

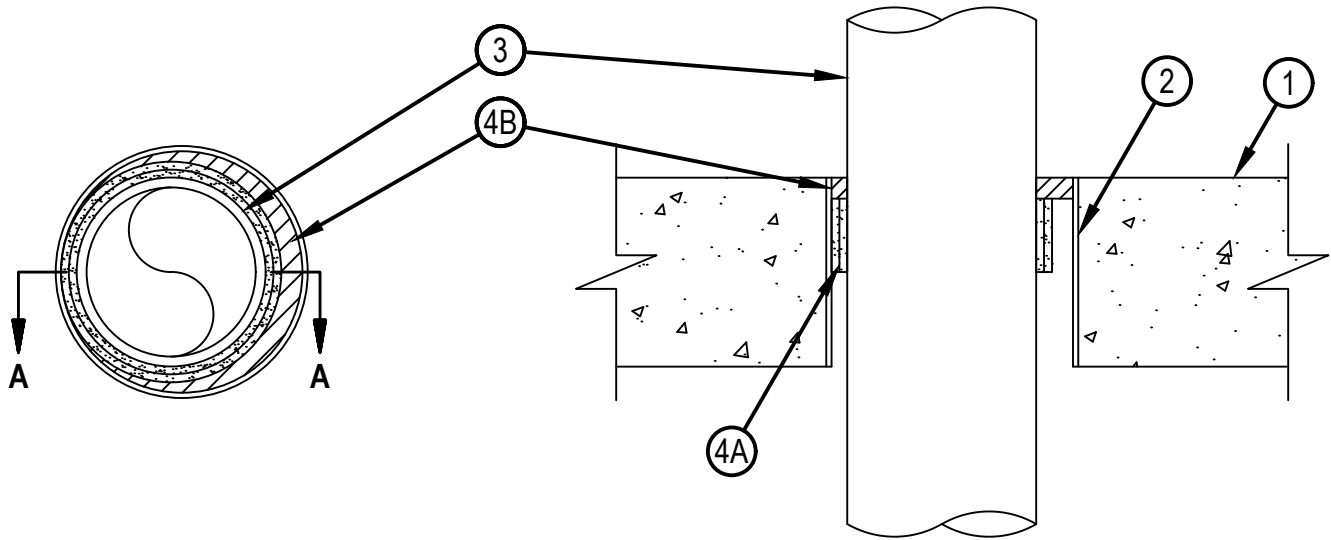


Classified by
Underwriters Laboratories, Inc.
to UL 1479

System No. C-AJ-2770

F Rating - 2 Hr
T Rating - 2 Hr

CAJ 2770



SECTION A-A

1. Floor or Wall Assembly — Min 4-1/2 in. (64 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete floor or wall. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 8 in. (203 mm).
See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Steel Sleeve — (Optional) Cylindrical sleeve fabricated from min 0.016 in. (0.41 mm) thick galv sheet steel (28 gauge or heavier) and having a min 1-1/2 in. (38 mm) lap along the longitudinal seam. Sleeve installed by coiling the sheet steel to a diam smaller than the through opening, inserting the coil through the opening and releasing the coil. The ends of the steel sleeve shall be flush with each surface of the floor or wall.
- 2A. Nonmetallic Sleeve — (Optional) Nom 8 in. (203 mm) diam (or smaller) Schedule 40 (or heavier) solid or cellular core polyvinyl chloride (PVC) sleeve cast or grouted into floor or wall assembly, flush with floor or wall surfaces.
3. Through Penetrants — One nonmetallic pipe to be installed concentrically or eccentrically within the firestop system. Annular space within the firestop system is dependent upon the max diam and type of penetrant used as tabulated in Item 4A. Pipe to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of nonmetallic pipes may be used:
 - A. Polypropylene Random (PP-R) Pipe — Nom 6 in. (160 mm) diam (or smaller) Cosmoplast PP-R SDR 6 pipe for use in closed (process or supply) piping systems.
 - B. Polypropylene Random (PP-R) Pipe — Nom 4 in. diam (110 mm OD) (or smaller) Coprax PP-R SDR 6 pipe for use in closed (process or supply) piping systems.
 - C. High Density Polyethylene (HDPE) Pipe — Nom 6 in. (152 mm) diam (or smaller) SDR 11 HDPE pipe for use in closed (process or supply) piping systems.
4. Firestop System — The firestop system shall consist of the following:
 - A. Fill, Void or Cavity Material* — Wrap Strip — Nom 3/16 in. (4.8 mm) thick by 1-3/4 in. (44 mm) wide intumescent wrap strip. Layers of wrap strip are continuously wrapped around the pipe with ends tightly butted and held in place with tape. Wrap strip installed within the opening and recessed from top surface of floor or from both surfaces of wall to accommodate the required thickness of sealant (Item 4B). The number of layers for a given size penetrant is shown in table below:
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP648-E W45/1-3/4" Firestop Wrap Strip



Hilti Firestop Systems

Reproduced by HILTI, Inc. Courtesy of
Underwriters Laboratories, Inc.
October 14, 2019

System No. C-AJ-2770

CAJ 2770

Item 3A Pipe Diam, in. (OD mm)*	Item 3B Pipe Diam, in. (OD mm)*	Item 3C Pipe Diam, in. (OD mm)*	Max Opening Diam, in. (mm)	Annular Space Max, in. (mm)	Annular Space Max, in. (mm)	Number of Layers
1-1/2 (40)	1-1/2 (50)	1-1/2 (50)	3 (76)	3/16 (4.8)	15/16 (24)	1
2 (50)	2 (63)	2 (51)	3-1/2 (89)	3/16 (4.8)	15/16 (24)	1
-	-	2 (51)	4 (102)**	3/8 (10)	1-1/4 (32)	2
3 (75)	3 (90)	3 (90)	4 (102)	3/16 (4.8)	15/16 (24)	1
4 (100)	4 (110)	4 (102)	6 (152)	3/8 (10)	1-1/8 (29)	2
6 (160)	-	6 (152)	8 (203)	9/16 (14)	1 (25)	3

Note: Metric dimensions shown for pipes in parenthesis are actual metric OD's marked on pipe.

**Applicable to Item 2A sleeve only when opening is sleeved.

B. Fill, Void or Cavity Material* — Sealant — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with top surface of floor of both surfaces of wall.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE MAX Intumescent Sealant

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



Hilti Firestop Systems

Reproduced by HILTI, Inc. Courtesy of
Underwriters Laboratories, Inc.
October 14, 2019