

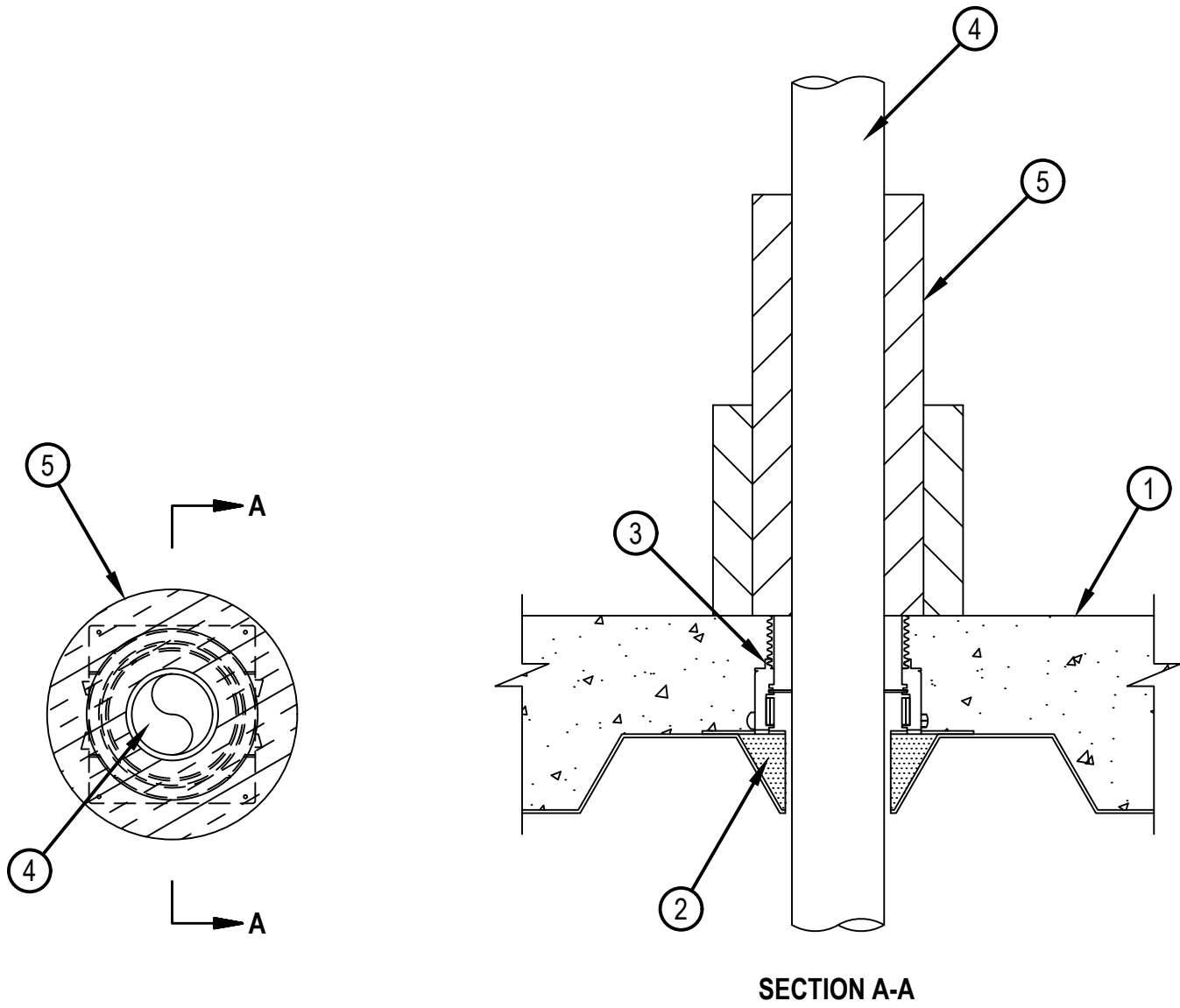


Classified by
Underwriters Laboratories, Inc.
to UL 1479 and CAN/ULC-S115

System No. F-A-1194

FA 1194

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating - 2 Hr	F Rating - 2 hr
T Rating - 2 Hr	FT Rating - 2 hr
L Rating At Ambient —1 CFM/ft ²	FH Rating - 2 hr
L Rating At 400°F —1 CFM/ft ²	FTH Rating - 2 hr
	L Rating At Ambient — 5.1 L/s/m ²
	L Rating At 204°C — 5.1 L/s/m ²



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November 20, 2019

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. (63.5 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete.
 - 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 device shall be used with Hilti provided extension to accommodate installation flush with top of floor. Device is to be trimmed flush with the top surface of the floor.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CFS-CID MD P 2"/2.5", 3"/2.5" and 4"/2.5" 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. Through-Penetrant — One metallic pipe installed concentrically within opening. Penetrant to be rigidly supported on both sides of floor assembly. The following types and sizes of penetrants may be used:
 - A. Steel Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 40 (or heavier) steel pipe.
 - B. Iron Pipe — Nom 4 in. (102 mm) diam (or smaller) cast or ductile iron pipe.
 - C. Conduit — Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing or nom 4 in. (102 mm) diam (or smaller) rigid steel conduit.
5. Duct Wrap Material* — Encapsulated duct wrap tightly wrapped around penetrant to extend min 24 in. (610 mm) above the floor. An additional layer of encapsulated duct wrap tightly wrapped around the first layer of duct wrap to extend 12 in. (305 mm) above floor. All longitudinal seams and exposed ends of both layers of duct wrap and joints between layers of duct wrap are sealed with foil tape to fully enclose the duct wrap material. One of the following types and thicknesses of duct wrap material shall be used.
 - A. Nom 2 in. (51 mm)) or 1-1/2 in. (38 mm) thick encapsulated duct wrap.

UNIFRAX I L L C — FyreWrap 2.0 Duct Insulation or FyreWrap 1.5 Duct Insulation
 - B. Nom 1-1/2 in. (38 mm) thick encapsulated duct wrap.

THERMAL CERAMICS INC — FireMaster FastWrap XL Duct Insulation

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