

FOAMULAR® INSULPINK®—Z Extruded Polystyrene (XPS) Rigid Foam Insulation

Product Data Sheet

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. Nothing contained in this bulletin shall be considered a recommendation.

The GREENGUARD INDOOR AIR QUALITY CERTIFIED mark is registered certification mark used under license through the GREENGUARD Environmental Institute.

This NAHB Research Center Green Approved mark is your assurance that a product is eligible for points toward National Green Building Certification. Visit www.GreenApprovedProducts.com for details.

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











OWENS CORNING FOAM INSULATION, LLC ONE OWENS CORNING PARKWAY TOLEDO, OHIO 43659

1-800-GET-PINK® www.owenscorning.com

Pub. No. 24963-B. Printed in U.S.A. August 2011. THE PINK PANTHER $^{\bowtie}$ @1964-2011 Metro-Goldwyn-Mayer Studios Inc. All Rights Reserved. The color PINK is a registered trademark of Owens Corning. @2011 Owens Corning.





FOAMULAR® INSULPINK®—Z Extruded Polystyrene (XPS) Rigid Foam Insulation

Product Data Sheet



Energy-Saving, Moisture-Resistant XPS Insulation

Insulation for Z-Furring Channels ASTM C578 Type X, I5 psi minimum

Description

INSULPINK®-Z insulation is extremely lightweight for easy handling and provides a compressive strength of 15 psi, which meets the requirements of a vertical wall application. INSULPINK®-Z insulation provides an R-value of 5 per inch of product thickness, and outstanding resistance to moisture for long-term retention of the thermal performance. INSULPINK®-Z insulation is produced by Owens Corning's patented HYDROVAC® process technology under conditions of strict quality control.

Key Features

- Helps reduce job site labor costs while you install premium insulation
- INSULPINK®-Z insulation is pre-cut to a nominal width of 237%" × 96" length panels, eliminating costly cutting of insulation panels to fit 24" o.c. Z-channels
- Available in a thickness of 1½" and 2" with square edges
- Excellent long-term stable insulating performance with an R-value of R-5¹ per inch
- Exceptional moisture resistance, long-term durability
- Limited lifetime warranty² maintains 90% of R-value and covers all ASTM C 578 properties
- The only XPS foam to be GREENGUARD Children & Schools CertifiedSM
- The only XPS foam with certified recycled content certified by Scientific Certification Systems (SCS) to contain a minimum 20% recycled content
- Will not corrode, rot or support mold growth
- Zero ozone depletion potential with 70% less global warming potential than our previous formula
- Reusable

- Lightweight, durable rigid foam panels are easy to handle and install
- Easy to saw, cut or score

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 MSDS or contact Owens Corning World Headquarters at I-800-GET-PINK®.

All construction should be evaluated for the necessity to provide vapor retarders. See current ASHRAE Handbook of Fundamentals.

FOAMULAR® XPS insulation is a non-structural material and must be installed on framing which is independently braced and structurally adequate to meet required construction and service loading conditions.

FOAMULAR® 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® INSULPINK®-Z Extruded Polystyrene (XPS) Rigid Foam Insulation

Product Data Sheet

Standards, Codes Compliance

- Meets ASTM C 578 Type X
- UL Classified. A copy of UL Classification Certificate U-197 is available at www.foamular.com



- See ICC-ES ESR-1061 at www.icc-es.org
- See www.foamular.com for details on listings, constructions and assemblies
- Meets California Quality Standards and HUD UM #71A
- Compliance verification by RADCO (AA-650)

Certifications and Sustainable Features of FOAMULAR® **XPS** insulation

- FOAMULAR® XPS insulation is reusable
- FOAMULAR® XPS insulation. is made with a zero ozone depletion formula
- Certified by Scientific Certification Systems to contain a minimum of 20% preconsumer recycled polystyrene
- · Certified to meet indoor air quality standards under the stringent GREENGUARD Indoor Air Quality Certification ProgramSM, and the GREENGUARD Children & Schools Certification ProgramSM
- Approved under the National Association of Home Builders (NAHB) Research Center Green Seal of Approval

