

DuPont™ Styrofoam™ Brand Perimate™ XPS Foam Insulation

Sturdy, Moisture-Resistant Insulation for Exterior Foundations

FEATURES/BENEFITS

Description

DuPont™ Styrofoam™ Brand Perimate™ Extruded Polystyrene (XPS) Foam Insulation* is a durable, lightweight and moisture-resistant foam board designed specifically for use on exterior foundation walls.

Styrofoam™ Brand Perimate™ features patented dovetail grooves on one face and shiplap edges on the long edges. When installed on the exterior of basement walls, it provides insulation, protects the waterproofing membrane and assists water drainage away from the foundation.

Sustainable Solutions

Styrofoam™ Brand Perimate™ Insulation is hydrochloro-fluorocarbon (HCFC) free with zero ozone-depletion potential. Styrofoam™ Brand Perimate™ is reusable in many applications.

Ease of Installation

Styrofoam™ Brand Perimate™ Insulation is:

- Easy to handle, cut using a utility knife or serrated blade, and install
- Durable and lightweight
- Moisture-resistant – protects the waterproofing membrane
- Covered with patented dovetail grooves on one face to channel water down to footing drains or weeping tiles
- Manufactured with shiplap edges on the long edges
- Suitable for use in pervious, semi-pervious and practically impervious soils
- Reusable

Available Sizes

U.S. and Canadian sizes, R-values and edge treatments can be found in Tables 1 and 2, respectively.

TABLE 1: U.S. Sizes, R-Values and Edge Treatments for Styrofoam™ Brand Perimate™ XPS Foam Insulation

Nominal Board Thickness ⁽¹⁾ (in.)	R-Value ⁽²⁾	Board Size (ft.)	Edge Treatment
1.063*	5.0	2 x 8	Shiplap Edge (long edge) Square Edge (short edge)
2.125	10.0	2 x 8	Shiplap Edge (long edge) Square Edge (short edge)

¹ Not all product sizes are available in all regions.

² R means resistance to heat flow. The higher the R-value, the greater the insulating power. R-values expressed in ft²·h²·F/Btu.

TABLE 2: Canadian Sizes, R-Values and Edge Treatments for Styrofoam™ Brand Perimate™ XPS Foam Insulation

Nominal Board Thickness ⁽¹⁾ (in.)	R-Value ⁽²⁾	Board Size (mm)	Edge Treatment
54	10.0 (1.76)	610 x 2400	Shiplap Edge (long edge) Square Edge (short edge)

¹ Not all product sizes are available in all regions.

² R-value expressed in ft²·h²·F/Btu, RSI (R-value Système International) value expressed in m²·°C/W.

PROPERTIES

DuPont™ Styrofoam™ Brand Perimate™ Extruded Polystyrene (XPS) Foam Insulation exhibits the properties and characteristics indicated in Tables 3 and 4 when tested as represented. Review all instructions and (Material) Safety Data Sheet ((M)SDS) before use. Please contact DuPont at 1-866-583-2583 when additional guidance is required for writing specifications that include this product.

TABLE 1: U.S. Physical Properties of Styrofoam™ Brand Perimate™ XPS Foam Insulation

Property and Test Method Value	Value
Thermal Resistance ⁽¹⁾ per inch, ASTM C518 @ 75°F mean temp., ft ² ·h·°F/Btu, R-value, min.	1.063" R-5.0; 2.125" R-10.0
Compressive Strength ⁽²⁾ ASTM D1621, psi, min.	30
Water Absorption, ASTM C272, % by volume, max.	0.1
Drainage Capacity, ASTM D4716 @ 1,200 psf, gradient 0.19, gal/min/ft	3.0
Water Vapor Permeance ⁽³⁾ , ASTM E96, perm, max.	1.1
Maximum Use Temperature, °F	165
Coefficient of Linear Thermal Expansion, ASTM D696, in/in·°F	3.5 x 10 ⁻⁵
Flexural Strength, ASTM C203, psi, min.	50

¹ Not all product sizes are available in all regions.

² R means resistance to heat flow. The higher the R-value, the greater the insulating power. R-values expressed in ft²·h·°F/Btu.

