

# **Specifying Cavity Wall Insulation**

# STYROFOAM™ CAVITYMATE™ Ultra

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### **PART 1 - GENERAL**

DISCLAIMER: The manufacturer has reviewed the product information contained in this short form specification. The information is organized and presented to assist the specification writer working on a construction project to select the appropriate products and to save time in writing the project specification Section. The specification writer is responsible for product selection as well as the use and application of this information, and should contact the manufacturer to ensure that all options are available and that the associated specification information is valid and correct.

### 1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification Sections, apply to this Section.

# 1.02 SUBMITTALS

- A. Manufacturer's product literature, including specified physical properties.
- B. Installation instructions.
- C. Certification that product complies with specification requirements and is suitable for the use indicated.
- D. In the United States, a 50-year thermal limited warranty is available on STYROFOAM™ Insulation products 1.5 inches and greater. For thickness less than 1.5 inches, other warranties may apply. Warranties are available as described at http://building.dow.com/na/en/tools/warranty.htm

## 1.03 QUALITY ASSURANCE

A. STYROFOAM™ CAVITYMATE™ Ultra 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.

### 1.04 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.

### 1.05 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. In the United States, a 50-year thermal limited warranty is available on STYROFOAM™ Insulation products 1.5 inches and greater. For thickness less than 1.5 inches, other warranties may apply. Warranties are available as described at http://building.dow.com/na/en/tools/warranty.htm

#### PART 2 - PRODUCTS

#### 2.01 INSULATION

- A. Material Properties:
  - 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.
- \*\*\*Select appropriate board thickness below:
- B. Thickness: nominal 1-5/8" (R-10).
- \*\*\*Or\*\*\*
- B. Thickness: nominal 2" (R-12).
- C. Acceptable manufacturer's product: The Dow Chemical Company STYROFOAM™ CAVITYMATE™ Ultra 2.02

#### **ADHESIVE**

- A. Adhesive: type recommended by insulation manufacturer.
- B. Acceptable manufacturer's products:
  - ChemRex, Inc. "Contech Brands PL300 Foam Board Adhesive".
  - ChemRex, Inc. "Contech Brands Premium Foam Board Adhesive".
  - 3. Dacar products, Inc. "Foamgrab PS". STYROFOAM™ Brand CAVITYMATE™ Ultra Extruded Polystyrene Foam Insulation

#### **PART 3 - EXECUTION**

#### 3.01 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.

#### 3.02 INSTALLATION

- A. Apply 2" diameter daubs of adhesive spaced 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.
  - 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 spaced 24" o.c. both ways.
  - 3. Make insulation continuous. Fill all voids.

#### 3.03 CLEAN-UP

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

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