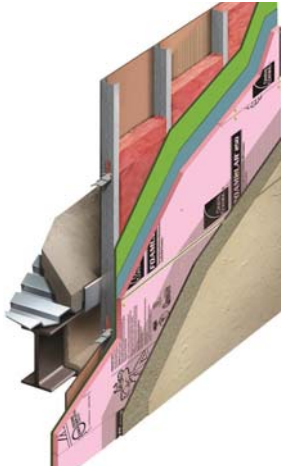




FOAMULAR® CI-C

Extruded Polystyrene (XPS)

Continuous Insulation under Coatings



Energy Saving, Moisture Resistant, Durable XPS Insulation

ASTM C578 Type X, 15 PSI minimum
CAN ULC 701 Type 2, 16 PSI minimum

Description

Owens Corning FOAMULAR® CI-C Extruded Polystyrene (XPS) Rigid Foam Insulation is a closed cell, moisture-resistant, durable rigid foam board intended for use under a variety of coatings including EIFS and Stucco systems. FOAMULAR® CI-C is classified as Type X / Type 2 product when tested in accordance with ASTM C578 / CAN ULC S701 and provides stable thermal performance of R-5 per inch. Removal of the as extruded skin surfaces provide smooth, flat, and parallel surfaces ideal as a base for coated surface materials.

Like all FOAMULAR® XPS Insulation products, FOAMULAR® CI-C is made with Owens Corning's patented Hydrovac process technology under strict quality control measures, which makes it durable, highly resistant to moisture, and permits the product to retain its high R-value year after year even after exposure to moisture and freeze thaw cycling.

Features

- Excellent insulating performance at R-5¹ per inch
- Limited lifetime warranty – maintains 90% of R-value and covers all ASTM C578 / CAN ULC S701 Type 2 properties
- Exceptional moisture resistance and durability
- GREENGUARD Gold Certification
- Certified recycled content – certified by SCS Global Services to contain a minimum 20% recycled content
- Will not corrode, rot or support mold growth
- Lightweight, durable rigid foam panels are easy to handle and install
- Easy to saw, cut or score
- Meets NFPA 285 when used under natural stone, manufactured stone and stucco and used as directed in the "Owens Corning Enclosure Solutions: NFPA 285 Accepted Complete Walls, Pub. No. 10020919-B
- For Exterior Insulation Finish Systems (EIFS) contact the individual coatings manufacturer for more information

1. R means the resistance to heat flow; the higher the R-value, the greater the insulating power.

Physical Properties²

| Property | Test Method ³ | Value |
|--|--------------------------|---|
| Thermal Resistance ⁴ , R-value (180 day minimum, hr•ft ² •°F/Btu (RSI, m ² °C/W) @ 75°F (24°C) mean temperature | ASTM C518 | |
| 1" Thickness | | 5.0 (0.88) |
| 1½" Thickness | | 7.5 (1.32) |
| 2" Thickness | | 10 (1.76) |
| 2½" Thickness | | 12.5 (2.2) |
| 3" Thickness | | 15 (2.64) |
| 3½" Thickness | | 17.5 (3.08) |
| 4" Thickness | | 20 (3.52) |
| @ 40°F (4.4°C) mean temperature | | |
| 1" Thickness | | 5.4 (1.03) |
| 1½" Thickness | | 8.1 (1.55) |
| 2" Thickness | | 1.8 (2.06) |
| 2-½" Thickness | | 13.5 (2.58) |
| 3" Thickness | | 16.2 (3.09) |
| 3½" Thickness | | 18.9 (3.61) |
| 4" Thickness | | 21.6 (4.12) |
| Long Term Thermal Resistance, LTTR-value ⁴ , minimum hr•ft ² •°F/Btu (RSI, m ² °C/W) @ 75°F (24°C) mean temperature | CAN/ULC S770-03 | |
| 1" Thickness | | 5.0 (1.03) |
| 1½" Thickness | | 7.8 (1.55) |
| 2" Thickness | | 10.6 (2.06) |
| 2½" Thickness | | 13.4 (2.58) |
| 3" Thickness | | 16.2 (3.09) |
| 3½" Thickness | | 18.9 (3.61) |
| 4" Thickness | | 22.0 (4.12) |
| Compressive Strength ⁵ , minimum psi (kPa) | ASTM D1621 | 16 (110) |
| Flexural Strength ⁶ , minimum psi (kPa) | ASTM C203 | 50 (345) |
| Water Absorption ⁷ , maximum % by volume | ASTM C272 | 0.3 |
| Water Vapor Permeance ⁸ , maximum perm (ng/Pa•s•m ²) | ASTM E96 | 1.5 (86) |
| Dimensional Stability, maximum % linear change | ASTM D2126 | 2.0 |
| Flame Spread ^{9, 10} | ASTM E84 | 10 |
| Smoke Developed ^{9, 10, 11} | ASTM E84 | 175 |
| Oxygen Index, 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 x 10 ⁻⁵ (6.3 x 10 ⁻⁵) |

2. Properties shown are representative values for 1" thick material, unless otherwise specified.

3. Modified as required to meet ASTM C578.

4. 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. 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® XPS insulation is provided from testing at two mean temperatures, 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. The R-value at 180 day real-time age and 75°F mean temperature is commonly used to compare products and is the value printed on the product.

5. Values at yield or 10% deflection, whichever occurs first.

6. Value at yield or 5%, whichever occurs first.

7. Data ranges from 0.00 to value shown due to the level of precision of the test method.

8. Water vapor permeance decreases as thickness increases.

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

10. Data from Underwriters Laboratories Inc.® classified. See Classification Certificate U-197.

11. ASTM E84 is thickness-dependent, therefore a range of values is given.

Technical Information

- This product is combustible. A protective barrier or thermal barrier is required as specified in the appropriate building code. For additional information, consult SUIS or 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
- FOAMULAR CI-C is a non-structural material
- FOAMULAR® CI-C can be exposed to 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

Product

- Available in thicknesses from 1" to 4"
- Available in 2'x4', 2'x8' and 4'x8' sheets
- Square Edge/ Butt Edge Configuration

Applications

High Performance FOAMULAR® CI-C:

- Retards the transmission of water vapor and moisture
- Provides continuous insulation in EIFS and Stucco applications

Standards, Codes Compliance

- Meets ASTM C578 Type X UL Classified. A copy of the UL Classification Certificate U-197 is available at www.owenscorning.com
- See UL ER8811-01 at UL.com
- Meets CAN/ULC S701 Type 2
- See CCMC 13431-L
- ASTM E119 Fire Resistance Rated Wall Assemblies. See www.owenscorning.com for details.
- Meets California Quality Standards; HUD UM #71A
- Compliance verification by RADCO (AA-650)

Warranty

FOAMULAR® CI-C Insulation limited lifetime warranty maintains 90% of its R-value for the lifetime of the building and covers all ASTM C578 properties. See actual warranty for complete details, limitations and requirements at www.owenscorning.com.

All products described here may not be available in all geographic markets. Consult your local sales office representative for more information.

For more information on the Owens Corning family of building products, contact your Owens Corning dealer, call 1-800-GET-PINK or access www.owenscorning.com

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.

Notes

For additional information, refer to the Safe Use Instruction Sheet (SUIS) found in the SDS Database via

<http://sds.owenscorning.com>.

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
- Qualified as and ENERGY STAR product, under the U.S. Environmental Protection Agency and the U.S. Department of Energy
- Utilizing FOAMULAR® 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
- Approved under the Home Innovation Research Labs NGBS Green Certification Program



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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.



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