



# EXTRUDED POLYSTYRENE (XPS) TAPERED INSULATION

Owens Corning® FOAMULAR® & FOAMULAR® NGX® THERMAPINK® 25 Extruded Polystyrene (XPS) Tapered Insulation products provide performance and value in low slope roofing systems and are designed to be used over structural roof decks. THERMAPINK® 25 Tapered Roof Insulation provides a thermally efficient, moisture-resistant positive drainage slope for use under single-ply or other lightweight roofing systems.

International Building Code (IBC) requires a minimum slope of  $\frac{1}{4}$ " per foot to roof drains, scuppers or gutters to prevent ponding water and infiltration.\(^1\) Other standard slopes, such as  $\frac{1}{4}$ " per foot and  $\frac{1}{4}$ " per foot, are available to additionally manage water drainage and design flexibility.

Owens Corning provides tapered roofing estimating services with detailed tapered layouts to describe quantities and installation sequence. Contact your commercial area sales representative to request tapered roofing services or email GETTECH@owenscorning.com or call 1-800-GET-PINK®.

FOAMULAR® NGX® THERMAPINK® 25 Tapered contains the additional benefit of being manufactured with a blowing agent formulation that delivers a 90% reduction to Global Warming Potential (100 years), including the complete elimination of HFC 134a.²

- 1 See Section 1503.4 Roof Drainage of International Building Code (IBC) 2015 which references Section 1503 as well as Sections 1108 & 1106 and International Plumbing Code (IPC).
- 2 Compared to FOAMULAR® THERMAPINK® 25 Tapered blowing agent formulation.

#### **Features**



SUPERIOR MOISTURE RESISTANCE



**DURABLE** 



EASY TO CUT, FORM & FIT

## Standards, Codes Compliance

- Meets ASTM C578 Type IV (THERMAPINK® 25 Insulation)
- UL Classified. A copy of UL Classification Certificate U-197 is available at www.owenscorning.com
- · See UL ER8811-01 at UL.com
- FM (Factory Mutual) Class 1 Roof Decks
- · ASTM E108 Fire Classified Assemblies
- ASTM E119 Fire Resistance Rated Roof/Ceiling Assemblies
- UL and FM Wind Uplift Rated Assemblies
- Meets California Quality Standards and HUD UM #71a

Note: Refer to www.ul.com "Certifications" or FM Approval RoofNav for details on listings, constructions and assemblies.

#### **Physical Properties**

DISTANCE FROM DRAIN	0'-4'	0'-8'	0'-12'	0'-16'	0'-20'		
Average R-value <sup>3</sup>							
⅓" slope	3.75	5.00	6.25	7.50	8.75		
¼" slope	5.00	7.50	10.00	12.50	15.00		
½" slope	7.50	12.50	17.50	22.50	27.50		

<sup>3</sup> Average R-value @ 75°F (24°C) mean temperature

A combination of base, flat fillers and tapered pieces may be used for a particular project. For more information regarding product sizes and physical properties, please see Owens Corning publications, "FOAMULAR® & FOAMULAR® NGX® THERMAPINK® 25 Product Data Sheet" and "FOAMULAR® & FOAMULAR® NGX® 400/600/1000 Product Data Sheet". For higher compressive strength tapered insulation options, please contact GETTECH@owenscorning.com.

## **Technical Information**

- The roof designer must specify the number and location of roof drains as well as the minimum roof slope required for projects using Owens Corning FOAMULAR® or FOAMULAR® NGX® THERMAPINK® 25 Tapered Roof Insulation.
- FOAMULAR® & FOAMULAR® NGX® THERMAPINK® XPS insulation are non-structural 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® THERMAPINK® 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. 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® THERMAPINK® XPS insulation have a maximum service temperature of 165°F. Taking simple precautions during construction can minimize the potential for heatrelated damage. Install only as much insulation as can be covered in the same day. For horizontal applications, turn print side down
- when possible 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. Provide a final finish covering or temporary white opaque covering to avoid possible damage when dark (non-white) surfaces are used over FOAMULAR® & FOAMULAR® NGX® THERMAPINK® XPS insulation. Do not cover FOAMULAR® or FOAMULAR® NGX® THERMAPINK® 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. If improperly covered, and exposed to the right combination of sun, time and temperature, FOAMULAR® & FOAMULAR® NGX® THERMAPINK® 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 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."

