

Thermco™ Foam Insulation Guide Specification – AIA Format, Long Form

SECTION 07214 - FOAMED-IN-PLACE MASONRY WALL INSULATION

PART 1 - GENERAL

1.01 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.

1.02 SUBMITTALS

- A. Specification Sheets for Thermco™ foam
- B. Certified Test Reports: 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. Material Safety Data Sheet: Submit Material Safety Data Sheet complying with OSHA Hazard Communication Standard, 29 CFR 1910 1200.

1.03 QUALITY ASSURANCE

- A. Manufacturing Standards: Provide insulation produced by a single and approved manufacturer. The product must come from the manufacturer pre-mixed to ensure consistency.
- B. Installer Qualifications for Foamed-In-Place Masonry Insulation: Engage an experienced dealer/applicator who has been trained and licensed by the product manufacturer.
- C. Fire Performance Characteristics: 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.

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

Foamed-In-Place
Masonry Insulation
07214-1

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Manufacturers of Foamed-In-Place Masonry Insulation: Subject to compliance with requirements, provide products from the following:

1. **Thermco™** Thermal Corporation of America, 1405 West Washington, Mt. Pleasant, IA 52641 (319) 385-1535

No substitutions allowed.

2.02 INSULATING MATERIALS

- A. General: Provide insulating materials which comply with requirements indicated for materials, compliance with referenced standards, and other characteristics.
- B. Foamed-In-Place Masonry Insulation: 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. Fire-Resistance Ratings: Minimum four (4) hour fire resistance wall rating (ASTM E-119) for concrete masonry units when used in standard two (2) hour rated CMUs.
 2. Surface Burning Characteristics: Maximum flame spread, smoke developed and fuel contributed of 5, 50-100, and 0 respectively.
 3. Combustion Characteristics: Must be noncombustible, Class A building material. A Class A building material must have a flame spread rating of 25 or less.
 4. Thermal Values: "R" Value of 4.7/ inch @ 35 degrees F mean; ASTM C-177.
 5. Sound Abatement: Minimum Sound Transmission Class ("STC") rating of 54 for 12" CMU and 52 for 8" CMU.

PART 3 - EXECUTION

3.01 INSPECTION AND PREPARATION

- A. Application Assemblies:

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

Cavity Walls: 2" cavity or greater

3.02 INSTALLATION OF FOAMED-IN-PLACE INSULATION

- A. General: 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. Examination: Examine walls and cavities to determine whether there are conditions that would adversely affect the performance of the insulation. The walls to be insulated must be free of moisture both inside and outside of the block. Insulation is not to be injected into wet walls.
- C. Installation: 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.
- D. Sampling: Verify insulation density by random sampling. One cubic foot of fresh foam shall weigh between 2 lbs.8oz. and 3 lbs.6oz.
- E. Painting: Allow two weeks after foam installation before painting masonry walls.

END OF SECTION 07214