ENERBOND™ Professional Foam Adhesive

1. PRODUCT NAME
ENERBOND™ Foam Adhesive

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

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Calgary, Alberta T2P 1M4
1-866-583-BLUE (2583) (English)
1-800-363-6210 (French)
www.dowbuildingsolutions.com

3. PRODUCT DESCRIPTION
ENERBOND™ Foam Adhesive is a heavy-duty adhesive specially formulated to bond subfloors, drywall, paneling, foam panels and most construction materials. Better than traditional adhesives because of its excellent bonding power on dry, damp and even frozen lumber, ENERBOND™ Foam Adhesive provides a fast-grab tack and high-strength bond. It bonds to lumber, plywood, particle board, masonry, drywall, concrete and foam panels.

It is ideal for anchoring, joining and stabilizing insulated concrete forms and structural insulated panels. (ENERFOAM™ Foam Sealant can also be used to seal gaps in the forms and prevent leakage of the fresh concrete during the pouring stage.) ENERBOND™ Foam Adhesive is cream in color and is easy to apply in various weather conditions.

Basic Use
ENERBOND™ Foam Adhesive is a single-component, moisture cured polyurethane foam adhesive for interior and exterior use. It is designed to:
• Secure subflooring
• Attach drywall
• Fasten paneling
• Secure exterior sheathing
• Minimize use of mechanical fasteners

4. TECHNICAL DATA
Applicable Standards
ENERBOND™ Foam Adhesive complies with the following standards:
• ASTM D3498 – Standard Specification for Adhesives for Field-Gluing Plywood to Lumber Framing for Floor Systems
• HUD UM 60a – Performance specification for all flooring adhesive products used in HUD manufactured housing
• ASTM D6464 – Standard for Expandable Foam Adhesives for Fastening Gypsum Wallboard to Wood Framing
• California Specifications CA 25-4 – Standard for the Evaluation of Adhesives for Structural Use in Multi-unit Manufactured Housing and Commercial Coach Construction

Table 1: Features and Benefits of ENERBOND™ Foam Adhesive

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit</th>
</tr>
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<tbody>
<tr>
<td>Excellent adhesion</td>
<td>• Reduces nail pops in drywall/subfloor</td>
</tr>
<tr>
<td></td>
<td>• Reduces floor and stair squeaks</td>
</tr>
<tr>
<td></td>
<td>• Fewer callbacks and repairs</td>
</tr>
<tr>
<td></td>
<td>• Reduces fastener use</td>
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<tr>
<td>Gun-applied</td>
<td>• Easy to use</td>
</tr>
<tr>
<td>Significantly higher yield</td>
<td>• Cost-effective</td>
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<tr>
<td>traditional caulk adhesive</td>
<td></td>
</tr>
<tr>
<td>Bonds dry, treated, damp and</td>
<td>• Can be used under almost all weather</td>
</tr>
<tr>
<td>frozen surfaces</td>
<td>conditions</td>
</tr>
<tr>
<td></td>
<td>• Enhanced productivity</td>
</tr>
</tbody>
</table>

Table 2: Typical Properties of ENERBOND™ Foam Adhesive

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tack-free, min. (75°F [24°C], 50% RH)</td>
<td>14</td>
</tr>
<tr>
<td>Initial Bond, hours</td>
<td>2</td>
</tr>
<tr>
<td>Full Cure, days</td>
<td>7</td>
</tr>
<tr>
<td>Color</td>
<td>Cream</td>
</tr>
<tr>
<td>Shelf Life, months</td>
<td>12</td>
</tr>
<tr>
<td>Application Temperature, °F (°C)</td>
<td>32 to 100 (0 to 38)</td>
</tr>
</tbody>
</table>

Contact your Dow sales representative or local authorities for state and local building code requirements and related acceptances.

ENERBOND™ Foam Adhesive exhibits the typical physical properties shown in Table 2.

5. INSTALLATION
ENERBOND™ Foam Adhesive is easy to apply using a PRO Series foam dispensing gun. To ensure best adhesion performance, ENERBOND™ Foam Adhesive should be applied to substrates that are structurally sound and free of standing water, snow, ice, dirt, mud, oil or other loose materials and release agents that may impair adhesion. Painted surfaces and protective coatings should be removed, sanded or thoroughly roughened. Concrete and masonry substrates should be cured before bonding. Materials should be cut and fit-checked before applying adhesive.
Shake container vigorously for one minute before dispensing and between uses. To attach a PRO Series foam dispensing gun, invert can and screw gun onto adapter, then adjust flow control knob to adjust bead size (3/8”-1/2” [10-13 mm] recommended). Adhesive can be applied in a continuous zigzag bead or in parallel beads, ensuring that the adhesive layer will completely cover joists and framing where wood panels and drywall edges abut.

