Technical Bulletin" for more information
- 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.
- All construction should be evaluated for the necessity to provide vapor retarders. See current "ASHRAE Handbook of Fundamentals."

Certifications and Sustainable Features

- Certified by SCS Global Services to contain a minimum 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
- Environmental Product Declaration (EPD) has been certified by UL Environment

GREENGUARD PRODUCT CENTRED FOR ULCOMORE UL 2818 GOLD







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® and 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® XPS Insulation 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.

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Notes

Not for use in roofing. For roofing applications, use FOAMULAR® & FOAMULAR® NGX® THERMAPINK® XPS insulation.

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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