



UNIVERSITY OF
NORTHERN COLORADO

Environmental Health and Safety

Firestop Procedure

November 2024



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Purpose

The purpose of this procedure is to have a guide for installing fire-stop-related material and when to install said material to prevent fires and the spread of smoke through walls ceilings and floors.

Firestop is a form of passive fire protection that is used to seal around the openings, such as at pipe and cable penetrations and between joints in a fire-rated wall or floor assembly. Firestops are designed to maintain the fire-resistance rating of a wall or floor intended to impede the spread of fire or smoke.

Building Codes

Model codes that require firestop are as follows:

- International Building Code (IBC)
- Life Safety Code (NFPA-101)
- National Electrical Code (NFPA-70)
- National Building Code (NFPA-5000)
- Legacy US Building Codes (UBC, SBC, NBC)

How Firestopping Works/products

Through-penetration firestop products work by filling the voids around penetrating items in fire-rated walls and floors. Some firestop products intumesce or expand in the presence of heat. The intumescent action seals and stops the spread of flames and smoke to other floors and rooms for penetrations that melt or change shape in a fire (eg. Plastic piping). Common products are One-part Sealants (Caulks), Putty, Cementitious Mortars and Grouts, Sprays (Coatings), Intumescent Wraps, Pillows/Bags/Blocks, and Mechanical Devices.

When to Use Fire Stop

Most buildings are separated into compartments with fire-resistant walls and floors to prevent the spread of fire/smoke. During remodeling, construction projects, or where containment is broken firestop products should be used. The following areas are examples of where to use Firestop:

Joints-

- Top-of-Wall (head of wall)
- Curtain Wall
- Wall-to-Wall
- Floor-to-Floor

Penetrations-

- Plumbing (steel, copper, plastic, and other materials)
- Electrical/Communication Cables
- HVAC ducts
- Other Similar Systems

Approved Product to be Used

Below is a list of Firestop products that have been approved to be used on campus.

Specified Technologies INC.

- SpecSeal Firestop Sealant
- SpecSeal Firestop Putty
- STI Fire Stop Sealant
- SpecSeal Firestop Spray

HILTI

- FS-ONE Max Firestop Intumescent Sealant
- CSF-S SIL GG Firestop Silicone Sealant
- CP-605 Bottom-Of-Wall Firestop Sealant
- CFS-SP SIL Silicone-Based Joint Sealant Spray

Environmental Health and Safety shall review/approve all other firestop products if they are not listed above.