

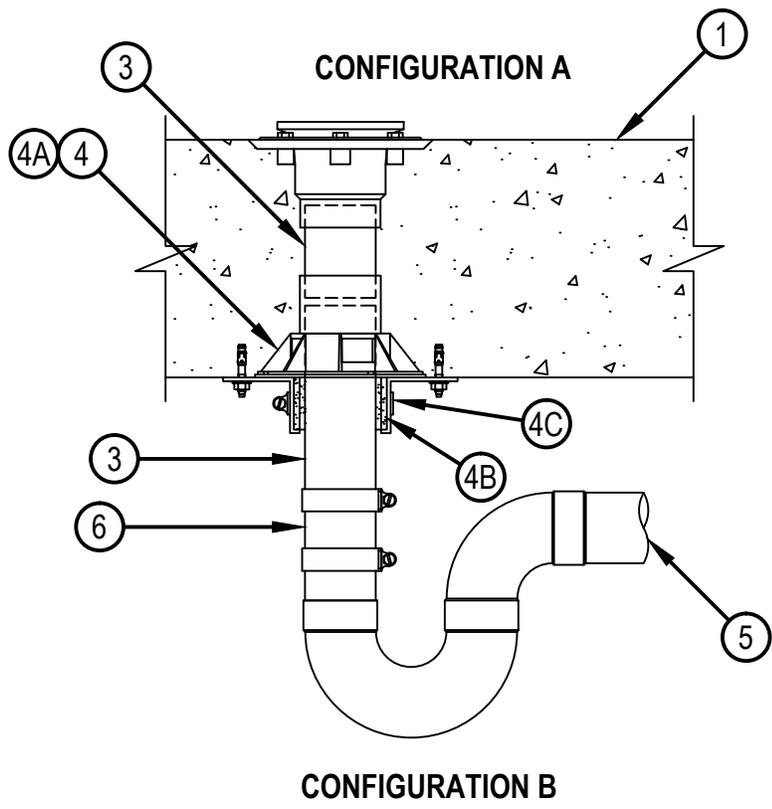
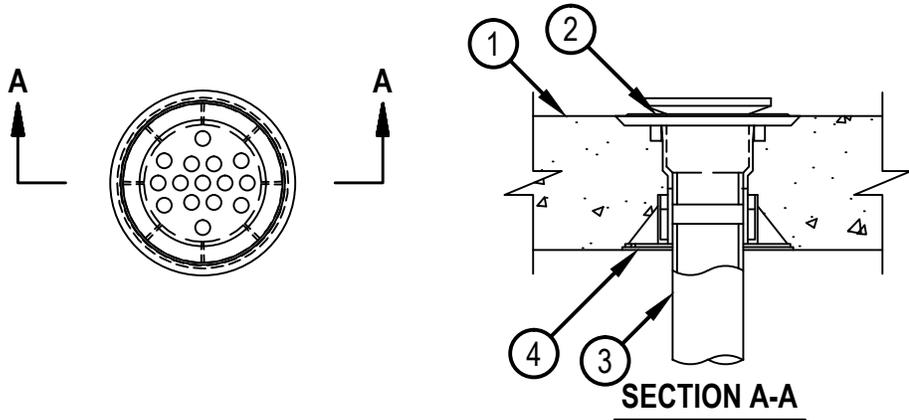


Classified by
Underwriters Laboratories, Inc.
to UL 1479 and CAN/ULC-S115

System No. F-A-2156

FA 2156

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 3 Hr	F Rating — 3 Hr
T Rating — 0 and 2 Hr (See Items 4 and 4A)	FT Rating — 0 and 2 Hr (See Items 4 and 4A)
L Rating At Ambient — Less Than 1 CFM/sq ft	FH Rating — 3 Hr
L Rating At 400 F — Less Than 1 CFM/sq ft	FTH Rating — 0 and 2 Hr (See Items 4 and 4A)
W Rating — Class 1	L Rating At Ambient — Less Than 1 CFM/sq ft
	L Rating At 400 F — Less Than 1 CFM/sq ft



