



**System No. F-C-2443**  
**XHEZ.F-C-2443**  
**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 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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**XHEZ - Through-penetration Firestop Systems**

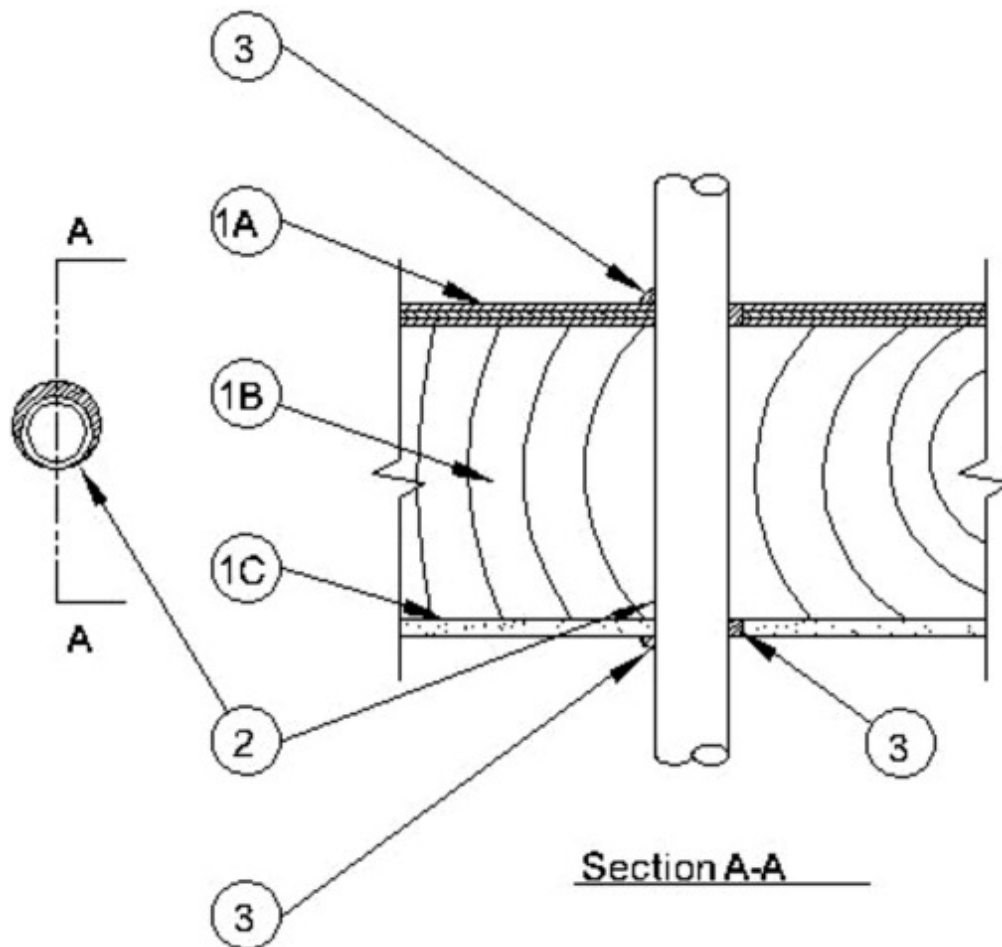
[See General Information for Through-penetration Firestop Systems](#)

**System No. F-C-2443**

June 01, 2016

**F Rating — 1 Hr**

**T Rating — 1 Hr**



**1. Floor-Ceiling Assembly** — The 1 hr fire rated solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory. The general construction features of the floor-ceiling assembly are 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 2 in. (51 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 4 ft wide by 5/8 in. (16 mm) thick as specified in the individual Floor-Ceiling Design. Max diam of opening is 2 in. (51 mm).

**1.1 Chase Wall** — (Not Shown, Optional) — The through penetrants (Item 2) may be routed through a 1 hr fire-rated single, double or staggered wood stud/gypsum board chase wall having a fire rating consistent with that of the floor-ceiling assembly. The chase wall shall be constructed of the materials and in the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

**A. Studs** — Nom 2 by 4 in. (51 by 102 mm) or nom 2 by 6 in. (51 by 152 mm) lumber or double nom 2 by 4 in. (51 by 102 mm) lumber studs.

**B. Sole Plate** — Nom 2 by 4 in. (51 by 102 mm) lumber or parallel 2 by 4 in. (51 by 102 mm) or nom 2 by 6 in. (51 by 152 mm) lumber plates, tightly butted. Max diam of opening is 2 in. (51 mm).

**C. Top Plate** — The double top plate shall consist of two nom 2 by 4 (51 by 102 mm) or nom 2 by 6 in. (51 by 152 mm) lumber plates or double parallel nom 2 by 4 in. (51 by 102 mm) lumber plates tightly butted. Max diam of opening is 2-in. (51mm).

**D. Gypsum Board\*** — Thickness, type, number or layers and fasteners shall be as specified in individual Wall and Partition Designs.

**2. Through Penetrant** — One nom 1-1/4 in. (32 mm) diam (or smaller) SDR 9 cross-linked polyethylene (PEX) tubing for use in closed (process or supply) piping systems. The annular space between the tubing and the periphery of the opening shall be min 0 in. (point contact) to a max 9/16 in. (14 mm). Tubing to be rigidly supported on both sides of the floor-ceiling assembly.

**3. Fill, Void or Cavity Material\* — Sealant** — Min 3/4 in. (19 mm) thickness of fill material applied within annulus flush with top surface of floor or sole plate. Min 5/8 in. (16 mm) thickness of fill material applied flush within annulus

flush with bottom surface of ceiling or on bottom surface of lower top plate. A 1/4 in. (6 mm) bead of fill material is applied to area of point contact on both sides of floor ceiling assembly.

**A/D FIRE PROTECTION SYSTEMS INC** — A/D FIREBARRIER Intumescent Sealant or A/D FIREBARRIER Intumescent Sealant II

**\* 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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