

SECTION 07270FIRESTOPPINGPART 1 - GENERAL1.1 SECTION INCLUDES

- A. Firestopping for penetrations in concrete and masonry walls and ceilings.
- B. Firestopping for PVC and insulated pipe penetrations.

1.2 RELATED SECTIONS

- A. Section 01050: Coordination
- B. Section 01340: Submittals
- C. Section 03300: Cast-in-Place Concrete
- D. Section 04200: Unit Masonry
- E. Section 07900: Joint Sealers
- F. Division 15: Mechanical
- G. Division 16: Electrical

1.3 REFERENCES

- A. ASTM E814 - Methods for Fire Tests of Through-Penetration Fire Stops.
- B. Underwriters Laboratories 1479.
- C. ASTM E84 - Test Method for Surface Burning Characteristics of Building Materials.
- D. ASTM C665 - Standard Specification for Mineral-Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing.

1.4 PERFORMANCE REQUIREMENTS

- A. Provide firestopping systems that meet or exceed the fire rating of the construction assembly being penetrated, when tested in accordance with ASTM E814 and UL 1479.

1.5 SUBMITTALS

- A. Submit product data under provisions of Section 01340.
- B. Submit manufacturer's specification and installation instructions.
- C. Submit design data indicating methods of closure.
- D. Submit test reports indicating that the system meets the specified performance requirements.
- E. Submit shop drawing indicating large scale details for each type of penetration through each type of construction assembly.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials to project site in manufacturer's original unopened packaging.

- B. Store materials in area protected from weather and moisture.

1.7 SEQUENCING AND SCHEDULING

- A. Coordinate work under provisions of Section 01050.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Gold Bond Building Products
- B. United States Gypsum
- C. 3M Products
- D. Hilti
- E. Johns Manville

2.2 MATERIALS

- A. The materials specified herein are the generic components of typical firestopping systems. The components shall be as required by the manufacturer to provide a complete firestopping system complying with the performance requirements specified.
- B. Insulation Packing Material: A combination of mineral fiber manufactured from glass and thermosetting resins, with a minimum density of 6 PCF, complying with ASTM C665, Type 1.
- C. Sealing Compound: A setting type sealing compound for use with gypsum wallboard assemblies. Material must be as required by the manufacturer of the gypsum wallboard system utilized and have passed testing in accordance with ASTM E814.
- D. Intumescent-type Wrap: Flexible rubber like material capable of expanding up to ten times in volumes when subjected to heat.
- E. Mortar: A cementious fire resistant material.
- F. Steel Collar: As required by the manufacturer to provide the complete firestopping system.
- G. Sealant: Elastomeric caulking resistant to temperatures up to 2000°F, as required by the manufacturer of the firestopping system.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that openings are ready to receive work.
- B. Verify that all penetrations are adequately prepared and that all back-up and systems required to support the firestopping has been provided.
- C. Beginning of installation means installer accepts existing conditions.

3.2 PREPARATION

- A. Protect materials surrounding the work of this section from damage.

3.3 INSTALLATION

- A. Products shall be installed as per the manufacturer's submitted instructions to provide a complete firestopping system at all fire rated assemblies.
- B. Fill all annular spaces of penetrations in masonry and concrete with insulation packing material and apply mortar or other approved sealing compound.
- C. Install intumescent wrap around all plastic pipe and insulated pipe penetrating fire rating assemblies.
- D. Install sealant as required per manufacturer's instructions.

3.4 CLEANING

- A. Clean work under provisions of Section 01710.

END OF SECTION