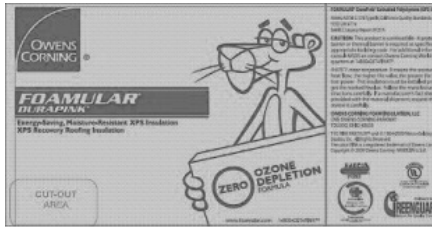


### Product Data Sheet



### Energy-Saving, Moisture-Resistant XPS Insulation

#### XPS Recovery Roofing Insulation

ASTM C578 Type IV, 25 psi minimum

#### Description

DURAPINK<sup>®</sup> Roofing Recovery Board is an extruded polystyrene (XPS) roofing product designed for use with single-ply membranes, including black EPDM<sup>1</sup> and other dark-colored single-ply membranes. DURAPINK<sup>®</sup> roofing recovery board works without overlay protection, ballast or pavers. DURAPINK<sup>®</sup> roofing recovery board saves the trouble and expense of removing the old roof, and adds insulation and moisture protection to the new one, providing new economy and durability for worn out commercial roofs.

Roofing recovery is an increasingly popular means of reroofing for aged and trouble-plagued roofs. The decision to recover a roof is based on two compelling reasons: The cost involved in tearing off the old roof, and the cost of disposing of the discarded debris—both of which can be significant. When you recover, both costs are avoided.

#### Key Features

- Excellent long-term stable insulation performance of R-5 per inch<sup>2</sup>
  - Exceptional moisture resistance, long-term durability
  - Recommended for use directly under black EPDM membranes, without the need for protection.
  - Limited lifetime warranty<sup>3</sup>—maintains 90% of R-value and covers all ASTM C578 properties
  - The only XPS foam to be GREENGUARD Children & Schools Certified<sup>SM</sup>
  - 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:**
- DURAPINK<sup>®</sup> roofing recovery board is to be installed over existing roofs only and not over new insulation.
  - When installed beneath dark-colored, mechanically attached membranes, some vertical displacement may be noticeable, especially during the high heat of mid-day. Such behavior is normal thermal expansion and contraction of the material. The movement will not affect the integrity of the recover roofing membrane or attachment systems.
  - Recovery roofing is often done over uneven substrates. Humps, sharp edges or ridges in the existing membrane should be cut out if possible before covering with DURAPINK<sup>®</sup> roofing recovery board. If this is not possible, DURAPINK<sup>®</sup> roofing recovery board can be placed, but may crack over uneven surfaces when walked on.
  - Examine the existing roof for areas of wet insulation and/or wet or deteriorated decking. Remove and replace wet or deteriorated material as necessary.
  - All roofs to be recovered should be evaluated for the presence of an existing vapor retarder. Research by the Oakridge National Laboratory (ORNL) suggests that some wet roof systems containing permeable materials can be dried to the interior of a building if no internal vapor retarder is present.
  - When installing DURAPINK<sup>®</sup> roofing recovery board beneath a dark-colored, mechanically attached

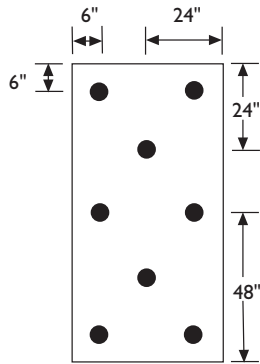


# FOAMULAR® DURAPINK® Extruded Polystyrene (XPS) Rigid Foam Insulation

## Product Data Sheet

membrane, Owens Corning recommends the installation of eight fasteners and stress plates per 4'x8' panel. The diagram shows the recommended fastener placement. For fully adhered and ballasted systems, contact the specific membrane manufacturer or Owens Corning for fastening recommendations.

### Fastening Pattern Diagram



- When installing DURAPINK® roofing recovery board beneath a white, mechanically attached roof system, a minimum of one fastener per eight square feet is required to secure the board, placed within 6" of each corner of 4'x8' panel. This limited amount of fasteners is acceptable but may allow some board movement. Install two to four additional fasteners in the center field as shown in the fastening diagram for enhanced flatness. The membrane should be laid out perpendicular to the long dimension of DURAPINK® roofing recovery board panels.

