

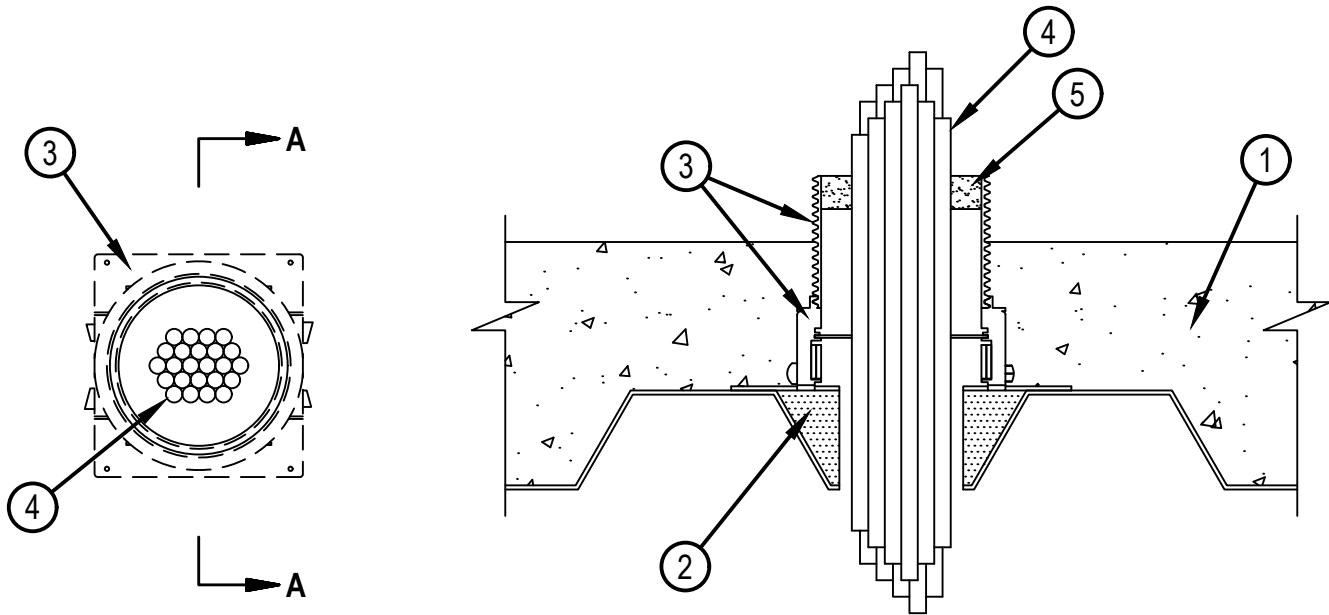


Classified by
Underwriters Laboratories, Inc.
to UL 1479 and CAN/ULC-S115

System No. F-A-3071

FA 3071

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 3 Hr	F Rating — 3 Hr
T Ratings — 1/4 and 1/2 Hr (See Items 4 and 5)	FT Ratings — 1/4 and 1/2 Hr (See Items 4 and 5)
	FH Rating — 3 Hr
	FTH Ratings — 1/4 and 1/2 Hr (See Items 4 and 5)



SECTION A-A



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November 20, 2019

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1. Floor Assembly — The fire rated unprotected concrete and steel 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 2-1/2 in. (64 mm) thick or min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete as specified in Item 4 Table.

B. Steel Floor and Form Units* — Max 3 in. (76 mm) deep galv steel fluted units as specified in the individual Floor-Ceiling Design.

2. Firestop Device* — Cast in place firestop device platform installed prior to concrete placement in floor assembly. The CFS-CID MD PLT firestop device platform is screwed to the fluted deck with one fastener at each corner in accordance with manufacturer installation instructions. The firestop device platform is sized for nominal 2 and 3 in. (51 and 76 mm) deep fluted decks.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CFS-CID MD PLT W2" and W3"

3. Firestop Device* — Cast in place firestop device installed over firestop device platform (Item 2) prior to concrete placement in floor assembly. The CFS-CID MD Firestop Device is set onto and screwed to the device platform in accordance with manufacturer installation instructions. The firestop device is sized for the diameter of the through penetrant and for the height of the concrete topping over the fluted deck. The 2.5" height devices are intended for a 2.5 in. (63.5 mm) concrete topping and the 4" height devices for concrete toppings greater than 2.5 in. (63.5 mm) thick. The firestop device may extend a max of 2 in. (51 mm) above the top surface of the concrete, except as noted in Item 5A.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CFS-CID MD M 2"/2.5", 3"/2.5" and 4"/2.5"; CFS-CID MD P 2"/2.5", 3"/2.5" and 4"/2.5"; CFS-CID MD M 2"/4", 3"/4" and 4"/4"; and CFS-CID MD P 2"/4", 3"/4" and 4"/4", CFS-CID MD PX 2"/2.5", 3"/2.5" and 4"/2.5" and CFS-CID MD PX 2"/4", 3"/4" and 4"/4"

4. Cables — Cables to be rigidly supported on both sides of the assembly. Any combination of the following types and sizes of copper conductor cables may be used:

A. Max 1/C 750 kcmil (or smaller) copper conductor cable with polyvinyl chloride (PVC) insulation and jacket.

B. Max 7/C No. 12 AWG with polyvinyl chloride (PVC) insulation and jacket.

C. Max 300 pair No. 24 AWG telephone cable with PVC insulation and jacket.

D. Multiple fiber optical communication cable jacketed with PVC and having a max OD of 1/2 in. (13 mm).

E. Max 3/C No. 12 AWG with ground with polyvinyl chloride jacketed steel clad Type MC cable.

F. Through-Penetrating Product* — Two copper conductors No. 18 AWG (or smaller) Power or Non Power Limited Fire Alarm Cable with or without a jacket under a metal armor.

AFC CABLE SYSTEMS INC

The firestop system shall be as follows:

Max Bundle Diameter	Firestop Device	Min Concrete Topping Thickness in. (mm)	T Rating Hr
2 in. (51 mm)	CFS-CID MD M 2", CFS-CID MD P 2"	2.5 (64) or 4.5 (114)	1/4
3 in. (76 mm)	CFS-CID MD M 3", CFS-CID MD M 4", CFS-CID MD P(X) 3", CFS-CID MD P(X) 4",	2.5 (64) or 4.5 (114)	1/4
4-1/2 in. (114 mm)	CFS-CID MD M 4", CFS-CID MD P(X) 4"	4.5 (114)	1/2



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5. Fill, Void or Cavity Material* - Putty — Min 1 in. (25 mm) thickness of fill material applied within annulus flush with top surface of device. Fill material is optional for 2-1/2 in. (64 mm) diam (or larger) cable bundle installed in 3" device and 3 in. (76 mm) diam (or larger) cable bundle installed in 4" device and 2 in. (51 mm) diam (or larger) cable bundle installed in 2" device. The T Rating for the firestop system is 1/4 hr when fill material or packing material (Item 5 or 5A) is not used.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 618 Firestop Putty Stick

5A. Packing Material (Not Shown) — As an alternate to Item 5, min 2 in. (51 mm) thickness of min 4 pcf (64 kg/m³) mineral wool insulation firmly packed to the fullest extent possible within annulus above smoke seal gasket flush with top surface of device. When concrete floor topping (Item 1A) thickness is 2.5 in. (64 mm), min 4 in. (102 mm) thickness of min 4 pcf (64 kg/m³) mineral wool shall be used and max device extension above floor is 4 in. (102 mm) .

* 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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