



XHEZ.F-B-2042 Through-penetration Firestop Systems

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Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Listed or Classified products, equipment, system, devices, and materials.
 - Authorities Having Jurisdiction should be consulted before construction.
 - Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
 - When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
 - Only products which bear UL's Mark are considered as Classified, Listed, or Recognized.
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Through-penetration Firestop Systems

[See General Information for Through-penetration Firestop Systems](#)

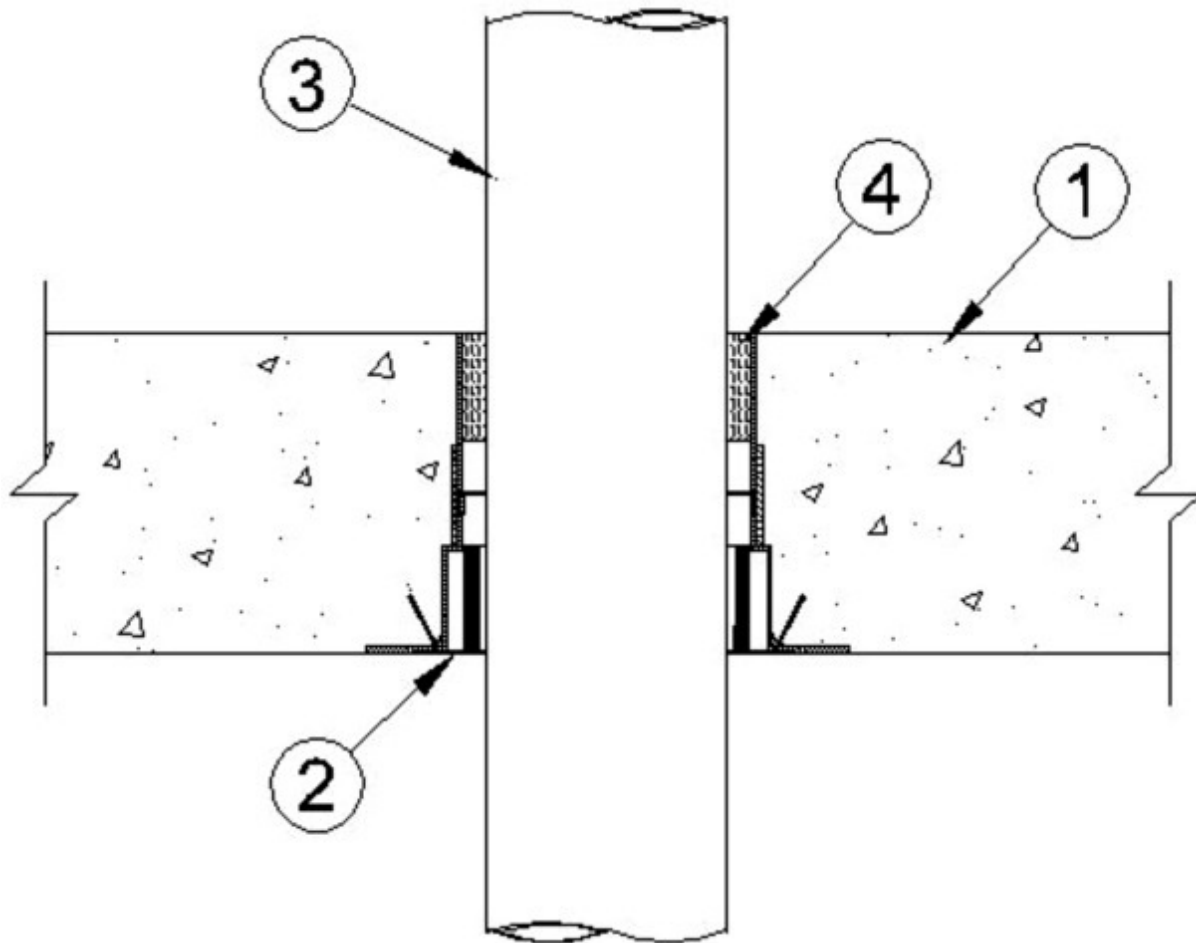
System No. F-B-2042

August 19, 2009

F Ratings — 2 and 3 Hr (See Item 3)

