

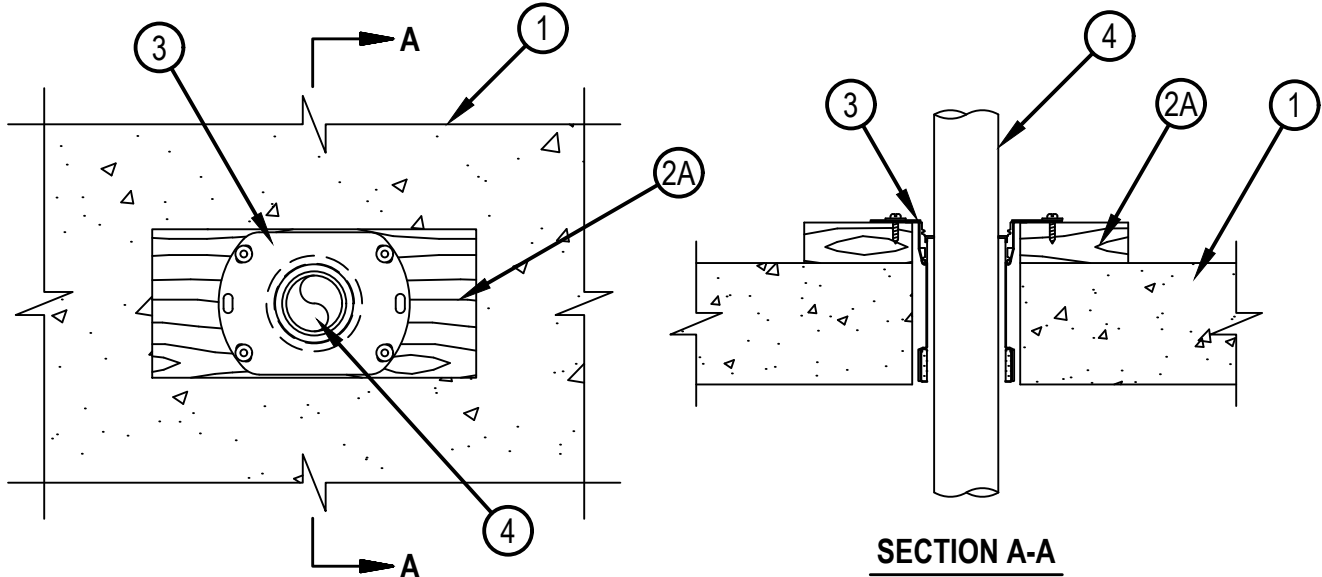


Classified by
Underwriters Laboratories, Inc.
to UL 1479 and CAN/ULC-S115

System No. F-A-1170

FA 1170

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 3 Hr	F Rating — 3 Hr
T Rating — 1/2 Hr	FT Rating — 1/2 Hr
	FH Rating — 3 Hr
	FTH Rating — 1/2 Hr



1. Floor Assembly — Min 4-1/2 in. (114 mm) to max 10-1/2 in. (267 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Min 6 in. (152 mm) to max 11 in. (279 mm) thick UL Classified hollow core Precast Concrete Units*. Diam of opening is 4 in. (102 mm).

See Precast Concrete Units (CFTV) categories in the Fire Resistance Directory for names of manufacturers.

2. Chase Wall — The chase wall shall be constructed to include the following construction features:

- A. Sole Plate — Min 2 by 6 in. (51 by 152 mm) lumber sill plate securely attached to concrete floor. Diam of opening is 4 in. (102 mm).
- B. Studs (Not Shown) — Nom 2 by 6 in. (51 by 152 mm) lumber studs.
- C. Gypsum Board* (Not Shown) — Min 1/2 in. (13 mm) thick gypsum board.

3. Firestop Device* — Drop-in firestop device installed in core-drilled opening through sill plate and concrete floor assembly in accordance with accompanying installation instructions. For hollow core floors, the firestop device shall extend a max 1/2 in. (13 mm) below the bottom surface of the floor or may be recessed a max of 1/2 in. from the bottom surface of the floor. The firestop device flange shall be secured to the top surface of the lumber sole plate with four min 1 in. (25 mm) long Type W steel screws in conjunction with min 1 in. (25 mm) diam steel washers, two fasteners at each side of the device. The firestop devices shall be installed as detailed in the following table:

Core Hole or Sleeve Diam, In. (mm)	Firestop Device	Nom Diam of Through Penetrant, In. (mm)	Min-Max Concrete Floor Thickness In. (mm)
4 (102)	CFS-DID 2"C	2 (51) or smaller+	4-1/2 - 10-1/2 (114 - 267)
4 (102)	CFS-DID 2" HC8	2 (51) or smaller+	6 - 7 (152 - 178)
4 (102)	CFS-DID 2" HC10	2 (51) or smaller+	8 - 9 (203 - 229)
4 (102)	CFS-DID 2" HC12	2 (51) or smaller+	10 - 11 (254 - 279)

+ For pipe smaller than nom 2 in. (51 mm) diam, Adapter and Top Seal Plug is required to be used.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CFS-DID 2"C, CFS-DID 2"HC8, CFS-DID 2"HC10, CFS-DID 2"HC12



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4. Through Penetrant — One metallic pipe, conduit or tubing to be installed within the firestop device. Pipe, conduit or tubing to be rigidly supported on both sides of floor assembly. The following types of pipe, conduit or tubing may be used:
- A. Steel Pipe — Nom 2 in. (51 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - B. Iron Pipe — Nom 2 in. (51 mm) diam (or smaller) cast or ductile iron pipe.
 - C. Conduit — Nom 2 in. (51 mm) diam (or smaller) rigid steel conduit.
 - D. Conduit — Nom 2 in. (51 mm) diam (or smaller) steel electrical metallic tubing.
 - E. Copper Tubing — Nom 2 in. (51 mm) diam (or smaller) Type L (or heavier) copper tubing.
 - F. Copper Pipe — Nom 2 in. (51 mm) diam (or smaller) Regular or heavier copper pipe.

* 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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