



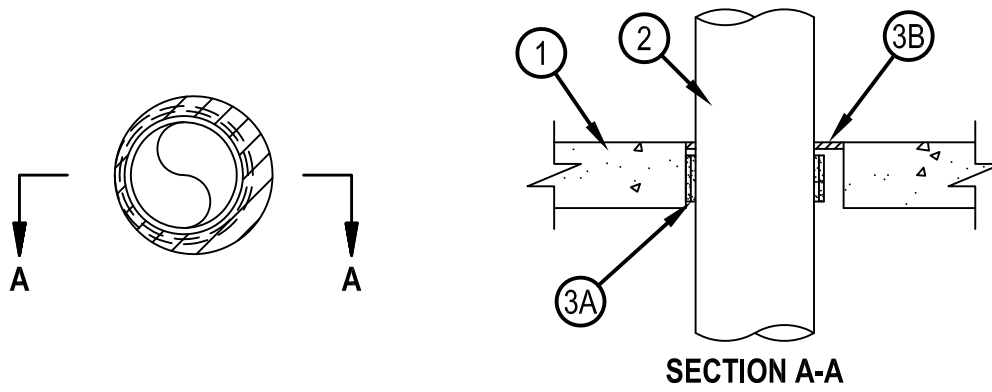
Classified by
Underwriters Laboratories, Inc.
to CAN/ULC-S115

System No. C-AJ-2022

F Rating — 2 Hr
FT Rating — 0 Hr
FH Rating — 0 Hr
FTH Rating — 0 Hr



CAJ 2022



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 64 mm (2-1/2 in.) thick reinforced lightweight or normal weight 1600-2400kg/cu m (100-150 pcf) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diameter of opening 152 mm (6 in.).
See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. 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 3A. 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. Polyvinyl Chloride (PVC) Pipe — Nom 102 mm (4 in.) diam (or smaller) Schedule 40 solid or cellular core PVC for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
 - B. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 102 mm (4 in.) diam (or smaller) SDR11 or SDR 13.5 CPVC pipe for use in closed (process or supply) piping systems.
 - C. Flame Retardant Polypropylene (FRPP) Pipe — Nom 102 mm (4 in.) diam (or smaller) Schedule 40 (or heavier) FRPP pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
 - D. Acrylonitrile Butadiene Styrene (ABS) Pipe — Nom 102 mm (4 in.) diam (or smaller) Schedule 40 solid or cellular core ABS for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
 - E. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 102 mm (4 in.) diam (or smaller) SDR 11 CPVC for use in closed (process or supply) piping systems.
IPEX INC — AquaRise
 - F. Rigid Nonmetallic Conduit+ — Nom 102 mm (4 in.) diam (or smaller) Schedule 40 PVC conduit installed in accordance with the National Electrical Code (NFPA No. 70).



Hilti Firestop Systems

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January 07, 2015

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

A. Fill, Void or Cavity Material* - Wrap Strip — Nom 5 mm (3/16 in.) thick by 45 mm (1-3/4 in.) wide intumescent wrap strip. The layers of wrap strip are continuously wrapped tightly around pipe with end held in place with tape. Wrap strip installed recessed 6 mm (1/4 in.) from bottom surface of floor or from both surfaces of wall . The max diam of opening, max diam and type of penetrant, annular space within the firestop system and width and layers of wrap strip required are tabulated below.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 648E-W45/1-3/4" Wrap Strip

Max diam of Opening - mm (In.)	Max diam of Penetrant - mm (In.)	Annular Space - mm (In.)	Layers of Wrap Strip
89 (3-1/2)	51 (2)	Min 5 (3/16) to Max 22 (7/8)	1
127 (5)	76 (3)	Min 10 (3/8) to Max 29 (1-1/8)	2
152 (6)	102 (4)	min. 10 (3/8) to Max 29 (1-1/8)	2

B. Fill, Void or Cavity Materials*-Sealant — Min 6 mm (1/4 in.) 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 Sealant or 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.

+Bearing the UL Listing Mark

