1. PRODUCT NAME
STYROFOAM™ Brand CLADMATE™ CM20 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
Basic Use
STYROFOAM™ CLADMATE™ CM20 Insulation is a versatile, product manufactured for applications that require a high R-value (or RSI) and excellent moisture resistance and high compressive strength.

STYROFOAM™ CLADMATE™ CM20 Insulation combines an R-value of 5.0 per inch (RSI of 0.88 per 25 mm) with high moisture resistance and a (20 psi) compressive strength (CAN/ULC S701 Type 3). Its versatility enables its use in all residential construction applications including: above and below grade, under slabs, interior and exterior applications.

Sizes
Product thicknesses and R-values are shown in Table 1. Not all products are available in all areas. Consult your Dow representative about other sizes and lead-time requirements.

4. TECHNICAL DATA
Applicable Standards
STYROFOAM™ Brand CLADMATE™ CM20 Insulation meets CAN/ULC S 701 Type 3 – Standard for Thermal Insulation, Polystyrene, boards and pipe covering.
• D1621 – Standard Test Method for Compressive Properties of Rigid Cellular Plastics
• D 2842-06 – Standard Test Method for Water Absorption of Rigid Cellular Plastics

Code Compliance
STYROFOAM™ Brand CLADMATE™ CM20 Insulation complies with the following:
• CAN/ULC S701-11 Type 3
• CCMC 11420-L

Table 1: Sizes, R-values and Edge Treatments for STYROFOAM™ Brand CLADMATE™ CM20 Extruded Polystyrene Foam Insulation Available in a Variety of Sizes and Thicknesses to Address Your Needs.

<table>
<thead>
<tr>
<th>2'x8' Ship-Lap (4-sided)</th>
<th>2'x8' Buttedge</th>
<th>4'x8' Ship-Lap (4-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Board Thickness (1)</td>
<td>R-value (RSI) (2)(3)</td>
<td>Nominal Board Thickness (1)</td>
</tr>
<tr>
<td>0.75&quot;</td>
<td>R3.75 (0.66)</td>
<td>0.5&quot;</td>
</tr>
<tr>
<td>1.0&quot;</td>
<td>R5 (0.88)</td>
<td>1.0&quot;</td>
</tr>
<tr>
<td>1.5&quot;</td>
<td>R7.5 (1.32)</td>
<td>1.5&quot;</td>
</tr>
<tr>
<td>2.0&quot;</td>
<td>R10 (1.76)</td>
<td>2.0&quot;</td>
</tr>
<tr>
<td>2.4&quot;</td>
<td>R12 (2.113)</td>
<td>3.0&quot;</td>
</tr>
<tr>
<td>3.0&quot;</td>
<td>R15 (2.642)</td>
<td>4'x8' Ship-Lap (4-sided)</td>
</tr>
<tr>
<td>4'x10' Ship-Lap (4-sided)</td>
<td>1.0&quot;</td>
<td>R5 (0.88)</td>
</tr>
</tbody>
</table>

(1) Not all products are available in all parts of the country. Contact your Dow representative for more information.
(2) Not to be considered sales specifications.
(3) As per CAN/ULC S 701-11
(4) R-values expressed in ft²•h•°F/Btu.
Physical Properties
STYROFOAM™ Brand CLADMATE™ CM20 Insulation exhibits the properties and characteristics indicated in Table 2 when tested as represented.

Prolonged exposure to ultraviolet radiation may cause the surface of STYROFOAM™ Brand CLADMATE™ CM20 Insulation to become faded and dusty. A light-colored, opaque protective covering should be used if excessive solar exposure is expected. The surface degradation will have no measurable effect on the insulating value of the plastic foam unless the deterioration is allowed to continue until actual foam thickness is lost. Since dust would impair the performance of adhesives and finishes, a dusty surface should be brushed off before these products are applied.

Environmental Data
STYROFOAM™ Brand CLADMATE™ CM20 Insulation is hydrochlorofluorocarbon (HCFC) free with zero ozone-depletion potential. STYROFOAM™ Brand CLADMATE™ CM20 Extruded Polystyrene Foam Insulation is reusable in many applications.

Fire Protection
STYROFOAM™ Brand CLADMATE™ CM20 Insulation is combustible; protect from high heat sources. Local building codes may require a protective or thermal barrier. For more information, consult (Material) Safety Data Sheet ((M)SDS), call Dow at 1-866-583-BLUE (2583) or contact your local building inspector. In an emergency, call 1-519-339-3711.

### TABLE 2: Typical Physical Properties of STYROFOAM™ Brand CLADMATE™ CM20 Extruded Polystyrene Foam Insulation

<table>
<thead>
<tr>
<th>Property And Test Method</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermal Resistance per in. (25 mm), ASTM C518 @ 75°F (24°C) mean temp., R=ln•F/Blu (m²•°C/W), R-value (RSI) min.</td>
<td>5.0 (0.88)</td>
</tr>
<tr>
<td>Compressive Strength, ASTM D1621, psi (kPa), min.</td>
<td>20 psi (140 kPa)</td>
</tr>
<tr>
<td>Water Absorption, ASTM D2842, % by volume, max.</td>
<td>0.7</td>
</tr>
<tr>
<td>Water Vapour Permeance, ASTM E96, perm (ng/Pa•s•m²), max.</td>
<td>1.5 (86)</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>$3.5 \times 10^{-5}$ (8.3 $\times 10^{-2}$)</td>
</tr>
</tbody>
</table>

1. Values are consistent with criteria of CAN/ULC S 701-11
2. Vertical compressive strength is measured at 10 percent deformation or yield, whichever occurs first.
3. Based on $1\text{"} (25\text{mm})$ thickness.

5. INSTALLATION
Boards of STYROFOAM™ Brand CLADMATE™ CM20 Insulation are easy to handle, cut and install. Contact a local Dow representative or visit www.dowbuildingsolutions.com for more specific instructions.

6. AVAILABILITY
STYROFOAM™ Brand CLADMATE™ CM20 Insulation is distributed through an extensive network.
- 1-800-232-2436 (English)
- 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™ Brand CLADMATE™ CM20 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)

10. FILING SYSTEMS
www.dowbuildingsolutions.com