T Ratings — 0 and 3 Hr (See Item 3)

W Rating — Class 1 (See Item 5)



1. **Floor Assembly** — Min 6 in. (152 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete.
2. **Firestop Device*** — Cast in place firestop device permanently embedded during concrete placement in accordance with accompanying installation instructions. The device shall be installed flush with top and bottom surfaces of floor.

SECURUS INC, DBA HUBBARD ENTERPRISES — HydroFlame SS-PL

3. **Through Penetrant** — One nonmetallic pipe or conduit to be installed within the firestop device. Pipe or conduit to be installed in accordance with firestop device installation instructions and rigidly supported on both sides of floor assembly. The following types of pipe, conduit or tubing may be used:

A. **Polyvinyl Chloride (PVC) Pipe** — Nom 6 in. (152 mm) diam (or smaller) Schedule 40 solid or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems. **When nom 5 in. or 6 in. (127 or 152 mm) diam PVC pipe is used, F Rating is 2 hr and T Rating is 0 hr. When max 4 in. (102 mm) diam PVC pipe is used, F Rating is 3 hr and T Rating is 3 hr.**

B. **Rigid Nonmetallic Conduit+** — Nom 6 in. (152 mm) diam (or smaller) Schedule 40 PVC conduit installed in accordance with the National Electrical Code (NFPA No. 70). **When nom 5 in. or 6 in. (127 or 152 mm) diam PVC conduit is used, F Rating is 2 hr and T Rating is 0 hr. When max 4 in. (102 mm) diam PVC conduit is used, F Rating is 3 hr and T Rating is 3 hr.**

C. **Chlorinated Polyvinyl Chloride (CPVC) Pipe** — Nom 6 in. (152 mm) diam (or smaller) SDR 13.5 (or heavier) or Schedule 40 CPVC pipe for use in closed (process or supply) piping systems. **When nom 5 in. or 6 in. (127 or 152 mm) diam CPVC pipe is used, F Rating is 2 hr and T Rating is 0 hr. When max 4 in. (102 mm) diam CPVC pipe is used, F Rating is 3 hr and T Rating is 3 hr.**

D. **Acrylonitrile Butadiene Styrene (ABS) Pipe** — Nom 4 in. (102 mm) diam (or smaller) Schedule 40 solid or cellular core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems. **When max 4 in. (102 mm) diam ABS pipe is used, F Rating is 3 hr and T Rating is 3 hr.**

E. **Cross-Linked Polyethylene (PEX) Tubing** — Nom 2 in. (51 mm) diam (or smaller) SDR 9 PEX tubing for use in closed (process or supply) piping systems. **When max 2 in. (51 mm) diam ABS pipe is used, F Rating is 3 hr and T Rating is 3 hr.**

4. **Packing Material** — Min 2 in. (51 mm) depth of min 4 pcf (64 kg/m³) mineral wool batt insulation tightly-packed into annular space with its top surface flush with the top surface of the floor. When optional sealant (Item 5) is used, top surface of packing material to be recessed min 1/4 in. (6mm) from top surface of floor.

5. **Fill, Void or Cavity Material* - Sealant** — (Optional, Not Shown) - Min 1/4 in. (6 mm) thickness of sealant applied within the annulus, flush with the top surface of floor. Sealant to lap min 1/2 in. (13 mm) onto top surface of concrete around perimeter of firestop device. **W Rating applies only when sealant is used.**

3M COMPANY

3M FIRE PROTECTION PRODUCTS — FB-1000 NS, FB-3000 WT or FB-1003 SL

*Bearing the UL Classification Mark

+Bearing the UL Listing Mark

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