

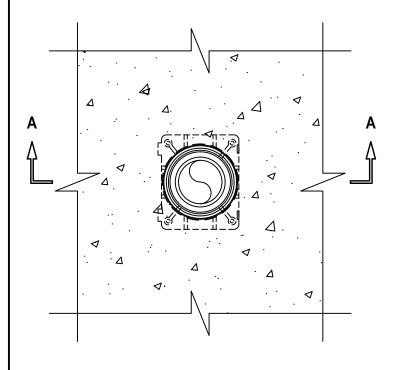
System No. F-A-2417

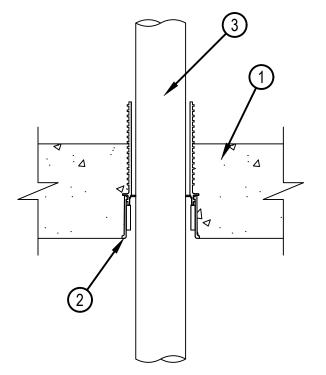


CAN/ULC S115
F Rating —3 Hr
FT Ratings — 0 and 1 Hr (See Item 3)
FH Ratings — 0 Hr
FTH Ratings — 0 Hr

TOP VIEW

SECTION A-A





System No. F-A-2417



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 normal weight concrete (2400 kg/m3 or 150 pcf). See table in Item 3.
- 2. Firestop Device* Cast in place firestop device, with optional accessories including sleeve extension, permanently embedded during concrete placement or grouted in concrete assembly in accordance with accompanying installation instructions with a max 51 mm (2 in.) projection above the top surface of the concrete.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CFS-CID U 2"CA

The ratings of the firestop systems are dependent on the diam of penetrant, size of device and thickness of the concrete assembly as indicated in the table below.

Min Concrete	Firestop Device	Penetrant Diam, mm (in.)	Packing Material (Item 4) Required	Ratings, h			
Thickness, mm (in.)				F	FT	FH	FTH
114 (4-1/2)	CFS-CID U 2" CA	51 (2)	No	3	0 and 2 #	0	0
114 (4-1/2)	CFS-CID U 2" CA	Less Than 51 (2)	Yes	3	0	0	0

- # T Rating only applies to closed piping systems.
- 3. Through Penetrant One nonmetallic tube to be centered within the firestop system. Tube to be rigidly supported on both sides of floor-ceiling assembly. The following type and size of tubing may be used:
 - A. Cross Linked Polyethylene (PEX) Tubing Nom 51 mm (2 in.) diam (or smaller) SDR9 PEX tubing for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
- 4. Packing Material (Not Shown) Where indicated in Table above, min 102 mm (4 in.) thickness of 64 kg/m3 (4 pcf) mineral wool insulation shall be firmly packed to the fullest extent possible within annulus of device above the smoke seal gasket, between penetrant and device. Packing material to be installed flush with top surface of device.
- * Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

