

SPECIFYING CAVITY WALL INSULATION

November 2011

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The Dow Chemical Company
Short Form Guide Specification- Cavity Wall Insulation
STYROFOAM™ Brand CAVITYMATE™ Ultra Extruded Polystyrene Foam Insulation

PART 1 – GENERAL

1.1 SUMMARY

- A. Section Includes
 - 1. Foam-plastic board insulation
- B. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division-1 Specification Sections, apply to this Section.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. LEED Submittals:
 - 1. Product Data for Credit MR 4: For products having recycled content, documentation indicating percentages by weight of postconsumer and preconsumer recycled content. Include statement indicating cost for each product having recycled content.
- C. Manufacturer's product literature, including specified physical properties.
- D. Installation instructions.
- E. Certification that product complies with specification requirements and is suitable for the use indicated.

1.3 QUALITY ASSURANCE

- A. Cavity Wall Insulation shall not be produced with, or contain, any of the United States EPA regulated CFC Compounds listed in the Montreal Protocol of the United Nations Environmental Program.

1.4 INFORMATIONAL SUBMITTALS

- A. Product test reports.
- B. Research/evaluation reports.

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1.5 PRODUCT HANDLING

- A. Protect insulation from physical damage.
- B. Comply with manufacturer's recommendations for handling, storage and protection.
- C. Handle boards carefully so corners are not broken off or boards otherwise damaged.

1.6 WARRANTY

- A. Provide written warranty that the actual thermal resistance of the extruded polystyrene foam insulation will not vary by more than 10% from its published thermal resistance.
- B. Warranty period is 50 years after date insulation is purchased.

PART 2- PRODUCTS

2.1 FOAM-PLASTIC BOARD INSULATION

- A. Extruded-Polystyrene Board Insulation: ASTM C 578, with maximum flame-spread and smoke-developed indexes of 75 and 450, respectively, per ASTM E 84.
 - 1. Rigid closed cell extruded polystyrene foam insulation.
 - 2. Comply with ASTM C 578-95, Type IV, density 1.6 lb/cu. ft. min. compressive resistance 25 psi (ASTM D 1621-94)
 - 3. Thermal resistance: R-12; 5-year aged R-values of 6.0 and 5.6 min. °F-ft²-h/Btu²/inch at 40 °F and 75 °F respectively (ASTM C 518-91).
 - 4. Water absorption: Max. 0.1% by volume (ASTM C 272-91 (96)).
 - 5. Surface Burning Characteristics:
 - a. Flame spread: 15.
 - b. Smoke Developed: 165.
- B. Board thickness: nominal 1.75", 2.18", 2.5", 3" & 3.5" (custom thickness available- check with manufacturer).
- C. Acceptable manufacturer's product: The Dow Chemical Company Styrofoam™ Brand CAVITYMATE™ Ultra Extruded Polystyrene Foam Insulation.

2.2 ADHESIVE

A. Adhesive: type recommended by insulation manufacturer.

B. Dow Chemical Great Stuff Pro™ single component insulating foam sealant.

PART 3 – EXECUTION

3.1 INSPECTION AND PREPARATION

A. Verify that masonry joints are struck flush and that other conditions are satisfactory for proper installation.

B. Remove concrete fins and mortar projections that interfere with placement of insulation boards.

3.2 INSTALLATION

A. Apply 2” diameter daubs of adhesive space approximately 12” o.c. both ways on inside face of insulation board.

B. Butter all edges of insulation board with adhesive to provide continuous vapor barrier.

C. Fit insulation between wall ties and other obstructions with joints staggered and edges butted tightly.

1. Press units firmly against inside wythe of masonry or other construction.
2. Wedge insulation from outside wythe of construction with small fragments of masonry materials space 24” o.c. both ways.
3. Make insulation continuous. Fill all voids.

D. Comply with insulation manufacturer’s written instructions applicable to products and applications indicated.

E. Install insulation that is undamaged, dry, and unsoiled and that has not been left exposed to ice, rain, or snow at any time.

F. Extend insulation to envelop entire area to be insulated. Cut and fit tightly around obstructions and fill voids with insulation. Remove projections that interfere with placement.

3.3 CLEAN-UP

A. Remove and dispose of excess insulation, wrappings and other waster materials.

END OF SECTION