

DuPont™ Styrofoam™ Brand Cavitymate™ Plus ST-100 XPS Foam Insulation

Durable, Moisture-Resistant, Cavity Wall Insulation

FEATURES/BENEFITS

Description

DuPont™ Styrofoam™ Brand Cavitymate™ Plus ST-100 Extruded Polystyrene (XPS) Foam Insulation* is a moisture-resistant, durable and lightweight extruded polystyrene foam board specifically designed for use in wet cavity wall environments in commercial applications. Sized to fit snugly between wall ties, it is easy to handle, cut and install, saving time and money on the job site. The closed-cell structure of Styrofoam™ Brand Cavitymate™ Plus Insulation boards helps ensure exceptional long-term thermal performance and high moisture resistance.

Sustainable Solution

Styrofoam™ Brand Cavitymate™ Plus Insulation is hydrochlorofluorocarbon (HCFC) free with zero ozone depletion potential. Styrofoam™ Brand insulation products produced in North America contain an average of 20% pre-consumer recycled content certified by UL Environment Inc.

Available Sizes

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

Nominal Board Thickness ⁽¹⁾ (in.)	R-Value ⁽²⁾	Board Size (ft.)	Edge Treatment
2.0	10.0	16 x 96	Butt Edge
3.0	15.0	16 x 96	Butt 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 are expressed in ft²·h·°F/Btu. R-value determined by ASTM C518.

PROPERTIES

Styrofoam™ Brand Cavitymate™ Plus Insulation exhibits the properties and characteristics indicated in Table 2 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 2: Physical Properties of Styrofoam™ Cavitymate™ Plus XPS Foam Insulation

Test Method	Property	Typical Value	Units
ASTM C518	Thermal Resistance ¹ per inch @ 75°F mean temp.	5.0	ft ² ·h·°F/Btu, R-value, min.
ASTM D1621	Compressive Strength ²	25	psi, min.
ASTM C272	Water Absorption	0.1	% by volume, max.
ASTM E96	Water Vapor Permeance ³	1.5	perm, max.
-	Maximum Use Temperature	165	°F
ASTM D696	Coefficient of Linear Thermal Expansion	3.5 x 10 ⁻⁵	in/in·°F
ASTM C203	Flexural Strength	50	psi, min.
ASTM E84	Surface Burning Characteristics for both foam core and finished product		
	Flame Spread	≤25	
	Smoke Developed	≤450	

¹ Values are consistent with the criteria of ASTM C578 and the requirements of the FTC R-value rule (16 CFR Part 460). R means resistance to heat flow. The higher the R-value, the greater the insulating power.

² Vertical compressive strength is measured at 10 percent deformation or at yield, whichever occurs first. Since Styrofoam™ Brand Extruded Polystyrene Foam Insulations are visco-elastic materials, adequate design safety factors should be used to prevent long-term creep and fatigue deformation.

³ Based on 1" thickness.

TESTING

Applicable Standards

DuPont™ Styrofoam™ Brand Cavitymate™ Plus Extruded Polystyrene (XPS) Foam Insulation meets ASTM C578 – Standard Specification for Rigid Cellular Polystyrene Thermal Insulation, which includes:

- 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

Notice

Styrofoam™ Brand Cavitymate™ Plus 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

Contact your DuPont sales representative or local authorities for state and local building code requirements and related acceptances.

Warranty

In the United States, a 50-year thermal limited warranty is available on Styrofoam™ Brand insulation products 1.5 inches and greater. For thickness less than 1.5 inches, other warranties may apply. Warranties are available as described at building.dupont.com/warranties.

HANDLING

WARNING: For Professional Use Only. Read and follow the entire Safety, Handling, and Storage 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 DuPont products. Follow all applicable federal, state, local and employer regulations.

Precautionary Statements

- Styrofoam™ Brand Cavitymate™ Plus 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.
- Since dust would impair the performance of adhesives and finishes, dusty surfaces should be brushed off before products are applied.

Shelf Life and Storage

When stored outdoors, keep insulation boards tarped or covered to protect from weather and weighted down to prevent boards from being blown around by the wind. Store above standing water.

Disposal

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



**For more information visit us at
styrofoam.com/cavitymate
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 call the DuPont Contact Center at 866-583-2583 or contact your local building inspector. For emergencies contact Chemtrec 800-424-9300, CCN (Contract Number) 7442.

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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