### Typical Physical Properties<sup>1</sup>

DURAPINK® Roofing Recovery Board

| Property  | Test Method <sup>2</sup> | Value  |
|---|--------------------------|--|
| <b>Thermal Resistance<sup>3</sup></b> , R-Value (180 day) minimum,<br>hr•ft <sup>2</sup> •°F/Btu (RSI, °C•m <sup>2</sup> /W)<br>@ 75°F (24°C) mean temperature    | ASTM C518                |  |
| ½" Thickness  |                          | 3.0 (0.53)                                       |
| 1" Thickness  |                          | 5.0 (0.88)                                       |
| @ 40°F (4.4°C) mean temperature   |                          |  |
| ½" Thickness  |                          | 3.2 (0.57)                                       |
| 1" Thickness  |                          | 5.4 (0.95)                                       |
| <b>Long Term Thermal Resistance</b> , LTTR-Value <sup>3</sup> minimum<br>hr•ft <sup>2</sup> •°F/Btu (RSI, °C•m <sup>2</sup> /W)<br>@ 75°F (24°C) mean temperature | CAN/ULC S770-03          |  |
| ½" Thickness  |                          | N/A  |
| 1" Thickness  |                          | 5.0 (0.88)                                       |
| <b>Compressive Strength<sup>4</sup></b> , minimum psi (kPa)   | ASTM D1621               |  |
| ½" Thickness  |                          | 18 (124)   |
| 1" Thickness  |                          | 25 (172)   |
| <b>Flexural Strength<sup>5</sup></b> , minimum psi (kPa)  | ASTM C203                | 75 (517)   |
| <b>Water Absorption<sup>6</sup></b> , maximum % by volume   | ASTM C272                | 0.10   |
| <b>Water Vapor Permeance<sup>7</sup></b> , maximum perm (ng/Pa•s•m <sup>2</sup> )   | ASTM E96                 | 1.5 (86)   |
| <b>Dimensional Stability</b> , maximum % linear change  | ASTM D2126               | 2.0  |
| <b>Flame Spread<sup>8,9</sup></b>   | ASTM E84                 | 5  |
| <b>Smoke Developed<sup>8,9,10</sup></b>   | ASTM E84                 | 45-175   |
| <b>Oxygen Index<sup>8</sup></b> , minimum % by volume   | ASTM D 2863              | 24   |
| <b>Service Temperature</b> , maximum °F (°C)  | —                        | 165 (74)   |
| <b>Linear Coefficient of Thermal Expansion</b> , in/in/°F (m/m/°C)  | ASTM E228                | 3.5 × 10 <sup>-5</sup> (6.3 × 10 <sup>-5</sup> ) |

- 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. 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.
- 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.
- Data from Underwriters Laboratories Inc.® classified. See Classification Certificate U-197.
- ASTM E84 is thickness-dependent, therefore a range of values is given.

- Some membranes, such as PVC containing plasticizers, will require a separator between DURAPINK® roofing recovery board and the membrane.
- For roofing and other horizontal applications, product should be installed with the printed surface facing downward.
- DURAPINK® roofing recovery board can be installed over coal tar pitch (CTP) provided the existing coal tar is at least ten years old and has not been re-saturated in the last four years. If those age criteria are not met, a 6 mil polyethylene sheet will serve as an adequate separator between CTP and XPS.



# FOAMULAR® DURAPINK® Extruded Polystyrene (XPS) Rigid Foam Insulation

## Product Data Sheet

### Product and Packaging Data

DURAPINK® Roofing Recovery Board

| Material  |  |   | Packaging  |                       |                    |                   |                   |             |  |
|---|--|---|--|-----------------------|--------------------|-------------------|-------------------|-------------|--|
| Extruded polystyrene closed-cell foam panel with continuous skin on face and back 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) Length (ft) x Width (ft) x Height (ft) | Square feet per Pallet   | Board feet per Pallet | Bundles per Pallet | Pieces per Bundle | Pieces per Pallet | Edges       |  |
| ½   | ½ x 48 x 96  | 4 x 8 x 8   | 5,120  | 2,560                 | 8                  | 20                | 160               | Square Edge |  |
| 1   | 1 x 48 x 96  | 4 x 8 x 8   | 3,072  | 3,072                 | 8                  | 12                | 96                | Square Edge |  |

1. Available lengths and edge configurations vary by thickness. See [www.foamular.com](http://www.foamular.com) for current offerings. Other sizes may be available upon request. Consult your local Owens Corning representative for availability.

- See DURAPINK® roofing recovery board guide specifications for complete installation details.

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

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.

### Standards, Codes Compliance

- Meets ASTM C578 Type IV
- UL Classified. A copy of UL Classification Certificate U-197 is available at [www.foamular.com](http://www.foamular.com)



- See ICC-ES Evaluation Report ESR-1061 at [www.icc-es.org](http://www.icc-es.org)
- ASTM E108 Fire Classified Assemblies. See UL On-Line Certifications directory for details.
- 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% pre-consumer recycled polystyrene
- Certified to meet indoor air quality standards under the stringent GREENGUARD Indoor Air Quality Certification Program<sup>SM</sup>, and the GREENGUARD Children & Schools Certification Program<sup>SM</sup>

- Approved under the National Association of Home Builders (NAHB) Research Center Green Seal of Approval
- 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 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.sustainability.owenscorning.com](http://www.sustainability.owenscorning.com).



# FOAMULAR® DURAPINK® Extruded Polystyrene (XPS) Rigid Foam Insulation

## Product Data Sheet

### 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](http://www.foamular.com) or [www.owenscorningcommercial.com](http://www.owenscorningcommercial.com).

### References

- "The Impact of Climate on Drying Times of a Wetted Low-Slope Roof System," A.O. Desjarlais, D.M. Kyle, J.E. Christian, Oakridge National Laboratory, Journal of Thermal Insulation, December 1992.

### Notes

1. EPDM—Ethylene Propylene Diene Monomer roofing is a type of thermoset membrane roof material.
2. R means the resistance to heat flow; the higher the R-value, the greater the insulating power.
3. 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 1-800-GET-PINK®, or access our web sites: [www.foamular.com](http://www.foamular.com) and [www.owenscorning.com](http://www.owenscorning.com).

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