



## System No. W-L-2157 XHEZ.W-L-2157 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.

### XHEZ - Through-penetration Firestop Systems

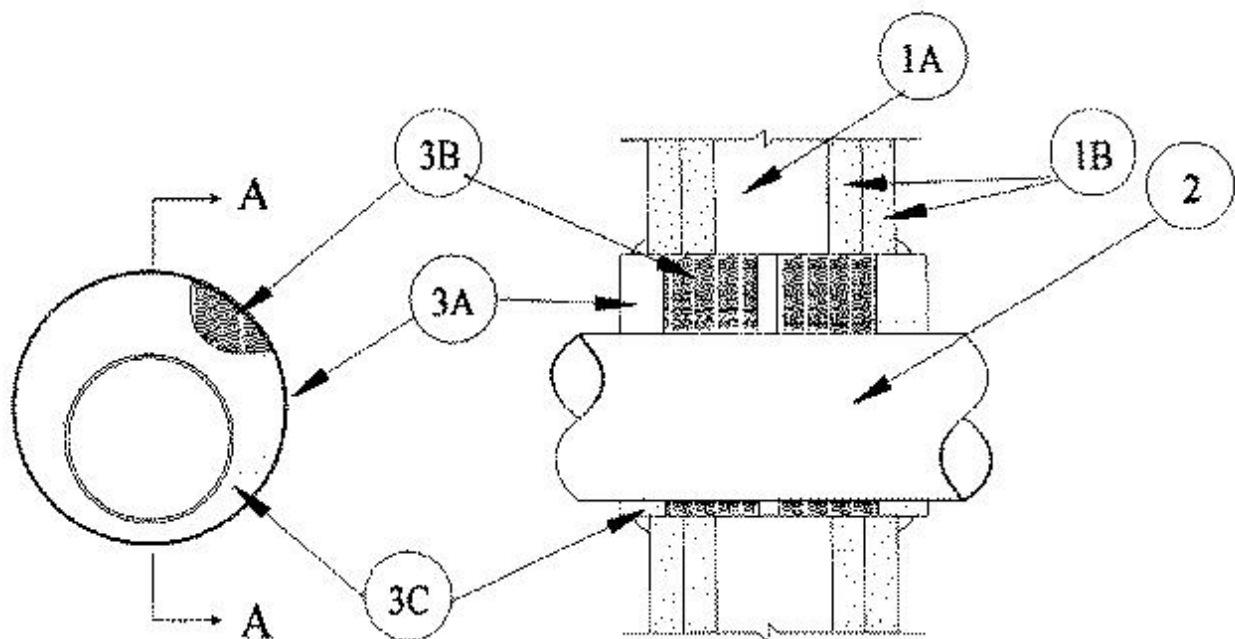
[See General Information for Through-penetration Firestop Systems](#)

#### System No. W-L-2157

November 05, 1998

**F Rating — 2 Hr**

**T Rating — 1 Hr**



#### SECTION A-A

1. **Wall Assembly** — The 2 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. **Studs** — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. OC. Steel studs to be min 3-5/8 in. wide and spaced max 24 in. OC.

B. **Gypsum Board\*** — 1/2 in. thick, 4 ft wide with square or tapered edges. The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 4 in.

2. **Through Penetrants** — One nonmetallic pipe or conduit to be installed either concentrically or eccentricity within the firestop system. The annular space between the pipe or conduit and the periphery of the opening shall be a min 1/2 in. to max 1-1/8 in. Pipe or conduit to be rigidly supported on both sides of wall. The following types and sizes of pipes or conduits may be used:

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

B. **Chlorinated Polyvinyl Chloride (CPVC) Pipe** — Nom 2 in. diam (or smaller) SDR 17 CPVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

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

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

A. **Steel Sleeve** — Cylindrical sleeve fabricated from 0.022 in. (No. 26 gauge) galv sheet steel and having a min 2 in. lap along the longitudinal seam. Length of steel sleeve to be equal to the thickness of the wall plus 1 in., such that when installed, the ends of the steel sleeve extend 1/2 in. beyond each surface of the wall. Sleeve installed by coiling the sheet steel to a diam smaller than the through opening, inserting the coil through the openings and releasing the coil to let it uncoil against the circular cutouts in the gypsum wallboard layers.

B. **Packing Material** — Min 2 in. thickness of 4 pcf mineral wool batt insulation firmly packed into opening as a permanent form on each side of wall. Packing material to be recessed from each surface of wall to accommodate the required thickness of fill material.

C. **Fill, Void or Cavity Material\* — Sealant** — Min 3/4 in. thickness of fill material applied within annulus, flush with both ends of steel sleeve. A min 1/2 in. bead of fill material shall be applied at the steel sleeve/gypsum wallboard interface on both surfaces of wall.

**A/D FIRE PROTECTION SYSTEMS INC** — A/D FireBarrier Silicone

\*Bearing the UL Classification Marking

+Bearing the UL Listing Mark

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