



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

System No. C-AJ-2684

F Ratings — 2 and 3 Hr (See Item 3A)

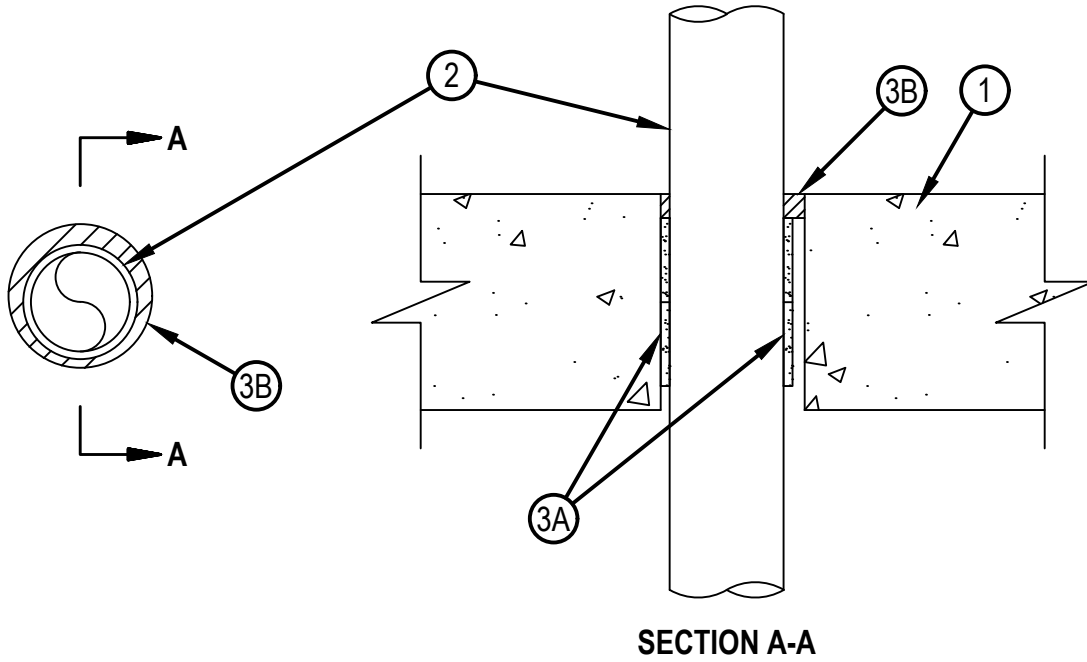
FT Rating — 0 Hr

FH Ratings — 0, 2 and 3 Hr (See Item 3A)

FTH Rating — 0 Hr



CAJ 2684



SECTION A-A

System tested with a pressure differential of 50 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 or 1600-2400 kg/m³) concrete floor or wall. Wall may also be constructed of any solid or filled UL Classified Concrete Blocks*. Max diameter of opening is 5 in. (127 mm).

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

2. Through Penetrant — One nonmetallic pipe to be installed either concentrically or eccentrically within the firestop system. The annular space between pipe and edge of opening shall be as specified in the Table below. 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. XFR 15/50 Polyvinyl Chloride (PVC) Pipe — Nom 3 in. (76 mm) diam (or smaller) Schedule 40 solid core XFR-PVC pipe for use in closed (process or supply) or vented (drain, waste, or vent) piping systems.

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

A. Fill, Void or Cavity Material* - Wrap Strip — Intumescent wrap strip wrapped around the pipe with ends butted and held in place with aluminum tape. The required number of layers and stack for the wrap strip vary depending on pipe diam and F Rating as indicated in Table below. Wrap installed recessed 1/2 in. (13 mm) from top surface of floor to accommodate fill material. In walls, the wrap strip shall be installed on both surfaces of the wall such that the exposed edge of the wrap strip is recessed 1/2 in. (13 mm) from each side of wall.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP648-E W45/1-3/4" Wrap Strip



Hilti Firestop Systems

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February 13, 2017

System No. C-AJ-2684

CAJ 2684

Max Pipe Diam	F Rating, hr	FH Rating, hr	Wrap Strip	Sealant	Max Opening Diam	Annular Space
2 in. (51 mm)	2	2	One layer, single stack	FS-ONE, FS-ONE MAX	3 in. (76 mm)	Min 3/16 in. (5mm), Max 7/16 in. (11 mm)
2 in. (51 mm)	3	3	One layer, double stacked	FS-ONE, FS-ONE MAX	3 in. (76 mm)	Min 3/16 in. (5mm), Max 7/16 in. (11 mm)
3 in. (76 mm)	2	0	Two layers, single stack	FS-ONE, FS-ONE MAX, CFS-S SIL GG	5 in. (127 mm)	Min 1/2 in. (13mm), Max 1 in. (25 mm)

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 or both surfaces of wall. The type of sealant permitted is dependent on the pipe diam, F and FH Ratings as specified in the Table above.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE Sealant, FS-ONE MAX Intumescent Sealant or CFS-S SIL GG Sealant

* 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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