DOW™ PROTECTION BOARD III

1. PRODUCT NAME
DOW™ Protection Board III

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

Dow Chemical Canada Inc.
Building Solutions
2400, 215 – 2 Street S.W.,
Calgary, Alberta T2P 1M4
1-866-583-BLUE (2583) (English)
1-800-363-6210 (French)
www.dowstyrofoam.ca/4architects

3. PRODUCT DESCRIPTION
Basic Use
DOW™ Protection Board III is an extruded polystyrene foam insulation with plastic film on one side. Designed for use in commercial foundation waterproofing applications, DOW Protection Board III helps protect the waterproofing membrane from damage during backfill. It is recommended for perimeter concrete and masonry walls where waterproofing protection is the primary requirement.

Sizes
Thickness: 1/4” Nominal
Length: 50’ Nominal
Width: 4’ Nominal
Standard Fan-folded Bundle: 2’ x 4’ x 10”

4. TECHNICAL DATA
Applicable Standards
ASTM International

Code Compliance
DOW™ Protection Board III complies with the following codes:
- Meets IBC/IRC requirements for foam plastic insulation; see ICC-ES NER-699
- BOCA-ES RR 21-02
- Underwriters Laboratories, Inc. (UL) Classified, see Classification Certificate US89; UL Fire Resistance Directory; UL Fire Classified Construction No. 260; UL Fire Classified No. 440; meets UL 1256
Contact your Dow sales representative or local authorities for state/provincial and local building code requirements and related acceptances.

Physical Properties
DOW™ Protection Board III exhibits the properties and characteristics indicated in Tables 1 and 2 when tested as represented.

Exposure to ultraviolet radiation in sunlight for several weeks will cause the surface of DOW™ Protection Board III to become yellow 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 the dust would impair the performance of adhesives and finishes, the dusty surface should be brushed off before these products are applied.

For chemical resistance properties of DOW Protection Board III, see Table 3.

ENVIRONMENTAL DATA
DOW™ Protection Board III is manufactured with HCFC blowing agents, which have 94 percent less ozone depletion potential than standard CFC blowing agents. DOW Protection Board III is reusable in many applications.

5. INSTALLATION
Boards of DOW™ Protection Board III are easy to handle, cut and install. Prior to installing DOW Protection Board III, verify that the substrate is free of sharp projections and that the waterproofing or damp-proofing is properly cured. To install DOW Protection Board III:
- Begin by unfolding bundles and apply by hanging or adhering to the structure; butt edges tightly.

Physical Properties of DOW™ Protection Board III

<table>
<thead>
<tr>
<th>Property And Test Method</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermal Resistance at nominal 1/4” (6 mm) thickness, ASTM C518 @ 75°F (24°C) mean temp., ft·h·°F/Btu (m³·°C/W), R-value (RSI), min.</td>
<td>1.0 (0.17)</td>
</tr>
<tr>
<td>Compressive Strength (2), ASTM D1621, psi (kPa), min.</td>
<td>8 (55)</td>
</tr>
<tr>
<td>Water Absorption, ASTM C272, % by volume, max.</td>
<td>0.3</td>
</tr>
<tr>
<td>Water Vapor Permeance (3), ASTM E96, perm, max.</td>
<td>0.8</td>
</tr>
<tr>
<td>Maximum Use Temperature, “F (°C)</td>
<td>165 (74)</td>
</tr>
</tbody>
</table>

(1) Values are consistent with the criteria of ASTM C578 and the FTC R-value rule [16 CFR Part 460]. R means resistance to heat flow. The higher the R value, the greater the insulating power.
(2) Vertical compressive strength is measured at 10 percent deformation or yield, whichever occurs first.
(3) For 1/4” thickness; perm-inches.
6. AVAILABILITY
DOW™ Protection Board III is distributed through an extensive network. For more information, call: 1-800-232-2436 (English)

7. WARRANTY
Not applicable.

8. MAINTENANCE
Not applicable.

9. TECHNICAL SERVICES
Dow can provide technical information to help address questions when using DOW™ Protection Board III. 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.dowstyrofoam.com/architect
- www.dowstyrofoam.ca/4architects
- www.sweets.com

| Chemical Resistance of DOW™ Protection Board III | Acid, inorganic, weak | Excellent |
| Acids, organic, weak | Excellent |
| Acid, organic, strong | Good |
| Alcohols, including isopropyl alcohol | Excellent |
| Methyl ethyl ketone | Not recommended |
| Polylglycols, including propylene glycol | Excellent |
| Hydrocarbons | Not recommended |
| Salts | Excellent |
| Insecticides | Not recommended |
| Kerosene | Poor |
| Mineral oil USP | Excellent |
| Naphtha (VMP) | Not recommended |
| Turpentine | Not recommended |
| Beer | Good |
| Gasoline | Not recommended |
| Fruit juices | Good |

(1) Explanation of ratings:
Excellent = The plastic was unaffected for the duration of the test.
Good = A very slight clouding or discoloration of the plastic.
Poor = Considerable changes in plastic during exposure.
Not recommended = Severe attack of the plastic. Became soft and unusable after a few hours of exposure.

NOTE: This table should be used as a guide only. For design purposes, specific test data on the intended application may be needed.