INSTALLATION PROCEDURES FOR THERMAX™ INSULATIONS

Exposed Basement Applications

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.

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
- Pencil
- Construction-grade adhesive such as ENERBOND™ MH or SF Polyurethane Adhesive
- 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

THERMAX Sheathing and THERMAX White Finish are non-structural, rigid boards consisting of a glass-fiber-reinforced poly-isocyanurate 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 insulation features an embossed white acrylic-coated aluminum facer on its exposed surface, for a clean, finished wall that is durable and washable.

THERMAX products can be left exposed to the interior without a thermal barrier in most applications.* THERMAX insulation products 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."

Before installing THERMAX insulation on the interior basement wall, be sure there are no leaks or structural cracks in the wall. THERMAX products insulate the basement wall; they do not stop water leakage.

Cutting

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

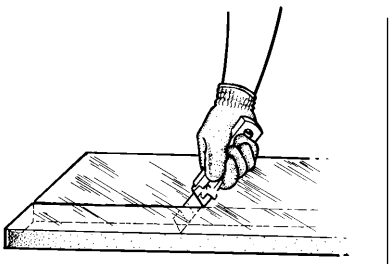

Figure 1a

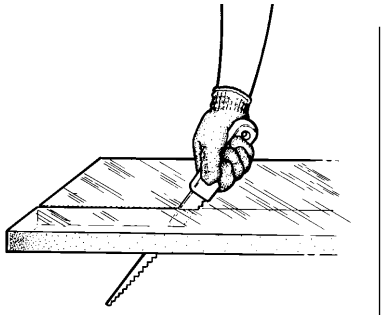

Figure 1b

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

Installation

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™ MH or SF Polyurethane 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.

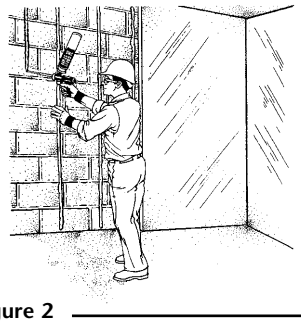

Figure 2

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.)

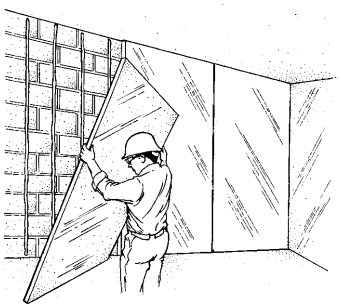

Figure 3

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.

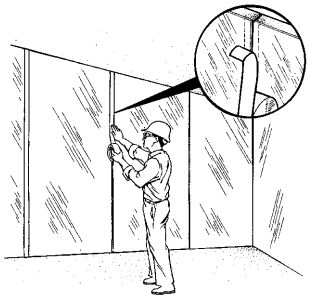

Figure 4

OPTION 2: PVC 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).

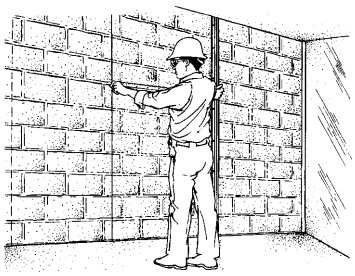

Figure 6

3. Provide proper ventilation and wear gloves and eye protection.

4. Apply beads of ENERBOND™ MH or SF Polyurethane Adhesive 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).

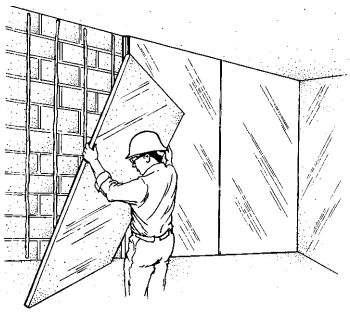

Figure 8

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).

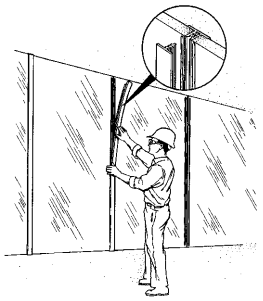

Figure 9

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.

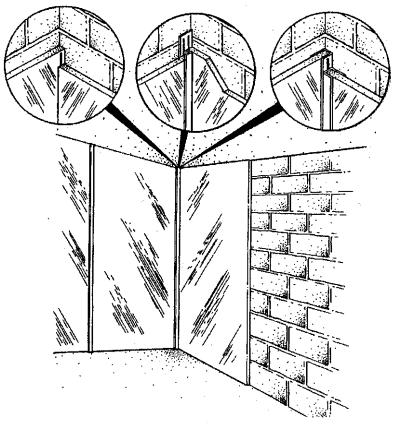

Figure 10

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

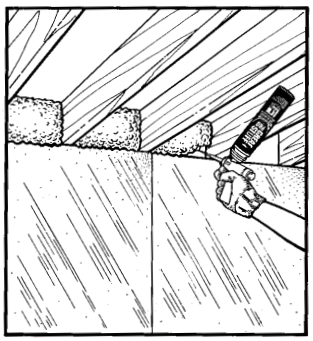

Figure 12

Utilities Installation

Electrical and plumbing utilities can be easily installed behind or within the insulation board. Cut openings in the back side of the insulation board for electrical boxes and access to plumbing fixtures and other utilities (Figures 13 and 14).

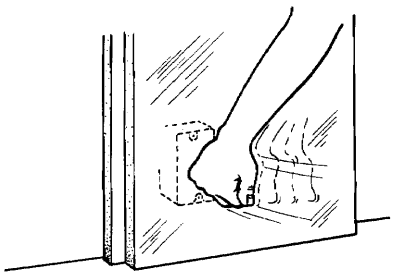

Figure 13

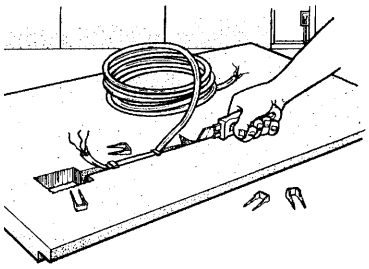

Figure 14

Recommendations for Painting

If desired, THERMAX™ Sheathing and THERMAX™ White Finish insulation may be painted after installation and taping of joints. Visit the online Answer Center at www.insulateyourhome.com/thermax for more specific recommendations to paint THERMAX insulations.

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• **For Sales Information: 1-800-232-2436**
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