THERMAX™ (ci) Exterior Insulation

1. PRODUCT NAME
THERMAX™ (ci) Exterior Insulation

2. MANUFACTURER
The Dow Chemical Company
Dow Building Solutions
200 Larkin Midland, MI 48674
1-866-583-BLUE (2583)
Fax 1-989-832-1465
www.thermaxwallsystem.com

3. PRODUCT DESCRIPTION
THERMAX™ (ci) Exterior Insulation consists of a glass-fiber-reinforced polyisocyanurate foam core faced with nominal 1.25 mil embossed BLUE™ thermoset-coated aluminum on one side and 0.9 mil smooth, reflective aluminum on the other. The integral durable thermoset coated aluminum facer provides a drainage plane and water resistant barrier, eliminating the extra step of installing a membrane or building wrap when used in conjunction with Dow Flashing products. The foam core provides one of the highest R-values(2) available (R-6.5 at 1”) for immediate insulation and weather protection on the job site, as well as long-term thermal performance. THERMAX™ (ci) Exterior Insulation meets or exceeds ASHRAE 90.1-2013 prescriptive requirements for continuous insulation on exterior walls, as governed by building codes. The 1.25 mil embossed BLUE™ thermoset-coated aluminum surface makes it a durable exterior insulation choice.

Sizes
See Table 1 for sizes, R-values and edge treatment options.

4. TECHNICAL DATA

Table 1: Sizes(1), R-Values And Edge Treatments For Thermax™ (ci) Exterior Insulation

<table>
<thead>
<tr>
<th>Nominal Board Thickness (in.)</th>
<th>R-Value</th>
<th>Board Size (ft.)</th>
<th>Edge Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.625</td>
<td>4.1</td>
<td>4 x 8/4 x 12</td>
<td>Square Edge</td>
</tr>
<tr>
<td>1.0</td>
<td>6.5</td>
<td>4 x 8/4 x 12</td>
<td>Square Edge</td>
</tr>
<tr>
<td>1.55</td>
<td>10.1</td>
<td>4 x 8/4 x 12</td>
<td>Shiplap</td>
</tr>
<tr>
<td>2.0</td>
<td>13.0</td>
<td>4 x 8/4 x 12</td>
<td>Shiplap</td>
</tr>
</tbody>
</table>

(1) Contact your Dow seller for information at different R-values and other sizes and lead time requirements. Not all product sizes are available in all regions.

(2) Aged R-value at 1” of cured foam @ 75°F mean temperature. R-value expressed in ft² •h•°F/Btu. R-value determined by ASTM C518 using the aging process in ASTM C1289 (90 days @ 140°F).

Basic Use
THERMAX™ (ci) Exterior Insulation is designed for continuous insulation, which meets or exceeds ASHRAE 90.1-2013 prescriptive requirements for continuous insulation on exterior walls, as governed by building codes. The 1.25 mil embossed BLUE™ thermoset-coated aluminum surface makes it a durable exterior insulation choice.

Table 2: Physical Properties of Rigid Cellular Plastics

Physical Properties
THERMAX™ (ci) Exterior Insulation exhibits the properties and characteristics indicated in Table 2 when tested as represented.

Fire Protection
THERMAX™ products should be used only in strict accordance with product application instructions. THERMAX™ products, when used in a building containing combustible materials, may contribute to the spread of fire. For more information, consult (Material) Safety Data Sheet ((M)SDS) and or call Dow at 1-866-583-BLUE (2583). In an emergency, call 1-989-636-4400.

Code Compliances
THERMAX™ (ci) Exterior Insulation complies with the following codes:
• 2012 International Building Code (IBC) Section 2603
• UL Classified; Class A UL 723 (ASTM E84) Surface Burning Characteristics of Building Materials
• ICC-ES ESR-1659
• FM 4880 – Factory Mutual Class 1 Foil-faced Polyisocyanurate Thermal Insulation on Exterior Walls
• FM 4880 – Factory Mutual Class 1 Insulated Wall and Ceiling Panel
• THERMAX™ products are covered under Underwriters Laboratories Inc. (UL) file R5622
• The following designs are 1, 2, 3 or 4 hour wall rated assemblies as listed in the UL Fire Resistance Directory: U026, U326, U330, U354, U355, U424, U425, U460, U902, U904, U905, U906, U907, V454, V482, V499, W417
• The following designs are 1, 2, 3 or 4 hour wall rated assemblies as listed in the Intertek Fire Resistance Directory: FI 60-02, FI 60-01, FI 120-01

Contact your Dow sales representative or local authorities for state and local building code requirements and related acceptances.
5. INSTALLATION
Boards of THERMAX™ (ci) Exterior Insulation are lightweight and can be sawed or cut with a knife. They install quickly and easily to walls with common building tools. For optimum performance seal all joints between boards with LIQUIDARMOR™ Sealant and Flashing. Visit www.building.dow.com to download the complete installation guide.

6. AVAILABILITY
THERMAX™ (ci) Exterior Insulation is distributed through an extensive network. For more information, call 1-800-232-2436.

7. WARRANTY
Fifteen-year limited thermal warranty as described in Form No. 179-00028.

8. MAINTENANCE
Not applicable.

9. TECHNICAL SERVICES
Dow can provide technical information to help address questions when using THERMAX™ (ci) Exterior Insulation. For technical assistance, call 1-866-583-BLUE (2583).

10. FILING SYSTEMS
www.thermaxwallsystem.com
www.dowbuildingsolutions.com

TABLE 2: Physical Properties of THERMAX™ (ci) Exterior Insulation

<table>
<thead>
<tr>
<th>Property and Test Method</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermal Resistance(1), ASTM C518, R-value</td>
<td>6.5</td>
</tr>
<tr>
<td>Compressive Strength(2), ASTM D1621, psi</td>
<td>25.0</td>
</tr>
<tr>
<td>Flexural Strength, ASTM C203, psi</td>
<td>55.0</td>
</tr>
<tr>
<td>Water Absorption, ASTM C209, % by volume, max.</td>
<td>0.1</td>
</tr>
<tr>
<td>Water Vapor Permeance, ASTM E96, perms</td>
<td>≤0.04</td>
</tr>
<tr>
<td>Maximum Use Temperature, °F</td>
<td>250</td>
</tr>
<tr>
<td>Surface Burning Characteristics(3), ASTM E84 Flame Spread</td>
<td>25</td>
</tr>
<tr>
<td>Smoke Developed</td>
<td>&lt;450</td>
</tr>
</tbody>
</table>

(1) Aged R-value at 1” of cured foam @ 75°F mean temperature. R-value expressed in ft²•h•°F/Btu. R-value determined by ASTM C518 using the aging process in ASTM C1289 (90 days @ 140°F).
(2) Vertical compressive strength is measured at 10 percent deformation or at yield, whichever occurs first.
(3) Calculated flammability values for this or any other material are not intended to represent hazards that may be present under actual fire conditions.