

SECTION 07 21 19
FOAMED-IN-PLACE INSULATION

PART 1 GENERAL

1.1 RELATED DOCUMENTS

- A. General provisions of the Contract, including General and Supplementary Conditions and Division 1 specification sections, apply to work in this section.

1.2 DESCRIPTION OF WORK

- A. Extent of this work shall be as indicated on the drawings and/or specified herein.
- B. Foamed-in place insulation in masonry cavity walls and at exterior wall crevices requiring a thermal seal.
- C. Foamed-in-place insulation at junctions of dissimilar wall and roof materials to achieve a thermal and air seal

1.3 REFERENCES

- A. ASTM D1621 – Standard Test Method for Compressive Properties of Rigid Cellular Plastics
- B. ASTM D1622 – Standard Test Method for Apparent Density of Rigid Cellular Plastics
- C. ASTM E84 – Standard Test Method for Surface Burning Characteristics of Building Materials
- D. ASTM E90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements
- E. ASTM E96/E96M – Standard Test Methods for Water Vapor Transmission Rate of Materials
- F. ASTM C177 – Standard Test Method for Steady State heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded Hot-Plate Apparatus
- G. ASTM C1029 – Standard Specification for Spray-Applied Rigid Cellular Polyurethane Insulation Thermal Insulation
- H. FBC - Florida Building Code

1.4 QUALITY ASSURANCE

- A. Manufacturer: Company specializing in manufacturing the products specified herein with a minimum of 5-year documented experience.
 - 1. Provide the product from a single manufacturer.
 - 2. Product shall be pre-mixed to ensure consistency.
- B. Applicator: Company specializing in installing the products specified herein with a minimum of 5-years documented experience.
- C. Do not install any product specified when the ambient temperature is below manufacturer's recommendation.

1.5 SUBMITTALS

- A. Submit complete product data for all materials furnished.
- B. Material Safety Data Sheet: Submit Material Safety Data Sheet complying with OSHA Hazard Communication, Standard 29 CRF 1910.1200.
- C. Certified Test Reports: With product data, submit copies of certified test reports showing compliance with the specified performance values, including R-Values, fire performance, and sound abatement characteristics.
- D. Installer shall provide a copy certification to install the product from manufacturer.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Two component plastic resin and catalyst foaming agent free of urea formaldehyde.

The School District of Palm Beach County

Project Name

SDPBC Project No.

1. Maximum Surface Burning Characteristics per ASTM E84:
 - a. Flame spread 25
 - b. Smoke developed 200
 - c. Fuel contributed 0
2. Thermal Values: R-Value of 4.9" @ 32°F mean; ASTM C-177.
3. Sound Abatement: Minimum sound transmission class (STC) rating of 53 and a minimum outdoor indoor transmission class (OITC) rating of 44 for 8" wall assembly (ASTM E90).
4. Compressive Strength 35
5. Density 1.3 lbs per cu ft
6. Water Vapor Transmission 15.5-16.9 perms per inch
7. Non-Toxic per FHSA

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify site conditions prior to commencement of installation.
- B. Verify work within construction spaces or crevices are complete prior to insulation application.
- C. Verify that surfaces are clean, dry, and free of matter that may inhibit insulation adhesion.

3.2 PREPARATION

- A. Mask and protect adjacent surfaces from over spray or dusting.
- B. Apply primer in accordance with manufacturer's instructions.

3.3 APPLICATION

- A. Apply insulation in accordance with manufacturer's instructions.
- B. Apply insulation to a uniform monolithic density without voids.
- C. Coordinate installation of protective covering to achieve fire rating required.
- D. Patch damaged areas.

3.4 FIELD QUALITY CONTROL

- A. Inspection includes verification of insulation and overcoat thickness and density.

3.5 PROTECTION OF FINISHED WORK

- A. Protect finished Work under provisions of Section 1.
- B. Do not permit subsequent construction work to disturb applied insulation.

END OF SECTION