

Installation Procedures for Exposed Basement Applications

Using Thermax™ Brand Insulations

SYSTEM OVERVIEW

General Information

Thermax™ Sheathing and Thermax™ White Finish (WF) Insulation* offer two quick and easy options to insulate basement walls. Lightweight and easy to install, both products are ideally suited for exposed basement applications, whether the desired result is a semi-finished or finished appearance.

Thermax™ Sheathing and Thermax™ White Finish are nonstructural, rigid boards consisting of a glass-fiber-reinforced polyisocyanurate foam core with solid aluminum facers on both sides. The exposed surface of Thermax™ Sheathing is reflective

foil, perfect for use in areas such as a laundry room or storage space. Thermax™ White Finish features an embossed white acrylic-coated aluminum facer on its exposed surface, for a clean, finished wall that is durable and washable.

Thermax™ Brand products can be left exposed to the interior without a thermal barrier in most applications.** Thermax™ insulations are Factory Mutual approved as “Wall-Ceiling Construction, FM Approvals Standard FM 4880, Metal Faced – Class 1 Fire Rated to a max. 30 ft. High.”

Materials Checklist

To install Thermax™ Sheathing or Thermax™ White Finish Insulation, you will need:

- Utility knife or small handsaw
- Straight edge
- Safety glasses/goggles and gloves
- Ventilation or respiratory protection for application of polyurethane foam sealant
- Measuring tape
- Construction-grade adhesive such as Enerbond™ Professional Foam Adhesive

- Pencil
- Thermax™ Aluminum Foil or white foil tape (for Option 1)
- Mechanical fasteners (optional for Option 1)
- Squeegee or soft paint roller (for Option 1)
- PVC interlock joint closure system (for Option 2)
- Polyurethane-compatible construction-grade caulk/sealant (for Option 2)
- Polyisocyanurate-compatible insulating foam sealant such as GREAT STUFF™ Pro Gaps & Cracks Polyurethane Foam Sealant

INSTALLATION PROCEDURES

Cutting

Thermax™ Brand insulation products may be cut with a straight edge and utility knife or with a small handsaw. See Figures 1a and 1b.

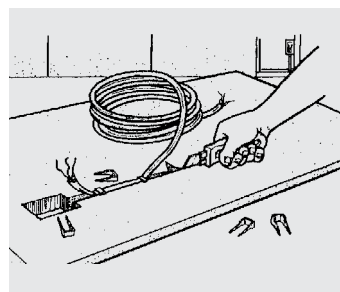


Figure 1a

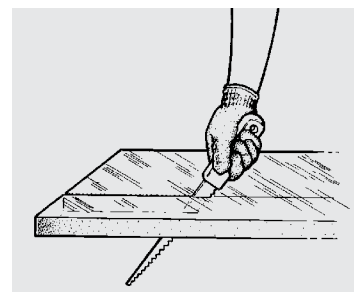


Figure 1b

* Thermax™ Sheathing and Thermax™ White Finish Insulation are former products of The Dow Chemical Company.

**See International Code Council National Evaluation Services Report NER-681.

Installation

Before installing Thermax™ insulation on the interior basement wall, be sure there are no leaks or structural cracks in the wall. Thermax™ Brand products insulate the basement wall; they do not stop water leakage. Thermax™ insulations may be attached directly to the basement wall with construction-grade adhesive or with the PVC interlock joint closure system. Both installation methods offer a quick and easy alternative to using studs, batt insulation and drywall.

Option 1: Adhere Directly to Wall

1. Provide proper ventilation and wear gloves and eye protection.
2. Apply heavy beads (min. bead size 3/8") of **Enerbond™ Professional Foam Adhesive** or appropriate construction-grade adhesive to the wall (Figure 2). **Note:** Follow adhesive manufacturer recommendations for application pressure and cure times for proper adhesion to masonry walls.

