

## SECTION 07 21 23

## FOAM-IN-PLACE INSULATION

04/06

## PART 1 GENERAL

## 1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

## ASTM INTERNATIONAL (ASTM)

ASTM C 930 (2005) Potential Health and Safety Concerns Associated with Thermal Insulation Materials and Accessories

ASTM E 84 (2007b) Standard Test Method for Surface Burning Characteristics of Building Materials

## U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR 1910.134 Respiratory Protection

## 1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

## SD-03 Product Data

foam-in-place insulation

## SD-08 Manufacturer's Instructions

foam-in-place Insulation

## 1.3 DELIVERY, STORAGE, AND HANDLING

## 1.3.1 Delivery

Deliver materials to the site in original sealed containers or packages, each bearing manufacturer's name and brand designation, referenced specification number, type, and class, as applicable; recommended method of installation; minimum net weight of insulation; coverage charts; and R-values. Installer will blend resin and foaming catalyst according to manufacturer's instructions.

## 1.3.2 Storage and Handling

Inspect materials delivered to the site for damage; unload and store out of weather in manufacturer's original packaging. Store only in dry locations,

not subject to open flames or sparks, and easily accessible for inspection and handling. Once material is blended with water by installer, materials must be maintained at a minimum temperature of 75 degrees F.

#### 1.4 SAFETY PRECAUTIONS

##### 1.4.1 Respirators

Provide installers with dust/mist respirators, training in their use, and protective clothing, all approved by National Institute for Occupational Safety and Health (NIOSH)/Mine Safety and Health Administration (MSHA) in accordance with 29 CFR 1910.134.

##### 1.4.2 Smoking

Do not smoke during installation of foam-in-place insulation.

##### 1.4.3 Other Safety Concerns

Consider other safety concerns and measures as outlined in ASTM C 930

### PART 2 PRODUCTS

#### 2.1 FOAM-IN-PLACE INSULATION

Provide foam-in-place insulation conforming to the following:

R-Value at 1 Inch Thickness: 4.6, minimum.

Foam Density: 0.72 pounds per cubic foot.

Surface Burning Characteristics, ASTM E 84: Flame Spread: 25, maximum.

Smoke Developed: 200, maximum.

Water Vapor Transmission: 17 perms, maximum.

##### Manufacturers and Products:

1. cfiFoam, Inc.; Core Foam Masonry Foam Insulation.
2. C.P. Chemical Co., Inc.; Tripolymer PRMIU or 105.

##### 2.1.1 Thermal Resistance Value(s) (R-Values)

The R-value shall be the value the product achieves after settlement.

##### 2.1.2 Prohibited Materials

- a. Asbestos-containing materials.
- b. Urea Formaldehyde containing materials
- c. Ammonium Sulfate containing material

### PART 3 EXECUTION

#### 3.1 EXISTING CONDITIONS

Before installing insulation, verify that all areas that will be in contact with the insulation are dry and free of projections which could cause voids, or compressed insulation. If moisture or other conditions are found that do not allow the workmanlike installation of the insulation, do not

proceed but notify the Contracting Officer of such conditions.

### 3.2 INSTALLATION

#### 3.2.1 Foam-In-Place Insulation

Inject foam into ungrouted cells of concrete masonry units through holes drilled in mortar joints at interior face of wall in accordance with manufacturer's instructions. Locate holes in inconspicuous locations as approved by Engineer. Upon completion, clean excess foam from face of masonry in accordance with manufacturer's instructions. Fill and patch holes with mortar in accordance with Section 04 20 00, Masonry.

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