



System No. W-J-3087
XHEZ.W-J-3087
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

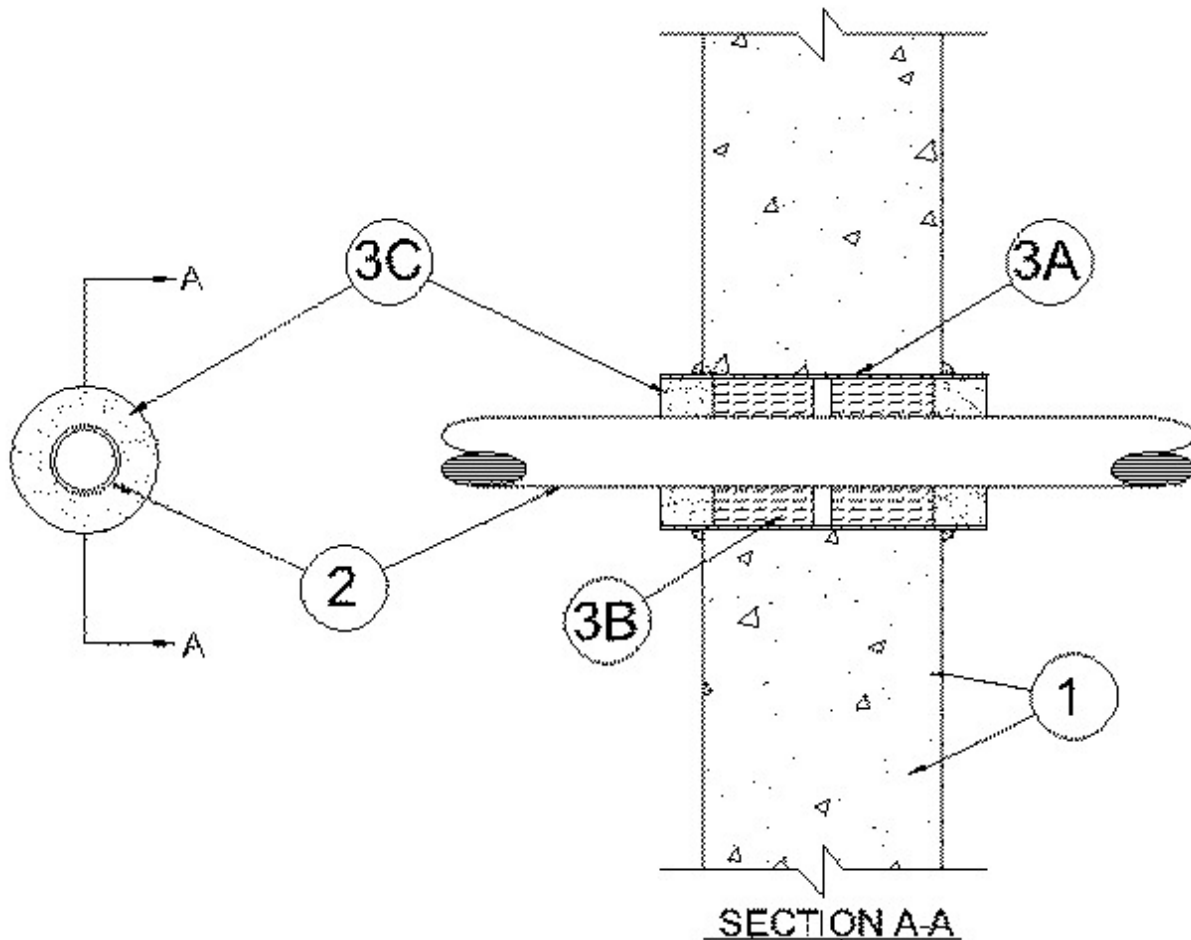
See General Information for Through-penetration Firestop Systems

System No. W-J-3087

November 11, 2002

F Rating — 2 Hr

T Ratings — 0 and 2 Hr (See Item 2)



1. **Wall Assembly** — Min 6 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max diam of opening is 2 in.

See **Concrete Blocks** (CAZT) category in the Fire Resistance Directory for names of manufacturers.

2. **Cables** — One cable to be centered within the firestop system. A nom annular space of 1/4 in. is required within the firestop system. Cable to be rigidly supported on both sides of wall assembly. The following types and sizes of copper conductor cables may be used:

- A. 1/C-500 kcmil (or smaller) cable with cross-linked polyethylene insulation and jacket.
- B. 100 pair No. 24 AWG (or smaller) cable with polyvinyl chloride (PVC) insulation and jacket.
- C. Type RG/U coaxial cable with fluorinated ethylene propylene insulation and jacket.
- D. Max 2/C - No. 12 AWG (or smaller) cable with (PVC) insulation and jacket.
- E. Max 3/C with ground - No. 10 AWG (or smaller) Type NM nonmetallic sheathed cable.

2A. **Cables - (Not Shown)** — As an alternate to Item 2, a max of seven cables bundle together and centered within the firestop system. A nom annular space of 1/4 in. is required within the firestop system. Cables to be rigidly supported on both sides of wall assembly. The following types and sizes of copper conductor cables may be used:

- A. Max 4 pair No. 24 AWG cable (or smaller) with polyvinyl chloride (PVC) insulation and jacet.
- B. Type RG/U coaxial cable with fluorinated ethylene propylene insulation and jacket.

The T Rating of the firestop system is dependent upon the type of cable used as tabulated below:

Cable Type	T Rating Hr
1/C-500 kcmil	0
100 Pair No. 24 AWG	0
RG/U	2
3/C No. 10 AWG	0
2/C No. 12 AWG	0

4 pair No. 24 AWG	0
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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 periphery of the opening.

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. Fill material to be forced into interstices of cable bundle to max extent possible on both sides of wall assembly. A min 1/2 in. bead of fill material shall be applied at the steel sleeve/concrete interface on both surfaces of wall.

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

*** 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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