INSTALLATION RECOMMENDATIONS FOR
STYROFOAM™ WALLMATE™
SLOTTED EDGE INSULATION

STYROFOAM™ WALLMATE™ extruded polystyrene foam featuring a slotted edge is specifically designed to insulate basement walls from the inside. STYROFOAM™ WALLMATE™ insulation has an R-value** of 5.0 per inch and resists moisture, keeping your basement comfortable all year long. It is quick and easy to install directly on masonry walls.

The following procedures are recommended for fast and easy installation of STYROFOAM™ WALLMATE™ insulation.

Before installing STYROFOAM™ WALLMATE™ insulation on the interior basement wall, be sure there are no leaks or structural cracks in the wall.

STYROFOAM™ WALLMATE™ insulation insulates the basement wall; it does not stop water leakage.

MEASURING AND CUTTING

1. To measure, mark board by dragging measuring tape hook along the surface of a board while holding the other end of the tape at the desired measurement (Figure 1).

   Figure 1

2. To cut, hold utility knife low against the board and make a deep impression. There is no need to cut all the way through (Figure 2).

   Figure 2

3. Break board over the edge of a table (Figure 3).

   Figure 3

4. Position boards of STYROFOAM™ WALLMATE™ insulation vertically against wall, ensuring they are plumb at right angles (90 degrees) (Figure 4).

   Figure 4

5. Place a 1” x 3” furring strip into the slot between two adjoining boards (Figure 5).

   Figure 5

   Option: Using a 2” x 3” furring strip will provide an air space behind drywall for installation of electrical wiring.

   Option: STYROFOAM™ WALLMATE™ insulation can be installed horizontally with furring strips running every 2’.

6. With electric drill and masonry bit, drill holes through furring strips 1-1/2” into concrete wall. Concrete fasteners should be 1-1/4" longer than the insulation board thickness. (To secure board to wall, use three or four screws per 8’ length of furring strip) (Figure 6).

   Figure 6

MATERIALS CHECKLIST

To install STYROFOAM™ WALLMATE™ insulation, you need:

- Cut-proof gloves
- Measuring tape
- Level
- Hand saw
- Utility knife
- Hammer
- 1” x 3” Furring strips
- Electric drill
- Masonry bits, screwdriver bits
- Masonry nails and screws, such as Tapcon screws
- Drywall
- Drywall screws
- Outlet boxes
- Electrical wire, wire staples
- Polystyrene-compatible interior caulk, caulking gun
- GREAT STUFF PRO™ Insulating Foam Sealant*
- Safety glasses

*Trademark of The Dow Chemical Company (“Dow”) or an affiliated company of Dow
**Consult label and Material Safety Data Sheet carefully before use.
***R-value means resistance to heat flow. The higher the R-value, the greater the insulating power.
Measuring For Exact Fit

7. STYROFOAM™ WALLMATE™ insulation can be installed in tight spaces, even if the wall is uneven. Position insulation board squarely against corner, overlapping inside edge of last board installed (Figure 7).
   a. Using a 2’-long stick, measure from the outside edge of the last board installed to the outside edge of the new board (distance ‘A’). Mark ‘A’ on stick.
   b. Place stick against wall. With a pencil at ‘A,’ move it down the board to be cut.
   c. Cut along marked line.
   d. Install overlap piece in corner.

Figure 7

Electrical Outlets

8. Cut a block of wood the same size as the electrical outlet box. Block thickness should ensure that the edge of the electrical outlet box will be flush with the drywall. Fasten wood block onto concrete wall with concrete fasteners (Figure 8).

Figure 8

9. Place insulation board over wood block and tap firmly with hand, forming an imprint of the block on the back side of the insulation board. Turn board over and cut out imprint. (Figure 9).

Figure 9

10. To accommodate electrical wires, cut 1/2”-deep channel on the back of the insulation board with utility knife. Use electrical staples to hold wires in place (Figure 10).

Caution: Some localities do not allow homeowners to do their own electrical work. In others, a permit is required. Check your local building code for rules and regulations. Dow recommends that electrical work be done by qualified individuals only.

Figure 10

Plumbing Fixtures

11. To install STYROFOAM™ WALLMATE™ insulation around plumbing fixtures protruding from the wall, ensure furring strips are positioned on either side of the pipe. Trim slotted edge of insulation board to ensure the next furring strip is on 24” centers. For areas behind plumbing that cannot be filled with STYROFOAM™ WALLMATE™ insulation, fill with GREAT STUFF PRO™ insulating foam sealant (Figure 11).

Figure 11

Windows And Doorways

12. Extend window and door framing so it will be flush with finishing drywall. Place STYROFOAM™ WALLMATE™ insulation against window or door frame and tap (as with electrical outlet), making an imprint of the area to be cut on the back side of the board (Figure 12).

Turn board over and cut out imprint.

Figure 12

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13. Seal the space between STYROFOAM™ WALLMATE™ insulation and the window or door frame with polystyrene-compatible caulk (Figure 13).

**Figure 13**

![Image of window with caulk between insulation and frame]

**Corners**

STYROFOAM™ WALLMATE™ insulation can be installed to the outside or inside edge at corners of interior basement walls.

**Outside** (Figure 14)

14. Press drywall corner bead over outside corner of wall covered with STYROFOAM™ WALLMATE™ insulation.
   - Attach first drywall sheet flush to the corner, using drywall screws to fasten to corner bead.
   - Install second drywall sheet to cover end of first sheet. Fasten to other flange of drywall corner bead.
   - For wall finishing, install second drywall corner bead over drywall corner by fastening with drywall screws to first corner bead.

**Figure 14**

![Image of drywall corner with first and second sheets]

**Inside** (Figure 15)

15. Press a drywall corner bead into inside corner formed by boards of STYROFOAM™ WALLMATE™ insulation.
   - Butt first drywall board into corner, and fasten to corner bead flange using drywall screws.
   - Butt second drywall board to first, and fasten to other corner bead flange using drywall screws.

**Install Drywall**

With furring strips 2' apart around room perimeter, installing drywall over STYROFOAM™ WALLMATE™ insulation is fast and simple.

- Use a wedge to lift the bottom of the drywall from floor before fastening. This will protect the drywall from incidental water on the basement floor.
- Tape and finish drywall according to manufacturer’s directions.

**Figure 15**

![Diagram of drywall installation with corner beads and sheets]
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GREAT STUFF PRO™ contains isocyanate and a flammable blowing agent. Read the label and Material Safety Data Sheet carefully before use. Eliminate all sources of ignition before use. Wear gloves, and safety glasses or goggles. Provide adequate ventilation or wear proper respiratory protection. Contents under pressure.

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. 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.

CAUTION: STYROFOAM™ brand insulation is combustible. Protect from high heat sources. A protective barrier or thermal barrier may be required as specified in the appropriate building code.