

**SECTION 07 21 29**

**SPRAYED INSULATION**

**PART 1 – GENERAL**

1.1 PURPOSE

- A. This guideline is intended to provide useful information to the Professional Service Provider (PSP) to establish a basis of design. PSP is to apply the principles of this section such that the University of Texas at Arlington (UTA) may achieve a level of quality and consistency in the design and construction of their facilities. Deviations from these guidelines must be approved by UTA and may require justification through Life Cycle Cost (LCC) analysis and submitted to UTA for approval.

1.2 LESSONS LEARNED AND DESIGN CONSIDERATIONS

- A. X

1.3 SECTION INCLUDES

- A. Glass fiber insulation applied to underside of structure.

1.4 RELATED REQUIREMENTS

- A. Volatile Organic Compound (VOC) Content Restrictions in Division 01.

1.5 REFERENCE STANDARDS

- A. ASTM C518 - Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus; current edition.
- B. ASTM C1014 - Standard Specification for Spray-Applied Mineral Fiber Thermal and Sound Absorbing Insulation; current edition.
- C. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; current edition.

1.6 SUBMITTALS

- A. See Division 01 for submittal procedures.
- B. Product Data: Provide data on materials, describing insulation properties.
- C. Manufacturer's Installation Instructions: Indicate special procedures, perimeter conditions requiring special attention.

1.7 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with not less than three years of documented experience.
- B. Installer Qualifications: Company specializing in performing the work of this section with minimum five years of experience.
- C. Products Specified by Flammability or Combustibility Criteria: Listed and classified by Underwriters Laboratories Inc.

**PART 2 – PRODUCTS**

2.1 MATERIALS

- A. Glass Fiber Insulation: ASTM E136, conforming to the following:
  - 1. K factor: 0.25 K, when tested in accordance with ASTM C518.
  - 2. Density: 3.0 lb/cu ft.
  - 3. NRC: 0.85 for 1 inch thickness.
  - 4. Flame Spread and Smoke Developed Index: 0/0, when tested in accordance with ASTM E84.
  - 5. Basis of Design: MONOGLASS Spray-On white fiber free of asbestos, free crystalline or combustible fibers.

2.2 ACCESSORIES

- A. Primer: As required by insulation manufacturer.

**PART 3 – EXECUTION**

3.1 EXAMINATION

- A. Verify that surfaces are clean, dry, and free of matter that may inhibit adhesion.

3.2 PREPARATION

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

3.3 INSTALLATION

- A. Install insulation in accordance with manufacturer's instructions.
- B. Install insulation to a uniform monolithic density without voids.
- C. Install to a minimum cured thickness of 2 inch.
- D. Tamp wet insulation surface to improve adhesion and to achieve a smooth surface.

3.4 FIELD QUALITY CONTROL

- A. Independent agency field inspection will be provided under provisions of the Quality Requirements section in Division 01.
- B. Inspection will include verification of insulation and sealer thickness and density.

END OF SECTION