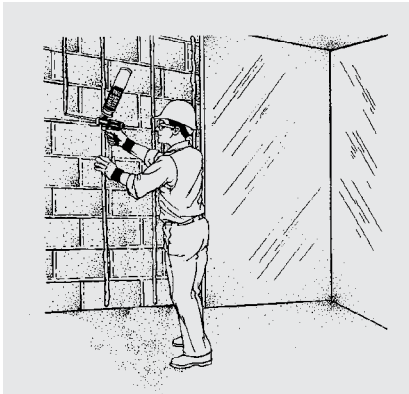


Figure 2

3. Press insulation board against the wall and butt board edges tightly together (Figure 3). Apply pressure to board until the adhesive is set. (Optional: Attach mechanical fasteners to the top and bottom of the board to hold it in place until the adhesive has set).

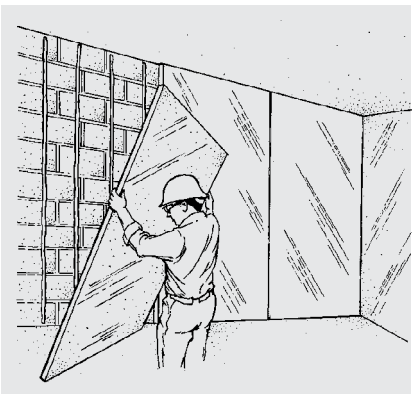


Figure 3

4. For additional insulation value and protection against air infiltration, apply a small bead of **GREAT STUFF™ Pro Gaps & Cracks** along board seams. Take care that foam does not get on insulation facer during application. Allow foam to fully cure, then trim excess with a serrated knife.
5. Cover seams between insulation boards with aluminum or white foil tape (Figure 4). Before applying tape, wipe the application area with a damp cloth to remove foam dust. Allow surface to air dry. Use a squeegee or soft paint roller to press the tape firmly to the joint. Cut tape with a knife or scissors. Do not tear tape.

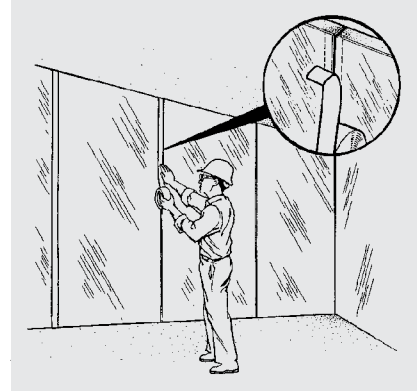


Figure 4

Option 2: PC Interlock Joint Closure

For additional moisture control and a more finished appearance when insulating with **Thermax™ White Finish Insulation**, use the PVC interlock joint closure system. The PVC interlock joint closure system is composed of a 2" wide PVC base strip that is attached to the wall at vertical joint locations and a top "T" section that snaps into the base, holding the insulation boards to the wall. The top "T" sections are available in sizes to accommodate board thicknesses of 1", 1.5" and 2". Select the correct top "T" section size for your application. Both the PVC base strip and top "T" sections are sold in 10' lengths.

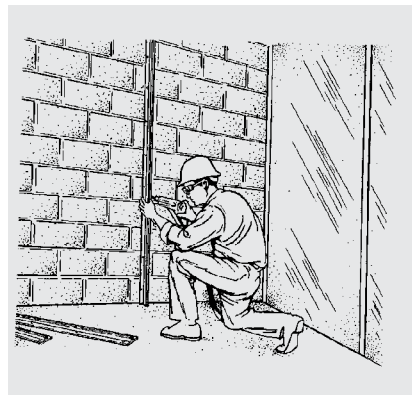


Figure 5

1. Measure and mark vertical lines for the placement of the PVC base strips. Space the PVC base strips for the correct width of the insulation board (Figure 5). Allow 1/8" between the insulation boards to accommodate the width of the PVC base strip.
2. Fasten PVC base strip to concrete or masonry wall every 12" with a pneumatic nailer or equivalent (Figure 6).

