

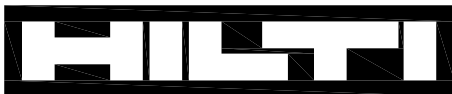
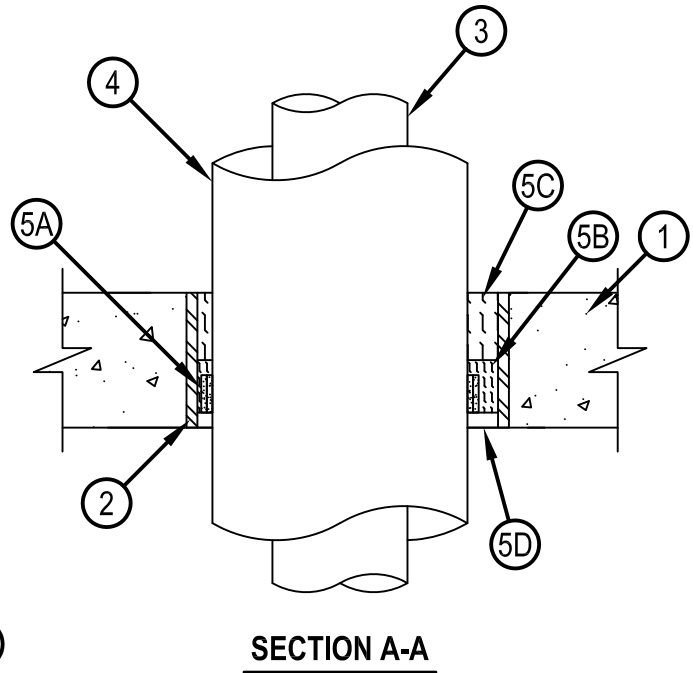
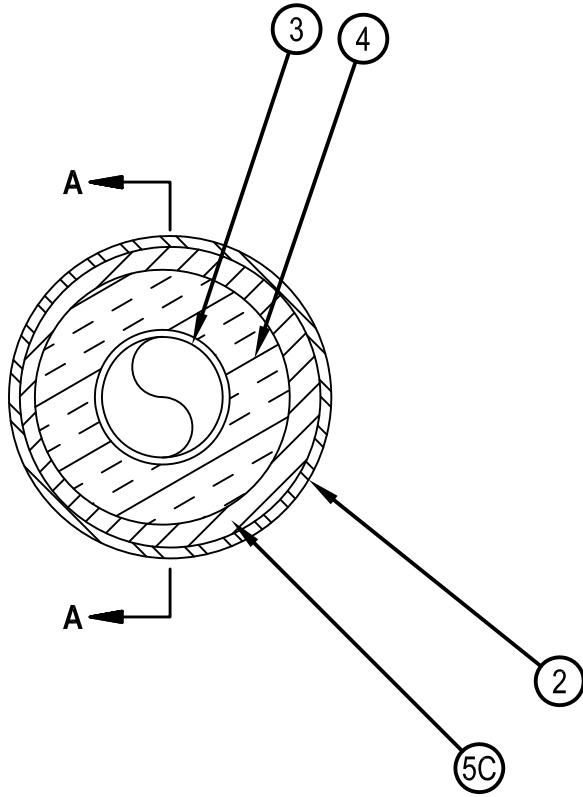


Classified by
Underwriters Laboratories, Inc.
to UL 1479 and CAN/ULC-S115

System No. C-AJ-5342

CAJ 5342

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 2 Hr	F Rating — 2 Hr
T Rating — 0 and 1-1/2 Hr (See Item 4)	FT Rating — 0 and 1-1/2 Hr (See Item 4)
	FH Rating — 2 Hr
	FTH Rating — 0 and 1-1/2 Hr (See Item 4)



Hilti Firestop Systems

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January 13, 2015

System No. C-AJ-5342

CAJ 5342

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. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 10 in. (254 mm).
See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Metallic Sleeve — (Optional) — Nom 10 in. (254 mm) diam (or smaller) Schedule 10 steel pipe, cast or grouted into floor or wall assembly, flush with floor or wall surfaces.
3. Through Penetrant — One metallic pipe to be installed either concentrically or eccentrically within the firestop system. Through penetrant to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic pipe may be used:
 - A. Copper Pipe — Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe.
 - B. Copper Tubing — Nom 4 in. (104 mm) diam (or smaller) Type L (or heavier) copper tubing.
 - C. Steel Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 40 (or heavier) steel pipe.
 - D. Iron Pipe — Nom 4 in. (102 mm) diam (or smaller) cast or ductile iron pipe.
4. Pipe Covering* — Nom 1 to 2 in. (25 to 51 mm) thick hollow cylindrical heavy density (min 3.5 pcf or 48 kg/m³) glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with factory-applied self-sealing lap tape or metal fasteners. Transverse joints secured with metal fasteners or butt tape supplied with the product. A nom annular space of min 1/2 in. (13 mm) to max 1-1/2 in. (38 mm) is required within the firestop system. The T, FT and FTH Ratings for the firestop system are 1-1/2 hr except than when pipe covering thickness is less than 2 in. (51 mm), the T, FT and FTH Ratings are 0 hr.
See Pipe and Equipment Covering - Materials (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.
5. Firestop System — The firestop system shall consist of the following:
 - A. Fill, Void or Cavity Material* - Wrap Strip — Nom 3/16 in. (4.6 mm) thick by 1-3/4 in. (44 mm) wide intumescent wrap strip. The wrap strip is continuously wrapped around the outer circumference of the insulated pipe covering two times with the ends tightly butted and held in place with masking tape or aluminum tape. Wrap strip to be slid into the annular space such that the bottom edge of the wrap strip shall be recessed 1/2 in. (13 mm) from the bottom surface of the floor. In walls, the wrap shall be installed on both surfaces of the wall such that the outer edge of the wrap strip is recessed 1/2 in. (13 mm) from each side of the wall.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 648E Wrap Strip
 - B. Packing Material — Nom 1-3/4 in. (44 mm) thickness of min 4 pcf (64 kg/m³) mineral wool batt insulation firmly packed into opening to fill the annular space between wrap strip and periphery of opening. Packing material to be recessed 1/2 in. (13 mm) from the bottom surface of the floor or both surfaces of wall.
 - C. Packing Material — Min 2 in. (51 mm) thickness of min 4 pcf (64 kg/m³) mineral wool batt insulation firmly packed into opening to fill the annular space above the wrap strip, between insulated penetrant and periphery of opening. In walls, this packing material is approx. centered within the thickness of the opening to accommodate the wrap strip, sealant and forming materials at each side of opening (Items 5A, 5B and 5D).
 - D. Fill, Void or Cavity Material - Sealant — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus flush with the bottom surface of the floor or both surfaces of the 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.



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