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April 07, 2014

System No. F-A-2156

FA 2156

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 Assembly — Min 4-1/2 in. (114 mm) thick lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete floor assembly.
2. Shower Drain Fitting — Polyvinyl chloride (PVC) shower fitting with chromed steel shower drain or floor drain strainer sized to accommodate drain pipe. PVC body cemented to nonmetallic drain pipe (Item 3).
3. Drain Piping — Nom 2 in. (51 mm) diam Schedule 40 cellular or solid core polyvinyl chloride (PVC). Cemented within the shower drain fitting (Configuration B) and firestop device using PVC cement. Drain piping rigidly supported below floor with suitable hangers.
4. Firestop System — Firestop Device* - Cast in place firestop device permanently embedded during concrete placement or grouted in concrete assembly in accordance with accompanying installation instructions. The T, FT and FTH Ratings of the firestop system are 0 hr when Item 4 is used.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 681 75/2"N Tub Box Flange Cast-In Firestop Device.

- 4A. Firestop System — As an alternate to Item 4, the firestop system shall be as follows. The T, FT and FTH Ratings of the firestop system are 2 hr when the firestop system as described in Item 4A (Configuration B) is used.

A. Firestop Device* — Cast in place firestop device permanently embedded during concrete placement or grouted in concrete assembly in accordance with accompanying installation instructions.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 681 75/2"N Firestop Drain Flange or CP 681 SD-FD

B. Fill, Void or Cavity Material* — Wrap Strip — Nom 3/16 in. (5 mm) thick by nom 1 in. (25 mm) wide intumescent wrap strip is continuously wrapped around the outer circumference of the pipe two times with ends held in place with tape. Wrap strip butted tightly against bottom surface of floor.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP648-E Wrap Strip

C. Steel Collar — Steel collar fabricated from coils of precut min 0.016 in. (0.4 mm) thick (No. 28 gauge) galv steel available from fill material manufacturer. Collar shall be nom 1 in. (25 mm) deep with 1 in. (25 mm) wide by 2 in. (51 mm) long anchor tabs on 1-3/4 in. (44 mm) centers for securement to the underside of floor. The opposite side incorporates retainer tabs, 1/2 in. (13 mm) wide by 3/16 in. (5 mm) long, pre-bent toward the pipe surface. Collar shall be tightly wrapped over the wrap strip, overlapping min 1 in. (25 mm) at seam. A nom 1/2 in. (13 mm) wide stainless steel hose clamp shall be secured to the collar at its mid-height. Every other anchor tab of collar secured to concrete floor with 1/4 in. (6 mm) diam by 1-1/4 in. (32 mm) long steel expansion type masonry fasteners, 1-1/4 in. (32 mm) long concrete screw anchors or 0.145 in. (3.5 mm) diam by 1-1/4 in. (32 mm) long powder actuated fasteners utilizing a nom 9/16 in. (15 mm) diam steel washer. As alternates to the anchors specified above, Hilti 1/4 in. (6 mm) diam by 1-1/4 in. (32 mm) long KWIK-CON II+ concrete screw anchor or Hilti 1/4 in. (6 mm) diam by 1-3/4 in. (44 mm) long KWIK-BOLT 3 steel expansion anchor, or Hilti X-DNI 27 P8S15 powder actuated floor pin with integral nom 9/16 in. (15 mm) diam steel washer may be used. One collar to be used at the bottom of the concrete floor.

5. Drain Piping — (Optional) Nom 2 in. (51 mm) diam cast iron pipe drain pipe and P trap. Secured to PVC pipe with a compression coupling (Item 6). Drain piping rigidly supported below floor with suitable hangers.
6. Compression Coupling — (Optional) Compression type high pressure pipe coupling with elastomeric gasket and a stainless steel jacket. Secured to cast iron (Item 5) and PVC (Item 3) drain pipes with stainless steel band clamps.

*Bearing the UL Classification Mark



Hilti Firestop Systems

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