XHEZ.F-E-3026 - 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.

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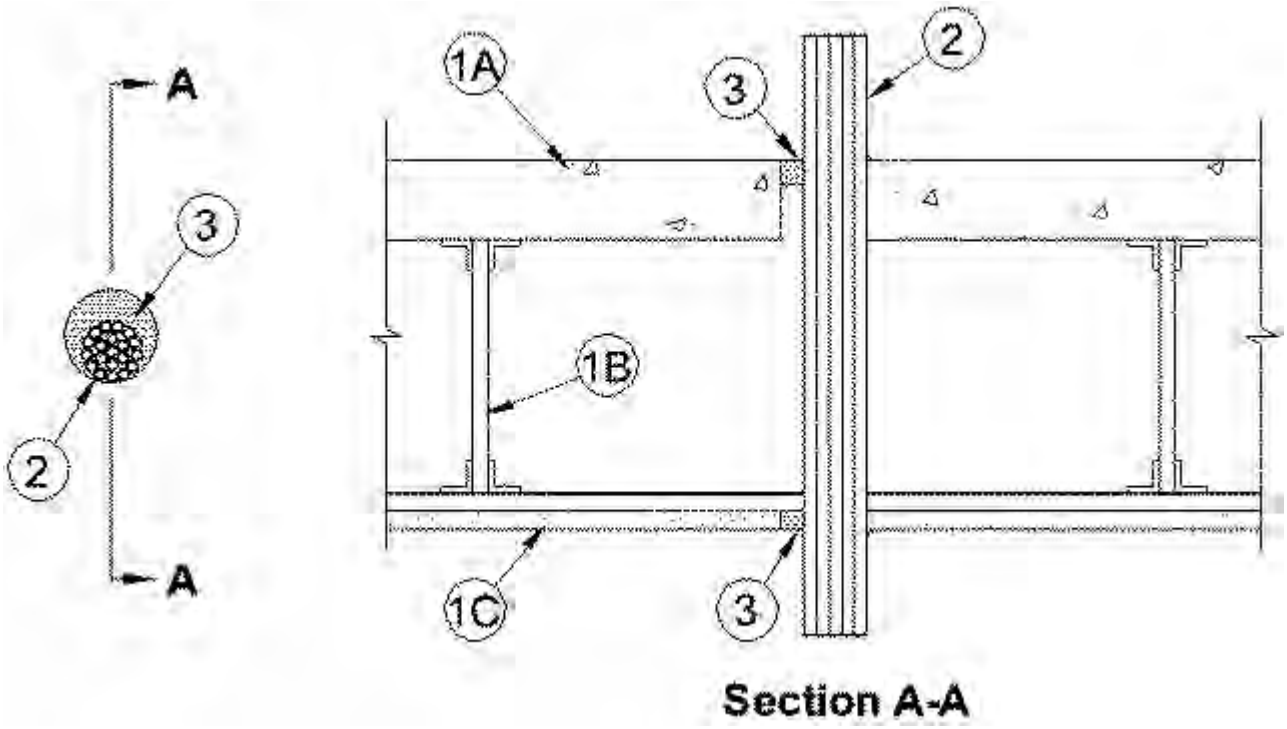
See General Information for Through-penetration Firestop Systems

System No. F-E-3026

December 10, 2019

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Ratings - 1 Hr	F Ratings - 1 Hr
T Ratings - 1 Hr	FT Ratings - 1 Hr
	FH Ratings - 1 Hr
	FTH Ratings - 1 Hr
L Rating At Ambient - Less Than 1 CFM/sq ft	L Rating At Ambient - Less Than 1.55 L/s/m
L Rating At 400 F - 1.4 CFM/sq ft	L Rating At 400 F - 2.2 L/s/m



Section A-A

1. **Floor -Ceiling Assembly —** The 1 hr fire-rated concrete and steel joist Floor-Ceiling assembly shall be constructed of the materials and in the manner described in the individual G500 Series Design in the UL Fire Resistance Directory, as summarized below:

A. **Concrete Floor —** Normal weight or lightweight (100-150 pcf or 1600-2400 kg/m^3) concrete over metal lath or steel deck as specified in the individual G500 Series Design. Max diam of floor opening is 4 in. (102 mm).

B. **Joists —** Steel joists **Structural Steel Members*** as specified in the individual G500 Series Design.

C. **Gypsum Board* —** Min 5/8 in. (16 mm) thick, screw-attached to furring channels as specified in the individual G500 Series Design. Max diam of ceiling is 4 in. (102 mm).

2. **Cables —** Max 3-1/2 in. (89 mm) diam tight bundle of cables to be installed either concentrically or eccentrically within the firestop system. The annular space between cable bundle and the periphery of the opening shall be a min 0 in. (point contact) to max 1/2 in. (13 mm). Penetrants to be located approx midway between joists and rigidly supported on both sides of floor-ceiling assembly. The following types and sizes of cables may be used:

A. Max 100 pair No. 24 AWG (or smaller) copper conductor telecommunication cable with polyvinyl chloride (PVC) insulation and jacketing.

B. Max 3/C No. 2/0 AWG (or smaller) aluminum conductor SER cable with PVC insulation and jacketing.

C. Max 3/C with ground No. 12 AWG (or smaller) Type NM (Romex) nonmetallic sheathed cable with PVC insulation and jacketing.

D. Max 7/C No. 12 AWG (or smaller) power/control cables with PVC insulation and jacketing.

E. Max RG/U (or smaller) copper conductor coaxial cable with fluorinated ethylene insulation and jacketing materials.

2A. **Through Penetrating Products* —** Max 4/C with ground No. 2 AWG (or smaller) aluminum or copper conductor aluminum jacketed Metal-Clad+ cable. Max one cable to be installed within the cable bundle. Max diam of cable bundle including metal clad cable not to exceed 3-1/2 in. (89 mm).

3. **Fill, Void or Cavity Materials* — Sealant —** Min 3/4 in. (19 mm) thickness of fill material applied within the annulus, flush with top surface of floor. Min 5/8 in. (16 mm) thickness of fill material applied within the annulus, flush with bottom surface of ceiling. Fill material to forced within interstices of cable bundle to max extent possible. At point contact locations, min 1/4 in.

(6 mm) diam bead of fill material applied at penetrant/concrete interface on top surface of floor and penetrant/gypsum board interface on bottom surface of ceiling.
RELIANCE WORLDWIDE CORPORATION DBA HOLDRITE HYDROFLAME — HydroFlame 100

* 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 2019-12-10