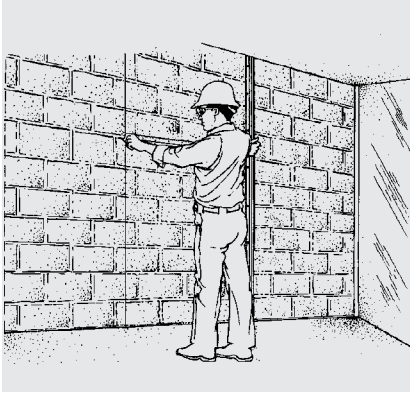


Figure 6

3. Provide proper ventilation and wear gloves and eye protection.
4. Apply beads of **Enerbond™** or appropriate construction-grade adhesive to the wall every 16" between PVC base strips (Figure 7).



Figure 7

5. Press insulation board firmly into position between the PVC base strips (Figure 8).

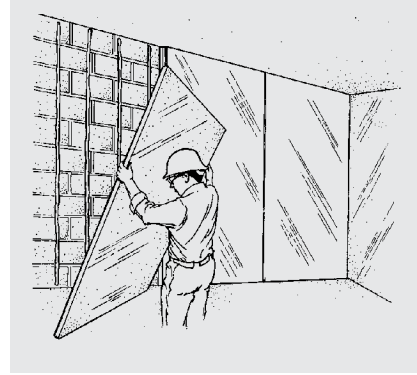


Figure 8

6. Apply a continuous bead of construction-grade caulk/ sealant along the vertical edges of the insulation boards, then position and press a PVC top "T" section in the PVC base strip until it snaps into place (Figure 9).

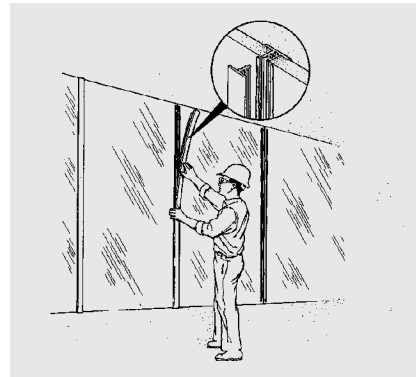


Figure 9

7. Figure 10 shows three different options for finishing at corners: butting two panels against one another, using the PVC Clip Strip or using the J-channel edge closure. The method chosen depends on the desired finished look.

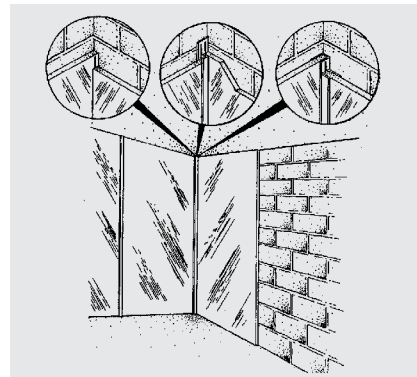


Figure 10

Additional Protection Against Air and Moisture

Use GREAT STUFF™ Pro Gaps & Cracks to seal gaps, cracks and joints as well as to insulate the area between floor joists along the sill plate (Figures 11 and 12). **Note:** GREAT STUFF Pro™ foam sealant products cannot be removed from Thermax™ White Finish Insulation. Use tape or protective film to protect board surface from overspray.

