# SECTION 07 8400 FIRESTOPPING

#### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

A. Firestopping systems.

#### 1.02 REFERENCE STANDARDS

- A. ASTM E119 Standard Test Methods for Fire Tests of Building Construction and Materials; 2016a.
- B. ASTM E814 Standard Test Method for Fire Tests of Penetration Firestop Systems; 2013a.
- C. ITS (DIR) Directory of Listed Products; current edition.
- D. FM (AG) FM Approval Guide; current edition.
- E. SCAQMD 1168 South Coast Air Quality Management District Rule No.1168; current edition.
- F. UL (FRD) Fire Resistance Directory; current edition.

#### **PART 2 PRODUCTS**

#### 2.01 FIRESTOPPING - GENERAL REQUIREMENTS

- A. Manufacturers:
  - 1. A/D Fire Protection Systems Inc.; www.adfire.com.
  - 2. 3M Fire Protection Products; www.3m.com/firestop.
  - 3. Hilti, Inc: www.us.hilti.com/#sle.
  - 4. Substitutions: See Section 01 6000 Product Requirements.
- B. Firestopping: Any material meeting requirements.
- C. Firestopping Materials with Volatile Content: Provide only products having lower volatile organic compound (VOC) content than required by SCAQMD 1168.
- D. Primers, Sleeves, Forms, Insulation, Packing, Stuffing, and Accessories: Type required for tested assembly design.

#### 2.02 FIRESTOPPING ASSEMBLY REQUIREMENTS

A. Through Penetration Firestopping: Use any system that has been tested according to ASTM E814 to have fire resistance F Rating equal to required fire rating of penetrated assembly.

# 2.03 FIRESTOPPING PENETRATIONS THROUGH CONCRETE AND CONCRETE MASONRY CONSTRUCTION

- A. Blank Openings:
  - 1. In Floors or Walls:
    - a. 2 Hour Construction: UL System C-AJ-0090; Hilti FS-ONE MAX Intumescent Firestop Sealant.
- B. Penetrations Through Floors or Walls By:
  - 1. Uninsulated Metallic Pipe, Conduit, and Tubing:
    - a. 2 Hour Construction: UL System C-AJ-1226; Hilti FS-ONE MAX Intumescent Firestop Sealant.
  - 2. Insulated Pipes:
    - a. 2 Hour Construction: UL System C-AJ-5048; Hilti FS-ONE MAX Intumescent Firestop Sealant, CP 606 Flexible Firestop Sealant, CP 601S Elastomeric Firestop Sealant, CP 604 Self-Leveling Firestop Sealant or CFS-S SIL GG Firestop Silicone Sealant Gun-Grade.

#### 2.04 FIRESTOPPING SYSTEMS

- A. Firestopping: Any material meeting requirements.
  - 1. Fire Ratings: Use any system that is listed by FM (AG), ITS (DIR), or UL (FRD) and tested in accordance with ASTM E814 or ASTM E119 with F Rating equal to fire rating of

penetrated assembly and minimum T Rating Equal to F Rating and in compliance with other specified requirements.

## PART 3 EXECUTION

#### 3.01 EXAMINATION

A. Verify openings are ready to receive the work of this section.

#### 3.02 PREPARATION

- A. Clean substrate surfaces of dirt, dust, grease, oil, loose material, or other matter that could adversely affect bond of firestopping material.
- B. Remove incompatible materials that could adversely affect bond.

## 3.03 INSTALLATION

A. Install materials in manner described in fire test report and in accordance with manufacturer's instructions, completely closing openings.

#### 3.04 CLEANING

A. Clean adjacent surfaces of firestopping materials.

#### 3.05 PROTECTION

A. Protect adjacent surfaces from damage by material installation.

**END OF SECTION**