

**DIVISION 07 – THERMAL AND MOISTURE PROTECTION**  
**07 80 00 FIRE AND SMOKE PROTECTION**  
**07 84 00 FIRESTOPPING**

**PART 1 - GENERAL**

1.01 GENERAL REQUIREMENTS

- A. Maintain the fire rating of penetrated fire separations and barriers. Fire stop and seal all penetrations made during construction.
  - 1. Provide firestopping for through-penetrations and membrane penetrations of fire-rated barriers.
  - 2. Install firestopping materials in accordance with fire test reports, fire resistance requirements, and manufacturer's recommendations and installation procedures.
  - 3. For demolition and renovation work, apply firestopping to open penetrations in fire-rated barriers where piping or cabling is removed. Firestopping is required regardless of whether the penetrations are used for new piping or cabling or left empty after construction.
  - 4. Firestopping material used to seal penetrations through which cable passes shall be re-usable / re-enterable.
  - 5. See additional requirements for telecommunications firestopping in WSU Design Standard 27 05 00 "Common Work Results for Telecommunications."

1.02 INSTALLER'S QUALIFICATIONS

- A. Contractor's employees and supervisors whose duties include the application of firestopping materials shall be trained and certified by the firestopping manufacturer.

**PART 2 - PRODUCTS**

2.01 PRE-APPROVED MANUFACTURERS

- A. Metacaulk
- B. Hilti
- C. Bio Fireshield
- D. 3M
- E. Specified Technologies, Inc. (STI)

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- F. Proposed alternative equivalents require approval from WSU Engineering Services.

**2.02 MATERIALS**

- A. Provide materials classified by UL, Warnock-Hersey or Factory Mutual to provide fire barrier equal to the time rating of construction being penetrated.
- B. Provide 100% asbestos-free materials that comply with applicable codes and have been tested in accordance with UL 1479 or ASTM E814.
- C. Brittle materials, such as taping compound, plaster or spray insulation are not acceptable firestopping materials.
- D. No solvent based firestopping material.
- E. Firestopping materials shall not be soluble in water after they have cured.
- F. Firestopping mortar manufactured by Metacaulk is preferred at cable tray penetrations where feasible. Intumescent mortars shall be installed to allow for additional cable installation after initial installation.

**PART 3 - EXECUTION**

**3.01 INSTALLATION**

- A. At all cable tray penetrations, apply a manufacturer's warning label above or adjacent to the penetration, on both sides of the partition, stating that the penetration has been firestopped. The label shall include a "Do Not Remove" statement. The label shall provide a list of information on the sealed penetration:
  - 1. Firestopping product installed
  - 2. UL, FM or WH system number
  - 3. Date of installation
  - 4. Installing Contractor, Contractor's Phone Number, and Manufacturer's Phone Number.

**END OF SECTION**