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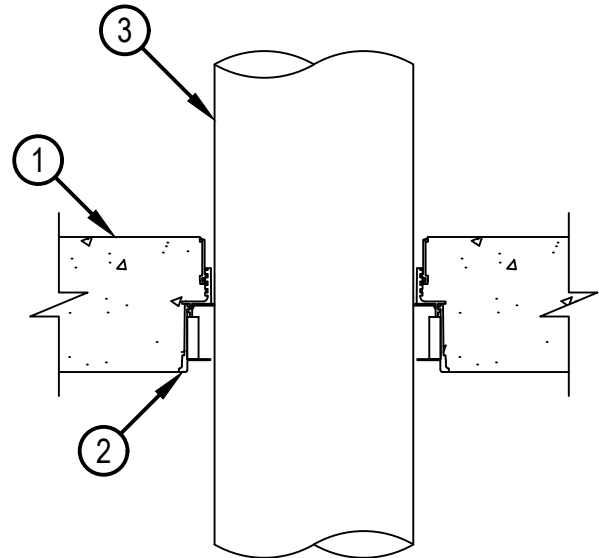
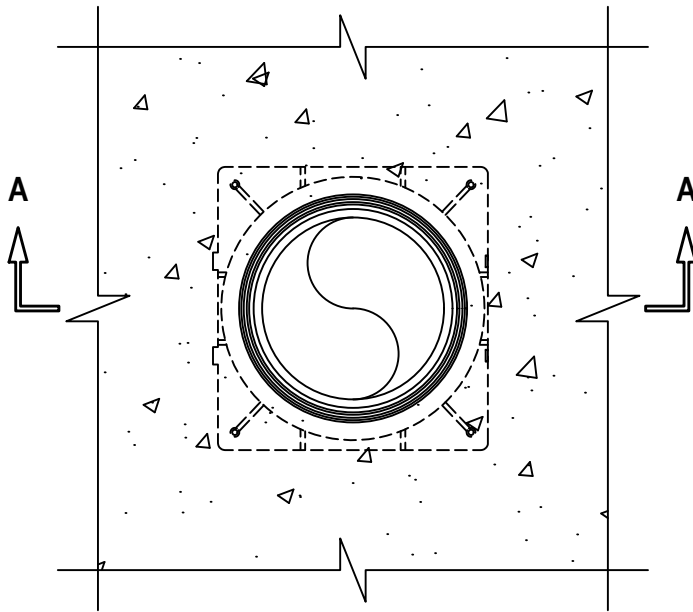
System No. F-A-2413

FA 2413

ANSI/UL1479 (ASTM E814)
F Rating — 2 Hr
T Rating — 2 Hr (See Item 3)
L Rating At Ambient — Less Than 1 CFM/sq ft
L Rating At 400°F — Less Than 1 CFM/sq ft
W Rating — Class 1 (See Item 3)**

TOP VIEW

SECTION A-A



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May 10, 2023

System No. F-A-2413

FA 2413

1. Floor Assembly — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete.
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 2 in. (51 mm) projection above the top surface of the concrete.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CFS-CID U 2", CFS-CID U 2" CA, CFS-CID U 3", CFS-CID U 4", CFS-CID U 6"
3. Through Penetrants — One nonmetallic pipe or conduit to be installed within the firestop system. Pipe or conduit to be rigidly supported on both sides of floor-ceiling assembly. The following types and sizes of nonmetallic pipes or conduits may be used:
 - A. Polyvinyl Chloride (PVC) Pipe — Nom 6 in. (152 mm) diam (or smaller) Schedule 40 solid or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
 - B. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 6 in. (152 mm) diam (or smaller) SDR13.5 CPVC pipe for use in closed (process or supply) piping systems.

Nom Pipe Diameter ++	Firestop Device	T Rating-Hr
1-1/4 to 2 in. (32 to 51 mm)	CFS-CID U 2", CFS-CID U 2" CA	2
2- to 3 in. (51 to 76 mm)	CFS-CID U 3"	2
3 to 4 in. (76 to 102 mm)	CFS-CID U 4"	2
6 in. (152 mm)	CFS-CID U 6"	2

When pipe diameters other than those shown in the above table are used, pipes shall be installed in conjunction with Item 4 and the T Ratings are 0 hr.

++ L Rating applies to pipe diameters and firestop devices as listed in table above.

**When W-rating is required – When nominal pipe diameter matches device size, pipe may be installed in any orientation. When nominal pipe diameter is smaller than device size, pipe must be installed from the bottom.

4. Packing Material — (Not Shown) When pipe sizes are less than those shown in the above table, a 4 in. (102 mm) thickness of 4 pcf (64 kg/m³) mineral wool insulation shall be firmly packed to the fullest extent possible within annulus 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.



Hilti Firestop Systems

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