1. **Product Name**
   THERMAX™ Heavy Duty 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.dowbuildingsolutions.com

3. **Product Description**
   THERMAX™ Heavy Duty Insulation consists of a glass-fiber-reinforced polyisocyanurate foam core faced with nominal 4 mil embossed white thermoset-coated aluminum on one side and 1.25 mil embossed aluminum on the other. It can be installed exposed to the interior without a thermal barrier.

   THERMAX™ Heavy Duty offers high, long-term R-value*. The facers help prevent water and water vapor intrusion into the insulation foam, and allow the foam to stabilize at a higher R-value. Used in conjunction with the appropriate joint closure system for the application, THERMAX™ Heavy Duty Insulation with its low perm rating helps to reduce moisture condensation within and behind the insulation.

**Basic Use**

THERMAX™ Heavy Duty is designed as an insulation and interior finish system for walls and ceilings in metal, wood post frame, and concrete or masonry buildings, as governed by building codes. The tough 4 mil white embossed aluminum surface of THERMAX™ Heavy Duty makes it a durable insulation/finish choice for use in moderate-impact areas, and it can be pressure-washed up to 2,000 psi with a 15-degree or greater spray tip (at 3’ minimum distance). Maximum length is 30 ft. (9.1 m) and a maximum thickness of 3 inches (76.2 mm).

4. **Technical Data**

   **Applicable Standards**
   THERMAX™ Heavy Duty meets ASTM C1289 – Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board, Type I, Class 2. Applicable standards include:
   - C203 – Standard Test Methods for Breaking Load and Flexural Properties of Block-Type Thermal Insulation
   - C209 – Standard Test Methods for Cellulosic Fiber Insulating Board
   - D2126 – Standard Test Method for Response of Rigid Cellular Plastics to Thermal and Humid Aging

   **Typical Physical Properties**
   THERMAX™ Heavy Duty exhibits the typical properties and characteristics indicated in Table 2 when tested as represented.

**Environmental Data**

THERMAX™ Heavy Duty is manufactured with a zero ozone depleting potential. The use of THERMAX™ Heavy Duty helps reduce the carbon footprint of commercial buildings.

**Fire Information**

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

**Code Compliances**

THERMAX™ Heavy Duty complies with the following codes:
- 2009 International Residential Code (IRC) Section 316
- 2009 International Building Code (IBC) Section 2603
- ICC-ES ESR-1659

**Table 1: Sizes, R-Values and Edge Treatments for THERMAX™ Heavy Duty 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>.5</td>
<td>3.3</td>
<td>4 x 8, 4 x 10</td>
<td>Square Edge</td>
</tr>
<tr>
<td>.75</td>
<td>5.0</td>
<td>4 x 8, 4 x 10</td>
<td>Square Edge</td>
</tr>
<tr>
<td>1.0</td>
<td>6.5</td>
<td>4 x 8, 4 x 10</td>
<td>Square Edge</td>
</tr>
<tr>
<td>1.5</td>
<td>9.8</td>
<td>4 x 8, 4 x 10</td>
<td>Square Edge, Shiplap</td>
</tr>
<tr>
<td>2</td>
<td>13.0</td>
<td>4 x 8, 4 x 10</td>
<td>Square Edge, 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) R-value means resistance to heat flow. The higher the R-value, the greater the insulating power. Stabilized R-value @75°F mean temperature determined in accordance with ASTM C518, R-values expressed in ft2•h•°F/Btu.
Contact your Dow sales representative or local authorities for state and local building code requirements and related acceptances.

5. INSTALLATION
Boards of THERMAX™ Heavy Duty are lightweight and can be sawed or cut with a knife. They install quickly to walls and ceilings – inside and outside of purlins, trusses or bar joints. Butt joints must be installed over structural members. The surface of the insulation at all joints must be continuously sealed with tape or with one of Dow’s joint closure systems.

Contact a local Dow representative or access the literature library at www.dowbuildingsolutions.com for more specific instructions.

6. AVAILABILITY
THERMAX™ Heavy Duty insulation is manufactured in several locations and is distributed through an extensive network. For more information, call 1-800-232-2436.

7. WARRANTY
Fifteen-year limited thermal warranty is available. Contact your Dow representative for details.

<table>
<thead>
<tr>
<th>TABLE 2: TYPICAL PHYSICAL PROPERTIES OF THERMAX™ HEAVY DUTY INSULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROPERTY AND TEST METHOD</td>
</tr>
<tr>
<td>--------------------------</td>
</tr>
<tr>
<td>Compressive Strength(1), ASTM D1621, psi, min.</td>
</tr>
<tr>
<td>Flexural Strength, ASTM C203, psi, min.</td>
</tr>
<tr>
<td>Water Absorption, ASTM C209, % by volume, max.</td>
</tr>
<tr>
<td>Water Vapor Permeance, ASTM E96, perm, max.</td>
</tr>
<tr>
<td>Maximum Use Temperature, °F</td>
</tr>
<tr>
<td>Light Reflectance, Visual Light Spectrophotometer, %</td>
</tr>
</tbody>
</table>

(1) Vertical compressive strength is measured at 10 percent deformation or at yield, whichever occurs first.

8. MAINTENANCE
Not applicable.

9. TECHNICAL SERVICES
Dow can provide technical information to help address questions when using THERMAX™ Heavy Duty. Technical personnel are available to assist with any insulation project. Call 1-866-583-BLUE (2583).

10. FILING SYSTEMS
- www.dowbuildingsolutions.com
- www.DowMetalBuilding.com

www.dowbuildingsolutions.com Technical Information
1-866-583-BLUE (2583)
Sales Information
1-800-232-2436

IN THE U.S.
THE DOW CHEMICAL COMPANY
200 Larkin
Midland, MI 48674

NOTICE: No freedom from any patent owned by Dow or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer’s use and for ensuring that Customer’s workplace and disposal practices are in compliance with applicable laws and other government enactments. The product shown in this literature may not be available for sale and/or available in all geographies where Dow is represented. The claims made may not have been approved for use in all countries or regions. Dow assumes no obligation or liability for the information in this document. References to “Dow” or the “Company” mean The Dow Chemical Company and its consolidated subsidiaries unless otherwise expressly noted.

NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

CAUTION: This product is combustible and shall only be used as specified by the local building code with respect to flame spread classification and to the use of a suitable thermal barrier. For more information, consult MSDS, call Dow at 1-866-583-BLUE (2583) or contact your local building inspector. In an emergency, call 1-989-636-4400.

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 Dow can give assurance that mold will not develop in any specific system.

A product of The Dow Chemical Company or an affiliated company of Dow
Habitat for Humanity is a registered service mark owned by Habitat for Humanity International

Printed in U.S.A.
Form No. 178-04018X-0512MCK MOW151830