TABLE 2: Canadian Physical Properties of Styrofoam™ Brand Perimate™ XPS Foam Insulation

Property and Test Method	Value
Thermal Resistance ⁽¹⁾ ASTM C518 @ 75°F mean temp., ft ² ·h·°F/Btu (m ² ·°C/W), R-value (RSI), min..	2.125" R-10.0 (RSI 1.76)
Compressive Strength ⁽²⁾ , ASTM D1621, psi (kPa), min.	30 (210)
Water Absorption, ASTM D2842, % by volume, max.	0.7
Drainage Capacity, CCMC Technical Guide 02712, Class A, gal/hr/ft (m ³ /hr/m)	>51.3 (>0.72)
Water Vapour Permeance ⁽³⁾ , ASTM E96, perm (ng/Pa·s·m ²), max.	1.05 (60)
Maximum Use Temperature, °F (°C)	165 (74)
Coefficient of Linear Thermal Expansion, ASTM D696, in/in·°F (mm/m·°C)	3.5 x 10 ⁻⁵ (6.3 x 10 ⁻²)
Flexural Strength, ASTM C203, psi (kPa), min.	50 (350)

¹ Not all product sizes are available in all regions.

² R-value expressed in ft²·h·°F/Btu, RSI (R-value Système International) value expressed in m²·°C/W.

TESTING

Applicable Standards

Styrofoam™ Brand Perimate™ Insulation meets ASTM C578, Type IV – Standard Specification for Rigid Cellular Polystyrene Thermal Insulation. Applicable standards include:

- **C518** – Standard Test Method for Steady- State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus
- **D1621** – Standard Test Method for Compressive Properties of Rigid Cellular Plastics
- **E96** – Standard Test Methods for Water Vapor Transmission of Materials
- **D696** – Standard Test Method for Coefficient of Linear Thermal Expansion of Plastics Between -30°C and 30°C With a Vitreous Silica Dilatometer
- **C203** – Standard Test Methods for Breaking Load and Flexural Properties of Block-Type Thermal Insulation
- **D2126** – Standard Test Method for Response of Rigid Cellular Plastics to Thermal and Humid Aging

- **C272** – Standard Test Method for Water Absorption of Core Materials for Structural Sandwich Constructions
- **D2842** – Standard Test Method for Water Absorption of Rigid Cellular Plastics
- **D4716** – Standard Test Method for Determining the (In-plane) Flow Rate per Unit Width and Hydraulic Transmissivity of a Geosynthetic Using a Constant Head
- CAN/ULC S701 Type 4

Notice

Styrofoam™ Brand Perimate™ Insulation complies with the following codes:

- International Residential Code (IRC) and International Building Code (IBC); see ICC-ES ESR 2142, BOCA-ES RR 21-02
- Underwriters Laboratories, Inc. (UL) Classified, see Classification Certificate D369
- CCMC Evaluation Report 04888

Warranty

In the United States, a 50-year thermal limited warranty is available on DuPont™ Styrofoam™ Brand Insulation products 1.5 inches and greater. For thickness less than 1.5 inches, other warranties may apply. Visit building.dupont.com/warranties or contact your DuPont representative for details.

HANDLING

WARNING: For Professional Use Only – Read and follow the entire Handling section and the Safety Data Sheets (SDSs, formerly MSDSs or Material Safety Data Sheets) carefully before use. The information below is designed to protect the user and allow for safe use and handling of Styrofoam™ Brand products. Follow all applicable federal, state, local and employer regulations.

Precautionary Statements

- DuPont™ Styrofoam™ Brand Perimate™ Extruded Polystyrene (XPS) Foam Insulation is combustible; protect from high heat sources.
- A protective barrier or thermal barrier may be required as specified in the appropriate building code.
- For more information, consult MSDS, call DuPont at 1-866-583-2583 or contact your local building inspector.

Disposal

Dispose of any residual Styrofoam™ Brand product, coated debris, or solvent in accordance with applicable federal, state, and local government regulations.



**For more information visit us at
styrofoam.com
or call 1-866-583-2583**

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DuPont™ STYROFOAM™ Brand Extruded Polystyrene Foam Insulation

CAUTION: This product is combustible. Protect from high heat sources. A protective barrier or thermal barrier may be required as specified in the appropriate building code. For more information, consult (Material) Safety Data Sheet ((M)SDS), call DuPont at 1-866-583-2583 or contact your local building inspector. In an emergency, call 1-989-636-4400 in the U.S. or 1-519-339-3711 in Canada.

WARNING: Rigid foam insulation does not constitute a working walkable surface or qualify as a fall protection product.

Building and/or construction practices unrelated to building materials could greatly affect moisture and the potential for mold formation. No material supplier including DuPont can give assurance that mold will not develop in any specific system.

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