

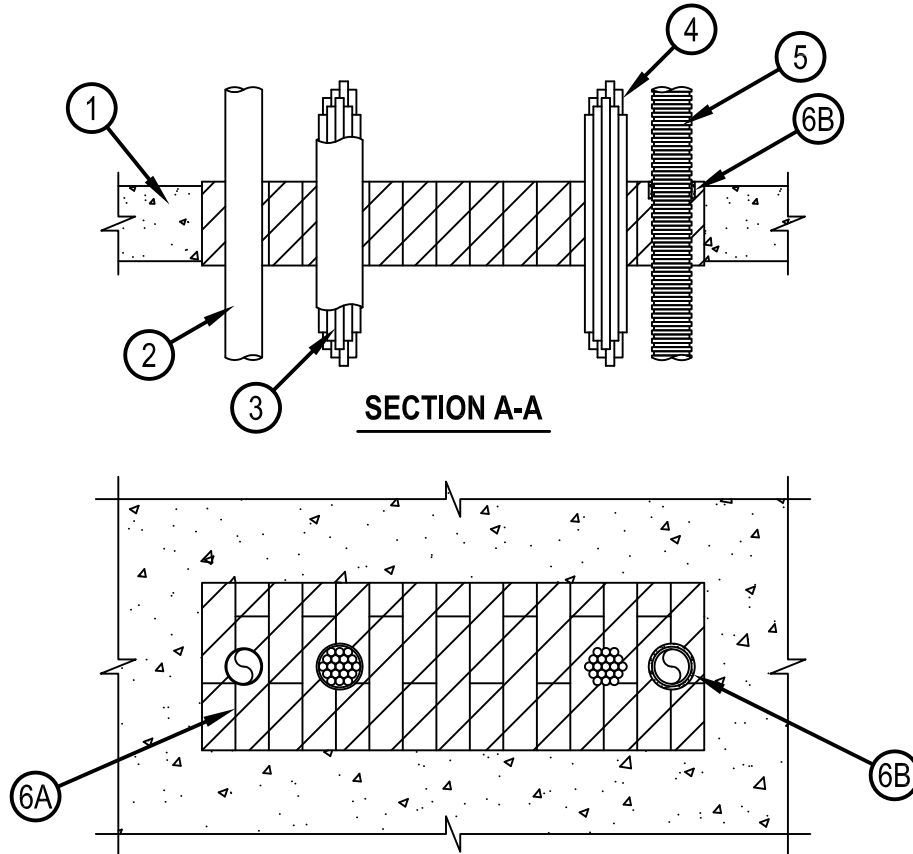


Classified by  
Underwriters Laboratories, Inc.  
to UL 1479 and CAN/ULC-S115

## System No. C-AJ-8209

CAJ 8209

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 3 Hr	F Rating — 3 Hr
T Rating — 3/4, 1, 1-3/4 and 3 Hr (See Items 2, 3, 4 and 5)	FT Rating — 3/4, 1, 1-3/4 and 3 Hr (See Items 2, 3, 4 and 5)
	FH Rating — 3 Hr
	FTH Rating — 3/4, 1, 1-3/4 and 3 Hr (See Items 2, 3, 4 and 5)



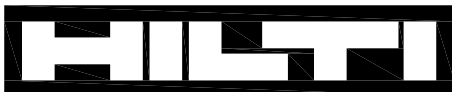
System tested with a pressure differential of 2.5 Pa between the exposed and the unexposed surfaces with the higher pressure on the exposed side.

1. Floor or Wall Assembly — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf) concrete floor or concrete wall. Wall may also be constructed of any solid or filled UL Classified Concrete Blocks\*. Max area of 300 sq. in. (1935 sq. mm) with max dimension of 30 in. (762 mm).

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

2. Electrical Metallic Tubing — Nom 2 in. (51 mm) diam (or smaller) steel electrical metallic tubing (EMT), or steel conduit. The min space between adjacent penetrants shall be 3 in. (76 mm). Tubing or conduit to be rigidly supported on both sides of floor assembly. When EMT is used, the T, FT and FTH Ratings are 3/4 Hr.

3. Cable — 1800 pair - No. 24 AWG 01 ARMM telephone cable with polyvinyl chloride (PVC) insulation and jacket. The min space between adjacent penetrants shall be 3 in. (76 mm). Cable to be rigidly supported on both sides of floor assembly. When 1800 pair cable is used, the T, FT and FTH Ratings are 1 Hr.



**Hilti Firestop Systems**

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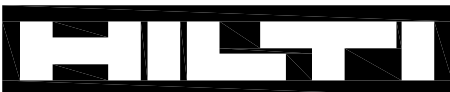
January 14, 2015

## System No. C-AJ-8209

4. Cables — Max 3 in. (76 mm) diam tightly bundled cable bundle. The minimum space between adjacent penetrants shall be 1-1/2 in. (38 mm). Cables to be rigidly supported on both sides of wall assembly.
- Max 300 pair No. 24 AWG copper telephone cables with polyvinyl chloride (PVC) insulation and jacket materials. When 300 pair cable is used, T Rating is 1 Hr.
  - Max 7/C No. 12 AWG cable with PVC insulation and jacket materials. When 7/C No. 12 cable is used, T Rating is 1 Hr.
  - Multiple fiber optical communication cables with PVC jacket material and having a max outside diameter of 1/2 in. (38 mm). When fiber optic cable is used, the T, FT and FTH Ratings are 1-3/4 Hr.
5. Optical Fiber/Communication Cable Raceways+ — Nom 2 in. (51 mm) diam (or smaller) optical fiber raceway, formed from polyvinyl chloride (PVC). Raceway to be installed in accordance with the National Electrical Code (NFPA No. 70). The min space between adjacent penetrants shall be 3 in. (76 mm). Raceway to be rigidly supported on both sides of floor assembly. When raceway is used, the T, FT and FTH Ratings are 3 Hr.
- See Optical Fiber/Communication Cable Raceways (QAZM) category in the Electrical Construction Materials Directory for names of manufacturers
6. Firestop System — The annular space between the individual penetrants and the periphery of the opening shall be min 1/2 in. (13 mm) to max 11-1/4 in. (286 mm). The annular space between penetrants shall not exceed 12 in. (305 mm). The firestop system shall consist of the following:
- Fill, Void or Cavity Material\* — Fire Blocks - Blocks installed with 5 in. (127 mm) dimension projecting through and centered within opening. Blocks to be firmly packed to fill the opening area.  
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CFS-BL Firestop Block
  - Fill, Void or Cavity Material\* — Wrap Strip - (Optional) - Nom 3/16 in. (4.76 mm) thick by 1 in. (25 mm) wide intumescent wrap strip. One layer of wrap strip is individually wrapped around raceway with ends butted and held in place with tape. Wrap strip installed flush with top surface of block in floor assemblies or both surfaces of fire block in wall assemblies.  
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP648-E- W25/1" Wrap Strip
  - Fill, Void or Cavity Material\* — Fill material to be forced into interstices of cables, between cables and cable tray and in voids between blocks and between blocks and the periphery of the opening to the max extent possible on both surfaces of wall or floor opening.  
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE Sealant, FS-ONE MAX Intumescent Sealant, CP618 Firestop Putty Stick or CP620 Fire Foam

+Bearing the UL Listing Mark

\* 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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