



1 PRODUCT NAME

STYROFOAM PERIMATE Insulation

2 Manufacturer

Dow Chemical Canada Inc.
 Building Materials
 1086 Modeland Road
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 (800) 363-6210 (French)
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3 Product Description

STYROFOAM* PERIMATE* extruded polystyrene insulation is a CAN/ULC S701, Type 4 extruded polystyrene board meeting both insulation and drainage needs in the commercial foundation market. It complies with CCMC report #12826-R. Specially designed vertical grooves along the surface face the soil to efficiently channel water down to the footing drains or weeping tiles.

STYROFOAM extruded polystyrene insulation has more than 50 years of proven performance in wet environments. The closed-cell structure of STYROFOAM PERIMATE resists water pickup, enabling it to retain its high R-value (RSI)** over time – necessary properties in wet, below-grade commercial foundation applications.

BASIC USE

STYROFOAM PERIMATE insulation protects foundation damp-proofing and water-proofing, especially during backfilling. It also provides a secondary barrier against ground water leakage. Freeze/thaw cycling of the foundation wall is minimized, reducing the potential for cracking. A warmer foundation wall reduces the potential for condensation and adds to the thermal mass of the building.

SIZES

Dimensions: 2.5" x 2' x 7'
 2.125" x 2' x 8'

4 Technical Data

APPLICABLE STANDARDS

- ASTM International
- ASTM C 177 – Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus
 - ASTM C 518 – Standard Test Method for Steady-State Thermal Transmission Properties by means of the Heat Flow Meter Apparatus

- ASTM D 1621 – Standard Test Method for Compressive Properties of Rigid Cellular Plastics
- ASTM D 2842 – Standard Test Method for Water Absorption of Rigid Cellular Plastics
- CCMC Technical Guide 02712 – Technical Guide for Foundation Drainage Systems

PHYSICAL/CHEMICAL PROPERTIES

STYROFOAM PERIMATE insulation exhibits physical properties as indicated in Table 1. For chemical resistance of STYROFOAM PERIMATE insulation, see Table 2.

ENVIRONMENTAL DATA

STYROFOAM PERIMATE insulation is manufactured with HCFC blowing agents, which have 94 percent less ozone depletion potential than standard CFC blowing agents.

FIRE PROTECTION

For proper protection of plastic foam in storage, consult an insurer, local fire department or other authority having jurisdiction.

TABLE 1

Physical Properties of STYROFOAM PERIMATE Insulation	
Property and Test Method	Value
Thermal Resistance, aged R-value (RSI) per inch (25.4 mm) @ 75°F (24°C), ASTM C 518, C 177, °F·ft ² ·h/Btu (m ² ·C/W)	5.0 (0.88)
Compressive Strength, ASTM D 1621, psi (kPa), min.	30 (210)
Water Absorption, ASTM D 2842, % by volume, max.	0.7
Drainage Capacity, CCMC Technical Guide 02712, Class A, gal/hr/ft, (m ³ /hr/m)	>51.3 (>0.72)

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**R means resistance to heat flow. The higher the R-value or RSI, the greater the insulating power.

STYROFOAM PERIMATE Insulation

TABLE 2

Chemical Resistance of STYROFOAM PERIMATE Insulation			
Acid, inorganic	Good	Gases, carbon hydroxide (CH ₄)	Good
Acid, organic	Good	Gases, chlorofluorocarbons	Good
Alcohol	Good	Gases, dioxide (O ₂)	Good
Asphalts, water-based	Good	Gases, nitrous hydroxide (NH ₃)	Good
Bases (caustics)	Good	Gases, sulfur dioxide (SO ₂)	Good
Bleach	Good	Mineral oil USP	Excellent
Brines and other salts	Good	Paints, alcohol-based	Good
Cements and mortar	Good	Paints, water-based	Good
Gases, carbon dioxide (CO ₂)	Good	Water	Good

5 Installation

Boards of STYROFOAM PERIMATE insulation are easy to handle, cut and install. The shiplapped boards are designed to ensure energy efficiency and minimize on-site cutting and waste. Polystyrene-compatible spot adhesive will hold the boards in place during backfilling. Caulk or mastic the top edge of the boards to prevent water infiltration behind the insulation. To complete the installation, parge the above-grade portions of STYROFOAM PERIMATE insulation.

6 Availability

STYROFOAM PERIMATE insulation is distributed through an extensive network. For more information, contact your local Dow sales representative or call 1-800-232-2436 (English) or 1-800-565-1255 (French).

7 Warranty

Not applicable.

8 Maintenance

Not applicable.

9 Technical Services

Dow can provide technical information to help address questions when using STYROFOAM PERIMATE insulation. Technical personnel are available at Dow sales offices to assist with any insulation project.

10 Filing Systems

- www.dowbuildingmaterials.com
- www.buildcore.com

IN CANADA:

- For Technical Information (English): 1-800-268-4840; (French): 1-800-363-6210
- For Sales Information (English): 1-800-232-2436; (French): 1-800-565-1255

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COMBUSTIBLE: Protect from high heat sources. For more information, consult MSDS and/or call Dow (1-800-268-4840). In an emergency, call 1-519-339-3711. Local building codes may require a protective or thermal barrier. Contact your local building inspector for more information.



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