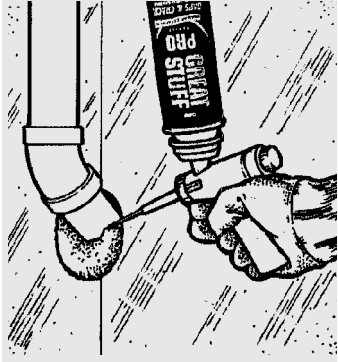


Figure 11

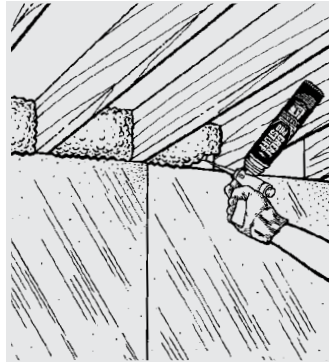


Figure 12

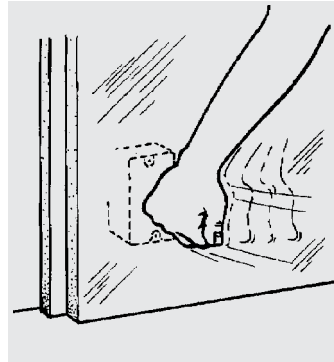


Figure 13

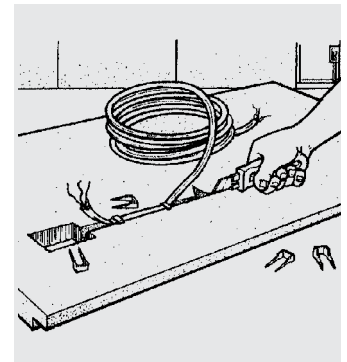


Figure 14

Recommendations for Painting

If desired, Thermax™ Sheathing and Thermax™ White Finish Insulation may be painted after installation and taping of joints. Visit our website for more specific recommendations to paint Thermax™ insulations.



For more information visit us at
thermaxwallsystem.com
or call 1-866-583-2583

NOTICE: No freedom from any patent owned by DuPont 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 DuPont is represented. The claims made may not have been approved for use in all countries or regions. DuPont assumes no obligation or liability for the information in this document. References to "DuPont" or the "Company" mean the DuPont legal entity selling the products to Customer unless otherwise expressly noted. NO EXPRESS WARRANTIES ARE GIVEN EXCEPT FOR ANY APPLICABLE WRITTEN WARRANTIES SPECIFICALLY PROVIDED BY DUPONT. ALL IMPLIED WARRANTIES INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED. The buyer assumes all risks as to the use of the material. Buyer's exclusive remedy or any claim (including without limitations, negligence, strict liability, or tort) shall be limited to the refund of the purchase price of the material. Failure to strictly adhere to any recommended procedures shall release DuPont Specialty Products USA, LLC or its affiliates, of all liability with respect to the materials or the use thereof. The information herein is not intended for use by non-professional designers, applicators or other persons who do not purchase or utilize this product in the normal course of their business.

CAUTION: When cured, these products are combustible and will burn if exposed to open flame or sparks from high-energy sources. Do not expose to temperatures above 240°F (116°C). 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 1-989-636-4400 in the U.S. or 1-519-339-3711 in Canada. The blowing agent contained within this product can exhibit vapor flame limits under the right conditions. If specific operating conditions are such that concentrations of the blowing agent above the lower flammable limit can accumulate in areas with high relative humidity and in the presence of high-energy electrical discharges or other ignition sources, additional measures such as increased ventilation or coded electrical equipment (class one, division two) may be warranted. DO NOT SMOKE DURING USE. DO NOT USE NEAR ANY OPEN FLAME OR ELECTRICAL SOURCE. OUTDOOR USE ONLY. INDOOR USE INCREASES LIKELIHOOD OF IGNITABLE CONDITIONS. INSTASTIK™ Quik Set Commercial Roofing Adhesive contains isocyanate and a blowing agent. Read the label and (Material) Safety Data Sheet ((M)SDS) carefully before use. Wear gloves, and goggles or safety glasses. Provide adequate ventilation or wear proper respiratory protection. Contents under pressure. For outside use only.

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 MSDS and/or call DuPont at 1-866-583-2583.

WARNING: THERMAX insulation does not constitute a working walkable surface or qualify as a fall protection product.

Building and/or construction practices unrelated to insulation 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.

DuPont™, the DuPont Oval Logo, Thermax™, GREAT STUFF PRO™ and Enerbond™ are trademarks or registered trademarks of DuPont or its affiliates. Copyright © 2019 DuPont de Nemours Inc.