SECTION 07214 - FOAMED-IN-PLACE MASONRY WALL INSULATION

PART 1 - GENERAL

1.02 SUMMARY

- A. Extent of insulation work is shown on drawings and indicated by provisions of this section.
- B. Applications of insulation specified in this section include the following:
 - 1. Foamed-in-Place masonry insulation for thermal, sound and fire resistance values

1.03 SUBMITTALS

- A. <u>Product and technical presentation</u> as provided by the manufacturer.
- B. <u>Certified Test Reports:</u> With product data, submit copies of certified test reports showing compliance with specified performance values, including R-values, fire performance and sound abatement characteristics.
- C: <u>Material Safety Data Sheet</u>: Submit Material Safety Data Sheet complying with OSHA Hazard Communication Standard, 29 CRF 1910 1200.

1.04 QUALITY ASSURANCE

- A. <u>Manufacturing Standards</u>: Provide insulation produced by a single and approved manufacturer. The product must come from the manufacturer pre-mixed to ensure consistency.
- B. <u>Installer Qualifications for Foamed-In-Place Masonry Insulation</u>: Engage an experienced dealer/applicator who has been trained and licensed by the product manufacturer and which has not less than ten years direct experience in the installation of the product used.
- C. <u>Warranty</u>: Upon request, a one year product and installation warranty will be issued by both the manufacturer and installer.
- D: <u>Fire Performance Characteristics:</u> Provide insulation materials which are identical to those whose fire performance characteristics, as listed for each material or assembly of which insulation is a part, have been determined by testing, per methods indicated below, by a testing agency acceptable to authorities having jurisdiction.
- E. <u>Insurance:</u> Insulation Subcontractor shall carry Products and Completed Operations Insurance with minimum liability limits of \$ 5,000,000.

Product must be classified by Underwriters Laboratory ® ("UL") as to Surface Burning Characteristics

Fire Resistance Ratings: ASTM E-119
Surface Burning Characteristics: ASTM E-84
Combustion Characteristics: ASTM E-136

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. <u>Manufacturers of Foamed-in-Place Masonry Insulation:</u> Subject to compliance with requirements, provide products from the following:
 - a. "Core-Fill 500™"- Tailored Chemical Products, P.O. Drawer 4186, Hickory, N.C. 28663, (800) 627-1687
 - Florida & Georgia Distributor

 Tailored Foam of Florida, Inc.
 3900 Saint Johns Parkway
 Sanford, FL 32771
 Telephone: 407-332-0333 Fax: 407-830-9174
 - b. Air Krete, Inc P.O. Box 380 Weedsport, NY 13166
 - c. CP Chemical Co. (Tripolymer) White Plains, NY.

2.02 INSULATING MATERIALS

A. General: Provide insulating materials which comply with requirements indicated for materials, compliance with referenced standards, and other characteristics. I

- B. <u>Foamed-in-Place Masonry Insulation:</u> Two component thermal insulation produced by combining a plastic resin and catalyst foaming agent surfactant which, when properly ratioed and mixed, together with compressed air produce a cold-setting foam insulation in the hollow cores of hollow unit masonry walls.
- 1. <u>Fire-Resistance Ratings:</u> Core-Fill 500™ masonry insulation is a thermal foam insulation product. It is not intended and should never be used to increase the fire rating of a concrete masonry unit.
- 2. <u>Surface Burning Characteristics:</u> Maximum flame spread, smoke developed and fuel contributed of 0, 5 and 0 respectively.
- 3. <u>Combustion Characteristics:</u> Must be noncombustible, Class A building material.
- 4. Thermal Values: "R" Value of 4.91/inch @ 32 degrees F mean; ASTM C-177
- 5. <u>Sound Abatement:</u> Minimum Sound Transmission Class ("STC") rating of 53 and a minimum Outdoor Indoor Transmission Class ("OITC") rating of 44 for 8" wall assembly (ASTM E 90-90)

PART 3 - EXECUTION

3.01 INSPECTION AND PREPARATION

A. <u>Application Assemblies:</u>

Block Walls: 6", 8", 10" or 12" concrete masonry units

Cavity Walls: 2" cavity or greater

3.05 INSTALLATION OF FOAMED-IN-PLACE INSULATION

- A. <u>General:</u> Install foamed-in-place insulation from interior, or as specified, prior to installation of interior finish work and after all masonry and structural concrete work is in place; comply with manufacturer's instructions.
- B. <u>Installation:</u> Fill all open cells and voids in hollow concrete masonry walls where shown on drawings. The foam insulation shall be pressure injected through a series of 5/8" to 7/8" holes drilled into every vertical column of block cells (every 8" on center) beginning at an approximate height of four (4) feet from finished floor level. Repeat this procedure at an approximate height of ten (10) feet above the first horizontal row of holes (or as needed) until the void is completely filled. Patch holes with mortar and score to resemble existing surface.

END OF SECTION 07214