## **Product and Packaging Data**

MATERIAL	PACKAGING  Shipped in poly-wrapped units with individually wrapped or banded bundles.						
Extruded polystyrene closed-cell foam, ASTM C578 Type IV, 25 psi minimum.							
THICKNESS (IN) <sup>5</sup>	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 <sup>6</sup>	PIECES PER BUNDLE	PIECES PER PALLET
1/8" slope A	0.5-0.75 x 24 x 96	4 x 8 x 8	4,608	2,880	24	12	288
⅓" slope B	0.75-1 x 24 x 96	4 x 8 x 8	3,456	3,024	18	12	216
1/8" slope C	1-1.25 x 24 x 96	4 x 8 x 8	2,688	3,024	14	12	168
1/8" slope D	1.25-1.5 x 24 x 96	4 x 8 x 8	2,304	3,168	12	12	144
¼" slope E	0.5-1 x 24 x 96	4 x 8 x 8	3,840	2,880	10	12	240
¼" slope F	1-1.5 x 24 x 96	4 x 8 x 8	2,304	2,880	12	12	144
½" slope G	0.5-1.5 x 24 x 96	4 x 8 x 8	2,688	2,688	14	12	168

<sup>5</sup> Other sizes may be available upon request. Consult your Owens Corning representative for availability.

## **Availability**

Owens Corning FOAMULAR® & FOAMULAR® NGX® XPS insulation come in a variety of configurations to assist in providing drainage, managing water, and creating desired surfaces in traditional single-ply and PRMA roofs. Tapered products are combined with flat and channeled products to create optimal assembly for height, moisture and thermal performance.

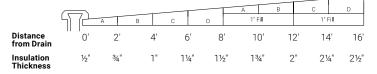
PANEL	THERMAPINK® 25 TAPERED INSULATION
⅓" slope A	X
⅓" slope B	X
⅓" slope C	X
⅓" slope D	X
¼" slope E	X
¼" slope F	X
½" slope G	X

<sup>6</sup> Tapered panels available for order in 2 piece increments.

## **Typical Tapered Roofing Sections**

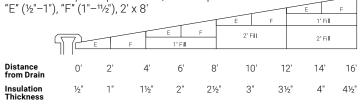
#### Typical Tapered Roofing Section 1/8" per foot slope

Utilizes four tapered panel sizes, A, B, C and D panel "A" (½"-¾"), "B" (¾"-1"), "C" (1"-1¼"), "D" (1¼"-1½"), 2' x 8'

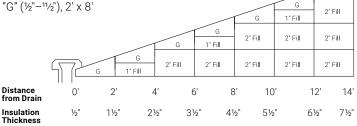


#### Typical Tapered Roofing Section ¼" per foot slope

Utilizes two tapered panel sizes, E and F panel







Dimensions are not to scale

Distance

### **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.

#### **Certifications and Sustainable Features**

- FOAMULAR® & FOAMULAR® NGX® XPS insulation is reusable.
- FOAMULAR® & FOAMULAR® NGX® 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 Certification Program and GREENGUARD Gold.
- Utilizing FOAMULAR® & FOAMULAR® NGX® XPS insulation can help achieve green building certifications including the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED®) certification.









## **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.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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GREENGUARD Certified products are certified to GREENGUARD standards for low chemical emissions into indoor air during product usage. For more information, visit

The Home Innovation Research Labs 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.

#### Notes

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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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