

XHEZ.F-A-3052 - THROUGH-PENETRATION FIRESTOP SYSTEMS

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 Certified 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 Certified.

XHEZ - Through-penetration Firestop Systems

XHEZ7 - Through-penetration Firestop Systems Certified for Canada

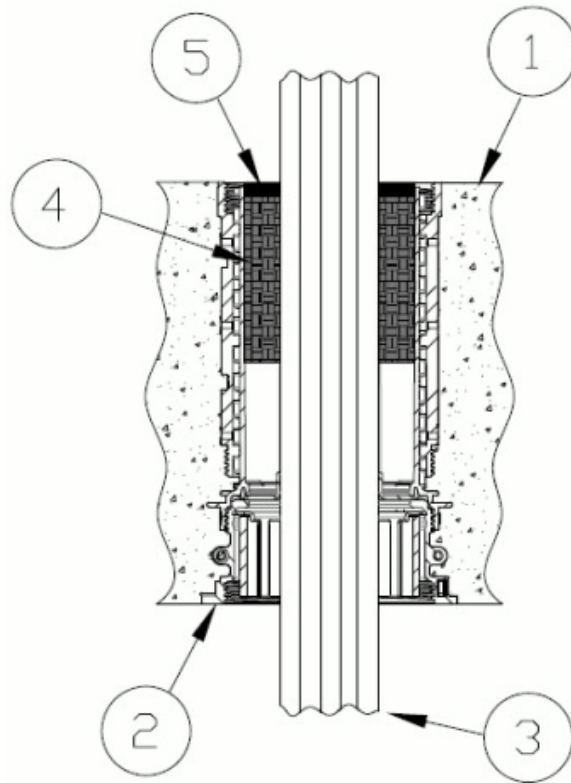
See General Information for Through-penetration Firestop Systems

See General Information for Through-penetration Firestop Systems Certified for Canada

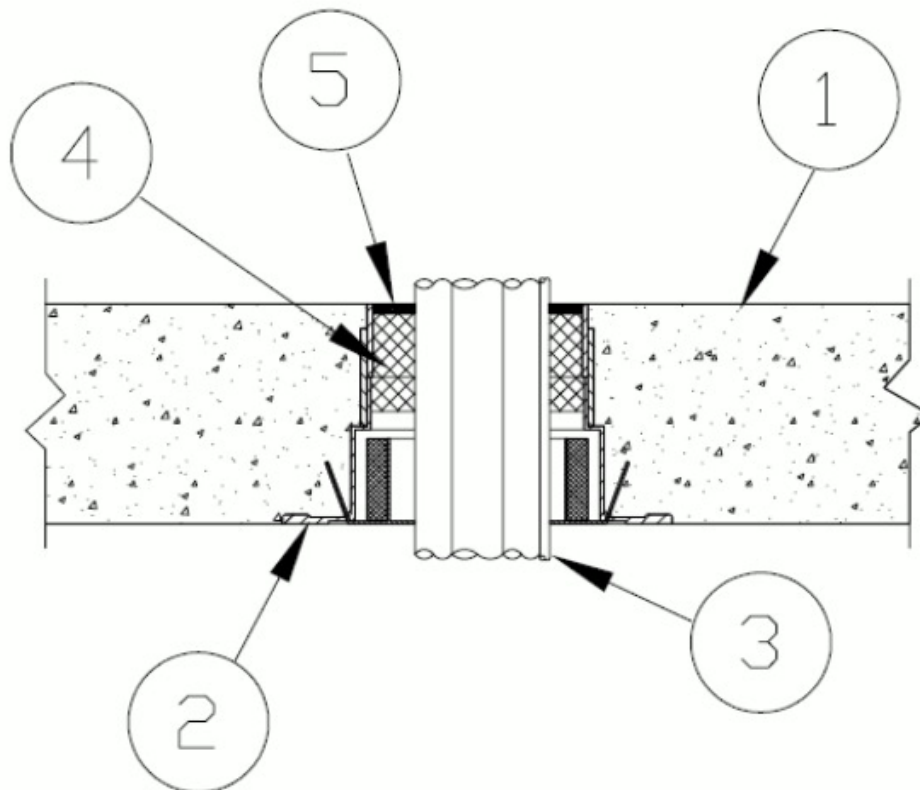
System No. F-A-3052

April 10, 2019

| ANSI/UL1479 (ASTM E814) | CAN/ULC S115 |
|---|--|
| F Rating — 3 Hr | F Rating — 3 Hr |
| T Rating — 1/4 Hr | FT Rating — 1/4 Hr |
| L Rating At Ambient — Less Than 1 CFM/ft ² | FH Rating — 3 Hr |
| L Rating At 400 F — Less Than 1 CFM/ft ² | FTH Rating — 1/4 Hr |
| W Rating — Class 1 | L Rating At Ambient — Less Than 5.1 L/s/m ² |
| | L Rating At 204° — Less Than 5.1 L/s/m ² |



Configuration A



Configuration B

System tested with a pressure differential of 2.5 Pa between the exposed and the unexposed surfaces with the higher pressure on the exposed side.

