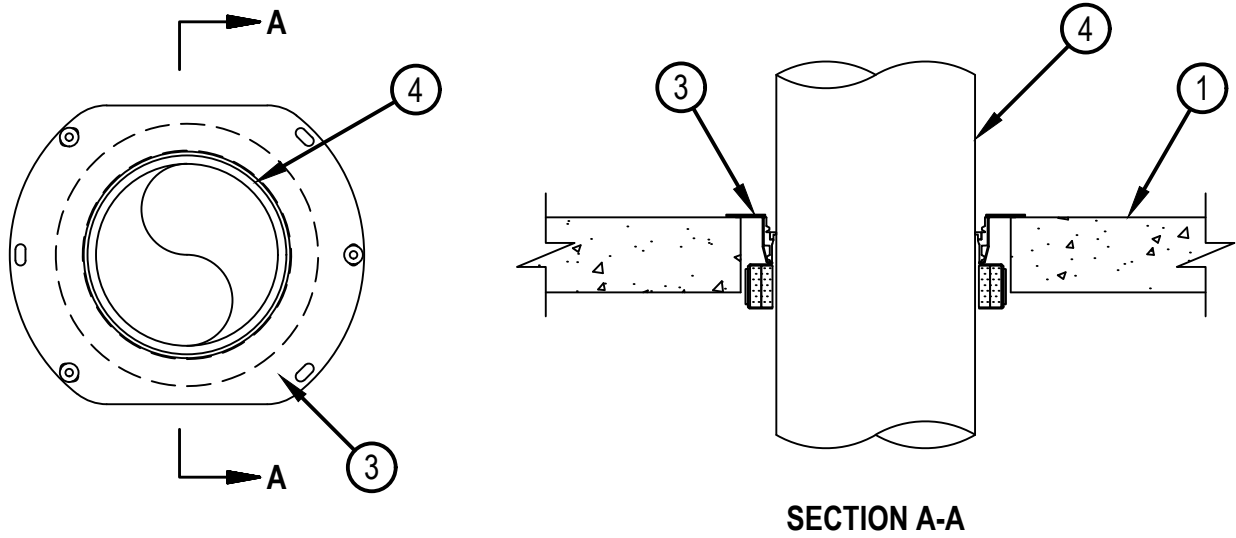




Classified by
Underwriters Laboratories, Inc.
to UL 1479

System No. F-A-2271
F Rating - 2 Hr
T Rating - 0 and 3/4 Hr (See Items 2 and 2A)

FA 2271



1. Floor or Wall Assembly — Min 2-1/2 in. (64 mm) to max 8 (203 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Max diam of opening is 9 in. (229 mm).
2. Metallic Sleeve — (Optional, Not Shown) -Nom 6 in. (152 mm) or 9 in. (229 mm) diam Schedule 10 (or heavier) steel sleeve cast or grouted into floor assembly, flush with floor surfaces. When metallic sleeve is used, T Rating is 0 Hr.
- 2A. Sheet Metal Sleeve — (Optional, Not Shown) — Nom 6 or 9 in. (152 or 229 mm) diam, min 26 ga galv steel provided with a 26 ga galv steel square flange spot welded to the sleeve at approx mid-height, or flush with bottom of sleeve in floors, and sized to be a min of 2 in. (51 mm) larger than the sleeve diam. The sleeve is to be cast in place and may extend a max of 4 in. (102 mm) below the bottom of the deck and flush with the top surface of the concrete floor. When sheet metal sleeve is used, T Rating is 0 Hr.
3. Firestop Device* — Drop-in firestop device installed in core-drilled or sleeved opening in concrete floor assembly in accordance with accompanying installation instructions. The firestop device flange should be secured to the top surface of the floor with three 1/4 in. (6 mm) diam by min 1-1/4 in. (32 mm) long steel expansion bolts or screw anchors (installed in a triangular fashion through holes provided). 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, Hilti 1/4 in. (6 mm) diam by 1-3/4 in. (45 mm) long KWIK-BOLT 3 steel expansion anchor or Hilti 1/4 in. (6 mm) by 3/4 in. (19 mm) long Metal HIT Anchor may be used. The firestop devices shall be installed as detailed in the following table:

Core Hole or Sleeve Diam, In. (mm)	Firestop Device	Nom Diam of Through Penetrant, In. (mm)
4 (102)	CFS-DID 2"MD	2 (63)
6 (152)	CFS-DID 4"MD	3 (90)
9 (229)	CFS-DID 6"MD	4 (125)

Note: Metric dimensions shown for pipes in parenthesis are actual metric OD's marked on pipe.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CFS-DID 2"MD, CFS-DID 4"MD, CFS-DID 6"MD



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System No. F-A-2271

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3A. Forming Material* - Foam Sealant (Not Shown) — For nom 4 in. pipes, min 1/2 in. (13 mm) thickness of foam sealant applied within annulus flush with top surface of device.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CF812 Foam Sealant

4. 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. Polypropylene Random (PP-R) Pipe — Nom 2 in. (63 mm), 3 in (90 mm) or 4 in. (125 mm) diam SDR 7.4 Aquatherm Green pipe for use in closed (process or supply) piping systems.

* 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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