Construction material can then be positioned over the substrate, and firm pressure applied. Substrates should be butted together within 10 minutes of dispensing adhesive. If bead has skinned over, it must be scraped off and reapplied. Supplemental mechanical fasteners should be installed after applying adhesive for best bond. Initial bond typically occurs within two hours, with full cure in seven days depending on conditions. Cure times will be shorter at higher temperature and humidity, and longer at lower temperature and humidity.

Excess adhesive can be cleaned from the substrate while still uncured using a dry cloth, putty knife or paint scraper. Cured adhesive must be mechanically removed.

ENERBOND™ Foam Adhesive should not be used in continuous underwater applications or on substrates with surface or standing water present.

For more information, consult the installation instructions (Form No. 179-07439/179-00378) or contact your Dow sales representative.

SAFETY AND CONDITIONS OF USE
Read the label and Material Safety Data Sheet carefully before use.

- ENERBOND™ Foam Adhesive contains isocyanate and a flammable blowing agent. Vapors may travel to other rooms. Ensure adequate ventilation and shut off all pilot lights and open flames; eliminate all sources of ignition before use. Do not smoke or use lighters or matches while dispensing foam.
- Do not breathe vapors or mists. Use in well-ventilated areas or wear proper respiratory protection. Isocyanate is irritating to the eyes, skin and respiratory system, and may cause sensitization by inhalation or skin contact.
- ENERBOND™ Foam Adhesive is very sticky and will adhere to most surfaces and skin. Do not get foam on skin. Wear gloves, and goggles or safety glasses. Cured foam must be mechanically removed or allowed to wear off in time.
- The contents are under pressure. The can may burst if left in areas susceptible to high temperatures, such as motor vehicles, or near radiators, stoves or other sources of heat. Do not place can in hot water. Do not puncture, incinerate or store at temperatures above 120°F.

6. AVAILABILITY
ENERBOND™ Foam Adhesive is distributed through an extensive network. For more information, call 1-800-232-2436.

7. WARRANTY
Not applicable.

8. MAINTENANCE
ENERBOND™ Foam Adhesive has a shelf life of 12 months when stored at 75°F. Contents of the can are under pressure. Can may burst if left in areas susceptible to high temperatures, such as motor vehicles, or near radiators, stoves or other sources of heat. Do not place can in hot water. Do not puncture, incinerate or store at temperatures above 120°F.

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

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

Sizes
ENERBOND™ Foam Adhesive is available in 26.5 oz (751 g) containers. One container can replace up to 16 quart tubes of traditional caulk adhesive when applied at 1/4” beads. ENERBOND™ Foam Adhesive is available in cartons of 12 (26.5 oz /751 g) aerosol cans. Consult your Dow representative for more details.

Storage and shelf life
ENERBOND™ Foam Adhesive should be stored between 65°F and 85°F (18°C and 29°C) for fast and easy application performance. ENERBOND™ Foam Adhesive has a shelf life of 12 months when stored in the original closed container. Open containers should be stored upright attached to dispensing gun when not in use. See package labeling for more information.

In Canada
DOW CHEMICAL CANADA ULC
2400, 215 – 2 Street S.W.
Calgary, Alberta T2P 1M4

Technical Information: 1-866-583-BLUE (2583)
Sales Information: 1-800-232-2436

For more information, consult the (Material) Safety Data Sheet (M(SDS)) or contact your local building inspector. In an emergency, call 1-888-636-4400 in the U.S. or 1-519-339-3711 in Canada. When air sealing buildings, ensure that combustion appliances, such as furnaces, water heaters, wood burning stoves, gas stoves and gas dryers are properly vented to the outside. See website: http://www.epa.gov/iaq/homes/hip-ventilation.html. In Canada visit http://archive.nrc-cnrc.gc.ca/eng/lbf/rcic/bsi/83-house-ventilation.html.

ENERBOND™ adhesive products contain isocyanate and a flammable blowing agent. Read all instructions and (Material) Safety Data Sheet (M(SDS)), carefully before use. Eliminate all sources of ignition before use. Cover all skin, wear long sleeves, gloves, and safety glasses or goggles. Do not use in aviation, or food/beverage contact, or as structural support in marine applications. Provide adequate ventilation or wear respirator protection. Contains under pressure. Do not be used for filling hot cavities or voids such as behind walls and under tub surrounds; this improper use of the product could result in the accumulation of flammable vapors and/or uncured material. Failure to follow the warnings and instructions provided with the product, and/or all applicable rules and regulations, can result in injury or death.

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.