Typical Physical Properties¹ MULAR® INSULPINK®—Z XPS Insulation

| Property | Test Method ² | Value | | |
|----------------------------------------------------------------|--------------------------|--------------------------------------------------|--|--|
| Thermal Resistance ³ , R-Value (180 day) minimum, | | | | |
| hr•ft²•°F/Btu (RSI, °C•m²/W) | | | | |
| @ 75°F (24°C) mean temperature | ASTM C 518 | | | |
| 1½" Thickness | | 7.5 (1.32) | | |
| 2" Thickness | | 10 (1.76) | | |
| @ 40°F (4.4°C) mean temperature | | | | |
| 1½" Thickness | | 8.1 (1.43) | | |
| 2" Thickness | | 10.8 (1.90) | | |
| Long Term Thermal Resistance, LTTR-Value ^{3,} minimum | | | | |
| hr•ft²•°F/Btu (RSI, °C•m²/W) | | | | |
| @ 75°F (24°C) mean temperature | CAN/ULC \$770-03 | | | |
| I½" Thickness | | 7.8 (1.37) | | |
| 2" Thickness | | 10.6 (1.87) | | |
| Compressive Strength ⁴ , minimum psi (kPa) | ASTM D 1621 | 15 (103) | | |
| Flexural Strength ⁵ , minimum psi (kPa) | ASTM D 203 | 60 (414) | | |
| Water Absorption ⁶ , maximum % by volume | ASTM C 272 | 0.10 | | |
| Water Vapor Permeance ⁷ , maximum perm (ng/Pa•s•m²) | ASTM E 96 | 1.5 (86) | | |
| Dimensional Stability, maximum % linear change | ASTM D 2126 | 2.0 | | |
| Flame Spread ^{8, 9} | ASTM E 84 | 5 | | |
| Smoke Developed ^{8, 9, 10} | ASTM E 84 | 45-175 | | |
| Oxygen Index ⁸ , minimum % by volume | ASTM D 2863 | 24 | | |
| Service Temperature, maximum °F (°C) | _ | 165 (74) | | |
| Linear Coefficient of Thermal Expansion, in/in/°F (m/m°/C) | ASTM E 228 | 3.5 × 10 ⁻⁵ (6.3 × 10 ⁻⁵) | | |

- Properties shown are representative values for I" thick material, unless otherwise specified
- Modified as required to meet ASTM C 578.
- 3. 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 realtime aged (as mandated by ASTM C 578) and a method of accelerated aging sometimes called "Long Term Therma Resistance" (LTTR) per CAN/ULC \$770-03. 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.
- 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.
- These laboratory tests are not intended to describe the hazards presented by this material under actual fire conditions.
- 9. Data from Undérwriters Laboratories Inc.® classified. See Classification Certificate U-197.
- 10. ASTM E 84 is thickness-dependent, therefore a range of values is given.
- Utilizing FOAMULAR® XPS insulation can help achieve green building certifications including the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED®) certification
- FOAMULAR® XPS insulation may qualify for The Buy American provision of the American Recovery and Reinvestment Act (ARRA)

Environmental and Sustainability

Owens Corning is a worldwide leader in building material systems, insulation and composite solutions, delivering a broad range of highquality 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. sustainability.owenscorning.com.



FOAMULAR® INSULPINK®-Z Extruded Polystyrene (XPS) Rigid Foam Insulation

Product Data Sheet

Product and Packaging Data

FOAMULAR® INSULPINK®-Z XP

| i iateriai | | | | 1 ackaging | | | | | |
|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------------------------|----------------------------------------------------------------------------|-----------------------------|--------------------------|-------------------------|-------------------------|--------|--|
| Extruded polystyrene closed-cell foam panel with continuous skins on top and bottom surfaces. | | | 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 | |
| 11/2 | $1.5 \times 23.875 \times 96$ | 4 × 8 × 8 | 2,037 | 3,056 | 8 | 16 | 128 | Square | |
| 2 | 2 × 23 875 × 96 | 4 × 8 × 8 | L 528 | 3.056 | 8 | 12 | 96 | | |

Packaging

Warranty

FOAMULAR® XPS insulation limited lifetime warranty maintains 90% of its R-value for the lifetime of the building and covers all ASTM C 578 properties. See actual warranty for complete details, limitations and requirements at www. foamular.com or www. owenscorningcommercial.com.

Notes

- I. R means the resistance to heat flow; the higher the R-value, the greater the insulating power.
- 2. See actual warranty for complete details, limitations and requirements.

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 I-800-GET-PINK®, or access our web sites: www.foamular.com and www.owenscorning.com.

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