



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

# System No. F-A-2240

F Rating — 2 Hr

FT Ratings — 1/4 and 2 Hr (See Item 3)

FH Rating — 2 Hr

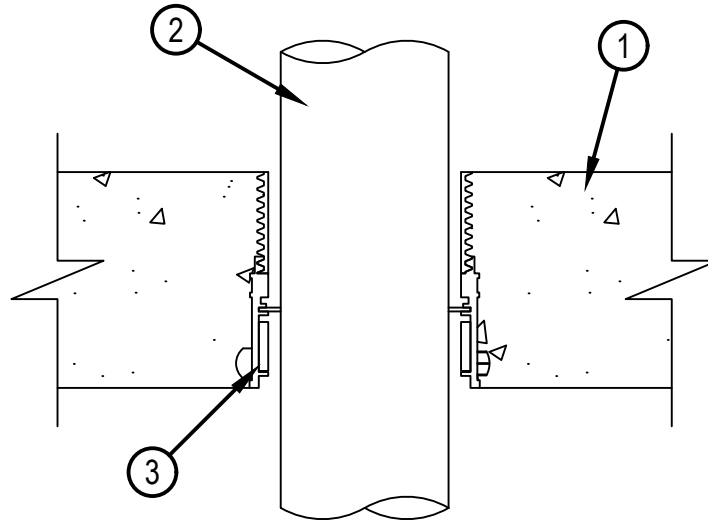
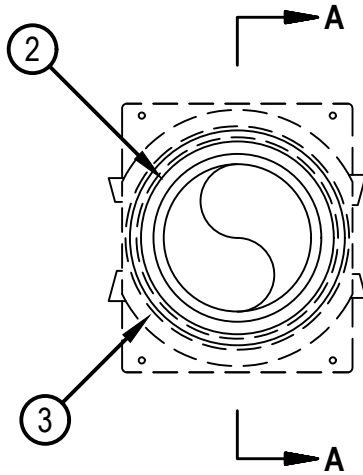
FTHs Rating — 1/4 and 2 Hr (See Item 3)

L Rating At Ambient — Less Than 1 CFM/sq ft (See Item 3)

L Rating At 400 F — Less Than 1 CFM/sq ft (See Item 3)



FA 2240



SECTION A-A



**Hilti Firestop Systems**

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Underwriters Laboratories, Inc.  
December 1, 2022

# System No. F-A-2240



FA 2240

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 114 mm (4-1/2 in.) thick light weight or normal weight concrete (1600-2400 kg/m<sup>3</sup> or 100-150 pcf).
  - 1A. Floor Assembly — (Optional — Not Shown) - The fire-rated unprotected concrete and steel deck floor assembly shall be constructed of the materials and in the manner specified in the individual D900 Series designs in the UL Fire Resistance Directory and as summarized below.
    - A. Concrete — Min 114 mm (4-1/2 in.) thick light weight or normal weight concrete (1600-2400 kg/m<sup>3</sup> or 100-150 pcf).
    - B. Steel Floor and Form Units — Composite or non-composite, max 76 mm (3 in.) deep galv steel fluted units as specified in the individual floor-ceiling design.
  2. Through Penetrant — One nonmetallic pipe to be centered within the firestop system. Pipe to be rigidly supported on both sides of floor assembly. The following types and sizes of pipe may be used:
    - A. Polyvinyl Chloride XFR (PVC-XFR) Pipe — Nom 38, 51, 76, 102 or 152 mm (1-1/2, 2, 3, 4 or 6 in.) nominal diam, Schedule 40 XFR PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.
    - B. HR Polyvinyl Chloride (PVC-HR) Pipe — Nom 51, 76, 102 or 152 mm (2, 3, 4 or 6 in.) nominal diam NAPSYS-HR PVC Sch 40 pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
3. Firestop Device\* — Cast in place firestop device permanently embedded during concrete placement or grouted in concrete assembly in accordance with accompanying installation instructions. Device to be sized for nom penetrant diam as indicated in Table below. Device cut flush with top surface of the concrete floor.

The FT and FTH Rating is dependent on the nom penetrant diam and device size as specified in Table below. L Rating applies only when the nom diam of pipe equals size of device (2 in. diam pipe in 2" device etc.)

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 680-PX 2", CP 680-PX 3", CP 680-P 4", CP 680-P 6"

Nom Penetrant Diam mm ( in.)	Firestop Device	F and FH Rating, hr	FT and FTH Rating, hr
38 (1-1/2) Item 2A	CP 680-PX 2"	2	1/4
51 (2) Item 2A and 2B	CP 680-PX 2"	2	2
76 (3) Item 2A	CP 680-PX 3"	2	2
76 (3) Item 2B	CP 680-PX 3"	2	1/4
102 (4) Item 2A	CP 680-P 4"	2	1/4
102 (4) Item 2B	CP 680-P 4"	2	2
152 (6) Item 2A and 2B	CP 680-P 6"	2	2

\* 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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