1. PRODUCT NAME
STYROFOAM™ Brand SM Extruded Polystyrene Foam Insulation

2. MANUFACTURER
Dow Chemical Canada ULC
Dow Building Solutions
450-1st St. SW, Suite 2100
Calgary, AB T2P 5H1
1-866-583-BLUE (2583) (English)
1-800-363-6210 (French)
dowbuildingsolutions.com

3. PRODUCT DESCRIPTION
STYROFOAM™ Brand SM Extruded Polystyrene Foam Insulation is a multi-purpose extruded polystyrene board that helps to meet the needs of the commercial and residential foundation and slab market. The closed-cell structure of STYROFOAM™ Brand SM Insulation resists water absorption, enabling it to retain a high R-value (RSI)* over time – a necessary property in below-grade residential foundation applications.

STYROFOAM™ Brand SM Insulation helps to protect foundation dampproofing and waterproofing, especially during backfilling. It also provides a secondary barrier against groundwater leakage. With STYROFOAM™ Brand SM Insulation, the freeze-thaw cycling of the foundation wall is minimized, reducing the possibility of cracking. And a warmer foundation wall reduces the potential for condensation and adds to the thermal mass of the building.

Basic Use
STYROFOAM™ Brand SM Insulation can be used against almost any commercial or residential foundation wall in above- and below-grade applications.

4. TECHNICAL DATA
Applicable Standards
ASTM International
- CAN/ULC S701 Type 4
- CCMC 04888-L

Physical Properties
STYROFOAM™ Brand SM Insulation exhibits physical properties as indicated in Table 2 when tested as represented.

TABLE 1: Sizes, R-values and Edge Treatments for STYROFOAM™ Brand SM Extruded Polystyrene Foam Insulation

<table>
<thead>
<tr>
<th>Board Thickness(1), Inches (mm)</th>
<th>R-Value</th>
<th>Board Size (Inches)</th>
<th>Edge Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>5.0</td>
<td>24 x 96</td>
<td>Butt Edge &amp; Shiplap</td>
</tr>
<tr>
<td>1.5</td>
<td>7.5</td>
<td>24 x 96</td>
<td>Butt Edge &amp; Shiplap</td>
</tr>
<tr>
<td>2.0**</td>
<td>10.0</td>
<td>24 x 96</td>
<td>Butt Edge &amp; Shiplap</td>
</tr>
<tr>
<td>2.4</td>
<td>12.0</td>
<td>24 x 96</td>
<td>Shiplap</td>
</tr>
<tr>
<td>2.5</td>
<td>12.5</td>
<td>24 x 96</td>
<td>Shiplap</td>
</tr>
<tr>
<td>3.0</td>
<td>15.0</td>
<td>24 x 96</td>
<td>Butt Edge &amp; Shiplap</td>
</tr>
<tr>
<td>4.0</td>
<td>20.0</td>
<td>24 x 96</td>
<td>Butt Edge &amp; Shiplap</td>
</tr>
</tbody>
</table>

(1) Not all product sizes are available in all regions.
** Also available in 4x8 Shiplap
Additional sizes may be stocked on a regional basis. Contact your local Dow seller for additional information.

TABLE 2: Physical Properties of STYROFOAM™ Brand SM Extruded Polystyrene Foam Insulation

<table>
<thead>
<tr>
<th>Property And Test Method</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermal Resistance per inch (25 mm), ASTM C518 @ 75˚F (24˚C)</td>
<td>5.0 (8.8)</td>
</tr>
<tr>
<td>Compressive Strength(1), ASTM D1621, psi (kPa), min.</td>
<td>30 (207)</td>
</tr>
<tr>
<td>Water Absorption, ASTM D2842, % by volume, max.</td>
<td>0.7</td>
</tr>
<tr>
<td>Water Absorption, ASTM C272, % by volume, max</td>
<td>0.3</td>
</tr>
<tr>
<td>Water Vapour Permeance, ASTM E96, perm (ng/Pa•m•s²), max(2)</td>
<td>1.5 (90)</td>
</tr>
<tr>
<td>Maximum Use Temperature, °F (°C)</td>
<td>165 (74)</td>
</tr>
<tr>
<td>Coefficient of Linear Thermal Expansion, ASTM D696, in/in•˚F (mm/m•˚C)</td>
<td>3.5 x 10⁻⁴ (6.3 x 10⁻²)</td>
</tr>
</tbody>
</table>

(1) Vertical compressive strength is measured at 10 percent deformation or at yield, whichever occurs first.
(2) Based on 1” (25 mm) thickness.
Environmental Data

STYROFOAM™ Brand SM Insulation is hydrochlorofluorocarbon (HCFC) free with zero ozone-depletion potential.

STYROFOAM™ Brand SM Extruded Polystyrene Foam Insulation is reusable in many applications.

STYROFOAM™ Brand Insulation products produced in North America contain an average of 20% pre-consumer recycled content certified by UL Environment Inc.

Fire Information

STYROFOAM™ Brand SM 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 Dow at 1-866-583-BLUE (2583) or contact your local building inspector.

5. INSTALLATION

STYROFOAM™ Brand SM Insulation boards are easy to handle, cut and install. In particular, STYROFOAM™ Brand SM Insulation with shiplap edges is designed to ensure energy efficiency and minimize on-site cutting and waste. Use a polystyrene-compatible adhesive to hold boards in place during backfilling. Apply caulk or mastic to the top of boards to prevent water infiltration behind the insulation. To complete the installation, parge the above-grade portions of STYROFOAM™ Brand SM Insulation.

It is recommended that any masonry irregularities or jagged surfaces on the foundation wall or slab be removed prior to installation. Below-grade walls should be protected from moisture leakage and dampness prior to installation of STYROFOAM™ Brand SM Insulation.

Visit www.dowbuildingsolutions.com or contact your local Dow representative for more specific instructions.

6. AVAILABILITY

STYROFOAM™ Brand SM Insulation is distributed through an extensive network. For more information, contact your local Dow representative or call:
• 1-800-232-2436 (English)
• 1-800-565-1255 (French)

7. TECHNICAL SERVICES

Dow can provide technical information to help address questions when using STYROFOAM™ Brand SM Extruded Polystyrene Foam Insulation. Technical personnel are available to assist with any insulation project. For Technical assistance, call:
• 1-866-583-BLUE (2583) (English)
• 1-800-363-6210 (French)

8. FILING SYSTEMS

www.dowbuildingsolutions.com