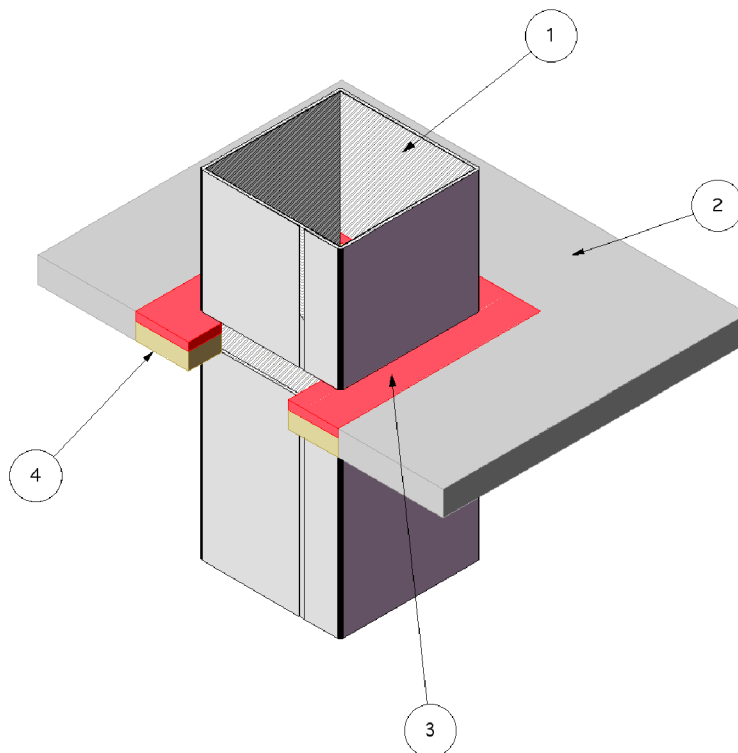

Design No. FS 561 F

FIRE PENETRATION SEAL

Penetrating Item Steel Duct

T-Rating - 2 hr

F-Rating - 2 hr



1. PENETRATING ITEM: A round or rectangular steel duct system constructed of min. 24 GA sheet steel with max. 720 in² area and max. 30-in. dimension (max. dim. 24-in. x max. 30-in., or max. 30 in. diameter) and protected with a one layer of 3M Fire Barrier Duct Wrap 15A or 20A, such as detailed in GD 532 F or GD 548 F or two layers of 3M Fire Barrier Duct Wrap 15A or 20A as detailed in GD 531 F or GD 547 F. The 3M Fire Barrier Duct Wrap 15A or 20A was abutted to each side of the penetration seal.
 2. FLOOR ASSEMBLY: The two-hour fire-rated floor assembly consists of min. 4-1/2 in. thick normal weight (100-150 pcf) reinforced concrete. Create an opening in the floor assembly having a max. cross-sectional area of 891in² and a max. dimension of 33-in. Position the duct assembly concentrically or eccentrically in the opening so that the annular space ranges from min. 1 in. on one side to max. 2 in. on the other.
 3. FILL, VOID OR CAVITY MATERIAL: Min. 3/8-in. depth of sealant fill material is to be applied to the recess around the top surface of the floor through-penetration opening. The fill material is in direct contact with the steel duct. The sealant material overlapped the concrete a nom. 1/4-in.
- Listed Manufacturer:**
- 3M -
Firestopping

Through-Penetration Fire Stop Systems

Firestopping Sealants

3M Fire Barrier™ 2000+ Silicone Joint Sealant

3M Fire Barrier™ 1000 N/S Silicone Joint Sealant

3M Fire Barrier™ 1003 S/L Silicone Joint Sealant

Listed Manufacturer:

3M -

Insulation

Mineral Wool Blanket

3M Fire Barrier Duct Wrap 15A

3M Fire Barrier Duct Wrap 20A

4. **PACKING MATERIAL:** Fill the annular space with scrap 3M Fire Barrier Duct Wrap 15A or 20A, or 4 pcf mineral wool**. Cut the mineral wool into strips. Then compress it approximately 25% and insert it into the opening to fill the entire annular space. Fill the slab depth with packing material and recess the surface of packing material a min. 3/8 in. from the top surface of the floor, as required to accommodate the necessary depth of caulk fill material. (** Listed with Omega Point Laboratories)