1. **Floor Assembly** — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete.

1A. **Alternate Floor Assembly** — (Not Shown) — The fire rated unprotected concrete and steel deck floor assembly shall be constructed of the material and in the manner specified in the individual D900 Series designs in the UL Fire Resistance Directory and as summarized below:

A. **Concrete** — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete, as measured from the top plane of the steel floor units.

B. Steel Floor and Form Units* — Composite or non-composite max 3 in. (76 mm) deep galv steel fluted units as specified in the individual Floor-Ceiling Design.

2. Firestop Device* — Cast in place firestop device permanently embedded during concrete placement or grouted in concrete assembly in accordance with accompanying installation instructions. For HFP devices the optional accessories (not shown) includes sleeve extension and/ or deck adapter, water dam, installed in accordance with installation instructions. The device shall be installed flush with top and bottom surfaces of floor. The devices are sized to accommodate the following nom pipe sizes:

| Nom Pipe Diam in. (mm) | Conf A Firestop Devices for Concrete Slab | Conf A Firestop Devices for Fluted Deck (Not Shown) | Conf B Firestop Devices for Concrete Slab | Conf B Firestop Devices for Fluted Deck (Not Shown) |
|------------------------|--|---|---|---|
| 1-1/4 to 2 (32 to 51) | HFP-CSM2, HFP-CSM2B, HFP-P2, HFP-P2B, HFP-M2, HFP-M2B, HFP-H3, HFP-H3B | add HFPCD2 | PS-CS-0200 | CD-CS-0200 |
| 2 to 3 (51 to 76) | HFP-CSM3, HFP-CSM3B, HFP-P3, HFP-P3B, HFP-M3, HFP-M3B, HFP-H4, HFP-H4B | add HFPCD3 | PS-CS-0300 | CD-CS-0300 |

HOLDRITE — (Configuration A) HFP-CSMx, HFP-CSMxB, HFP-Px, HFP-PxB, HFP-Mx, HFP-MxB, HFP-Hx, HFP-HxB; (Configuration B) HydroFlame PS-CS, CD-CS

3. Cables — Aggregate cross-sectional area of cables in opening to be max 45 percent of the cross-sectional area of the nom 2 in. (51 mm) or 3 in. (76 mm) diam firestop device throat. Min separation between cables and between cables and periphery of firestop device throat is 1/8 in. (3.2 mm). Cables to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of copper conductor cables may be used:

A. Max 1/C 500 kcmil cable with crosslinked polyethylene (XLPE) jacket.

B. Max 8/C No. 12 AWG or max 12/C No. 14 AWG cable with XLPE insulation and jacket.

C. Max 100 pair No. 24 AWG cable with PVC insulation and jacket.

D. Max four total - Nom 3/4 in. (19 mm) diam (or smaller) aluminum or steel Metal Clad Cable (Type MC).

E. Max four total - 3/C No. 4/0 AWG (or smaller) copper or aluminum conductor SER or MCM cables with XLPE or PVC insulation and jacket.

4. Packing Material — Min 2 in. (51 mm) depth of min 4 pcf (64 kg/m³) mineral wool batt insulation firmly packed into top of firestop device as a permanent form. Packing material to be recessed from top surface of floor as required to accommodate the required thickness of fill material.

5. Fill, Void or Cavity Material* — Sealant — Min 1/4 in. (6 mm) thickness of sealant applied within the annulus, flush with the top surface of floor. Sealant to be forced into interstices of cable group to max extent possible.

Conf B (Only) - Sealant to lap min 1/2 in. (13 mm) onto top surface of concrete around perimeter of firestop device.

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

RECTORSEAL — Metacaulk 835+ or Biotherm 100 or 200

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

Last Updated on 2019-04-10

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL's Follow-Up Service. Only those products bearing the UL Mark should be considered to be Certified and covered under UL's Follow-Up Service. Always look for the Mark on the product.

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