



Classified by  
Underwriters Laboratories, Inc.  
to UL 1479

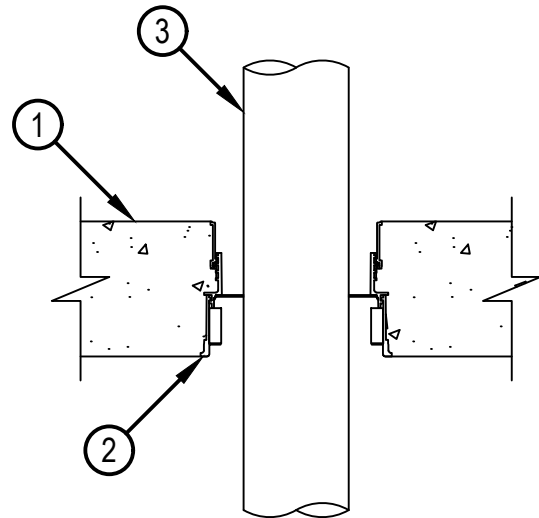
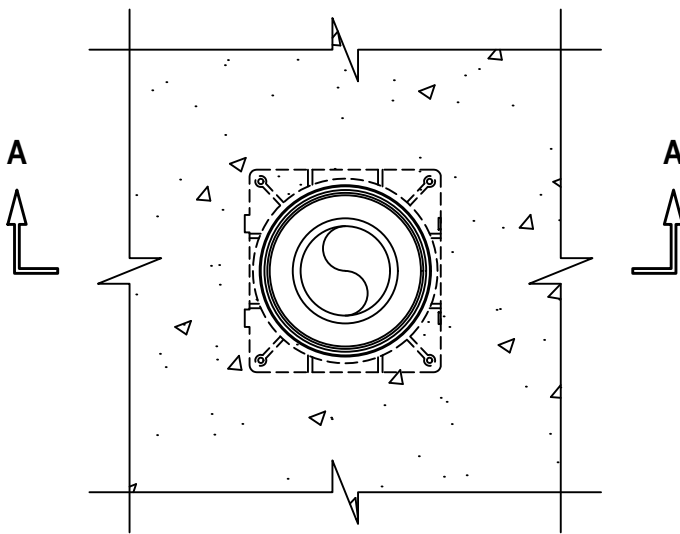
## System No. F-A-2414

ANSI/UL1479 (ASTM E814)
F Rating — 2 and 3 Hr (See Item 3)
T Rating —0 Hr
W Rating — Class 1 (See Item 2)**

FA 2414

**TOP VIEW**

**SECTION A-A**



1. Floor Assembly — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m<sup>3</sup>) concrete.
2. Firestop Device\* — Cast in place firestop device permanently embedded during concrete placement or grouted in concrete assembly in accordance with accompanying installation instructions. The 3" and 4" device may extend a max 2 in. (51 mm) above the top surface of the concrete. The max extension above the slab for the 2" device is not restricted.  
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CFS-CID U 2", CFS-CID U 2" CA, CFS-CID U 3", CFS-CID U 4",
3. Through Penetrants — One nonmetallic pipe to be installed within the firestop system. Pipe to be rigidly supported on both sides of floor assembly. The following types and sizes of nonmetallic pipes may be used:
  - A. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 2 in. (51 mm) diam (or smaller) FLOWGUARD GOLD® SDR11 CPVC pipe for use in closed (process or supply) piping systems.
  - B. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 3 in. (76 mm) diam (or smaller) BLAZEMASTER® SDR13.5 CPVC pipe for use in closed (process or supply) piping systems.

The firestop devices and nonmetallic pipes shall be sized as follows:

Nom Pipe Diameter	Firestop Device	F-Rating (Hr)
1-1/4 (32 mm)	CFS-CID U 2", CFS-CID U 2" CA	2
1-1/2 to 2 in. (38 to 51 mm)	CFS-CID U 2", CFS-CID U 2" CA	3
2- to 3 in. (51 to 76 mm)	CFS-CID U 3"	3
3 in (76 mm)	CFS-CID U 4"	3

4. Firestop Device\* — (Not shown) When pipe sizes are less than those shown in the table above, a 4 in. (102 mm) thickness of 4 pcf (64 kg/m<sup>3</sup>) mineral wool insulation shall be firmly packed to the fullest extent possible within annulus flush with top surface of device.

\*\* 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

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

