

# XHEZ.F-C-2496 - 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

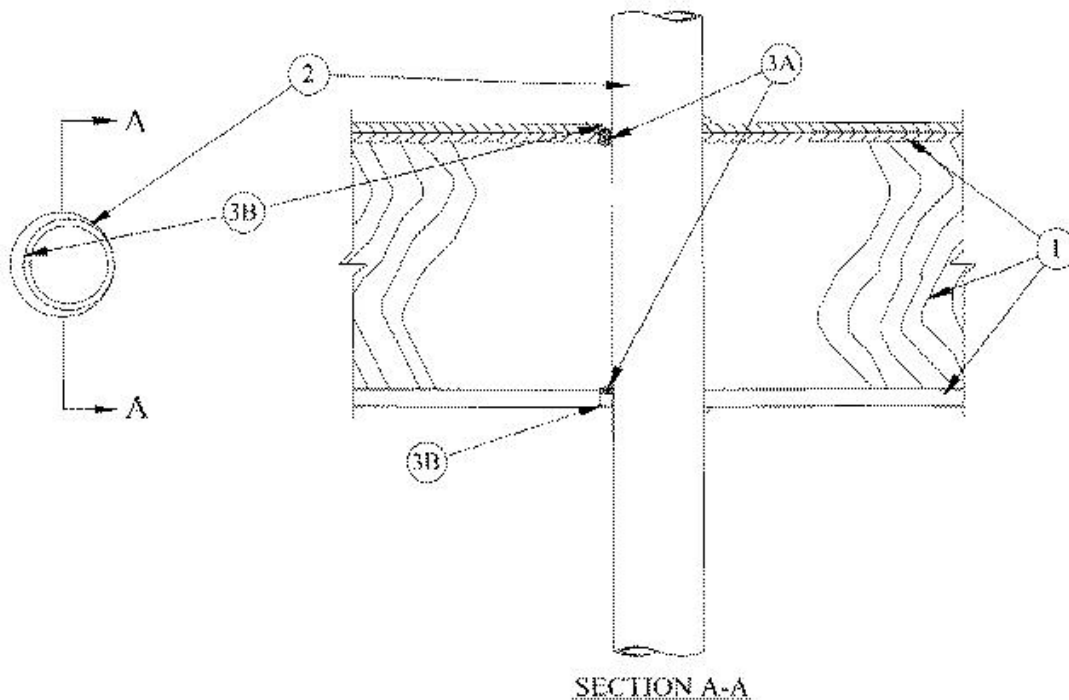
See General Information for Through-penetration Firestop Systems

### System No. F-C-2496

May 21, 2019

**F Rating — 1 Hr**

**T Rating — 3/4 Hr**



**1. Floor-Ceiling Assembly** — The 1 hr fire-rated wood joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Designs in the UL Fire Resistance Directory, as summarized below:

**A. Flooring System** — Lumber or plywood subfloor with finish floor of lumber, plywood or **Floor Topping Mixture\*** as specified in the individual Floor-Ceiling Design. Max diam of floor opening is 3-1/4 in. (83 mm).

**B. Wood Joists** — Nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or **Structural Wood Members\*** with bridging as required and with ends firestopped.

**C. Gypsum Board \*** — Nom 5/8 in. (16 mm) thick as specified in the individual Floor-Ceiling Design. Gypsum board secured to joists as specified in the individual Floor-Ceiling Design. Max diam of opening is 3-1/4 in. (83 mm).

2. **Through Penetrants** — One nonmetallic pipe to be installed either concentrically or eccentrically within the firestop system. Diam of the circular opening in flooring, and top and sole plates of chase wall is 5/8 (16 mm) or 7/8 in. (22 mm) larger than the actual diam of the pipe such that the annular space is min 0 in. (point contact) to max 7/8 in. (22 mm). Pipe to be rigidly supported on both sides of floor-ceiling assembly. The following types and sizes of nonmetallic pipes may be used:

A. **Polyvinyl Chloride (PVC) Pipe** — Nom 2 in. (51 mm) diam (or smaller) Schedule 40 cellular or solid core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.

B. **Chlorinated Polyvinyl Chloride (CPVC) Pipe** — Nom 2 in. (51 mm) diam (or smaller) SDR17 CPVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

C. **Rigid Nonmetallic Conduit+** — Nom 2 in. (51 mm) diam (or smaller) Schedule 40 PVC conduit installed in accordance with Article 347 of the National Electrical Code, (NFPA No. 70).

D. **Acrylonitrile Butadiene Styrene (ABS) Pipe** — Nom 1-1/2 in. (38 mm) diam Schedule 40 cellular or solid core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

E. **Crosslinked Polyethylene (PEX) Tubing** — Nom 1 in. (25 mm) diam (or smaller) SDR 9 PEX tubing for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

F. **Crosslinked Polyethylene/Aluminum/Crosslinked Polyethylene Composite Pressure Pipe (PEX-AL-PEX)** — Nom 1 in. (25 mm) diam (or smaller) PEX-AL-PEX pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

3. **Firestop System** — The firestop system shall consist of the following:

A. **Packing Material** — Foam backer rod firmly packed into opening as a permanent form. Packing material to be recessed from top surface of subfloor as required to accommodate the required thickness of fill material. When HydroFlame 100 fill material is used, no packing material is required.

B. **Fill, Void or Cavity Material\* — Caulk** — Min 1/4 in. (6 mm) thickness of HydroFlame 200 or 3/4 in. (19 mm) thickness of HydroFlame 100 fill material applied within annulus, flush with top surface of subfloor. At point contact location, a min 1/4 in. (6 mm) diam bead of fill material shall be applied to the penetrant/plywood interface on top surface of floor assembly. Min 1/2 in. (13 mm) thickness of HydroFlame 200 or 5/8 in. (16 mm) thickness of HydroFlame 100 applied within annulus, flush with bottom surface of ceiling. At point contact location, a min 1/4 in. (6 mm) diam bead of fill material shall be applied to the penetrant/gypsum board interface on bottom surface of ceiling. ABS pipe (Item 2D) is limited for use with HydroFlame 200 only.

**RELIANCE WORLDWIDE CORPORATION DBA HOLDRITE HYDROFLAME** — HydroFlame 100 or HydroFlame 200

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

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