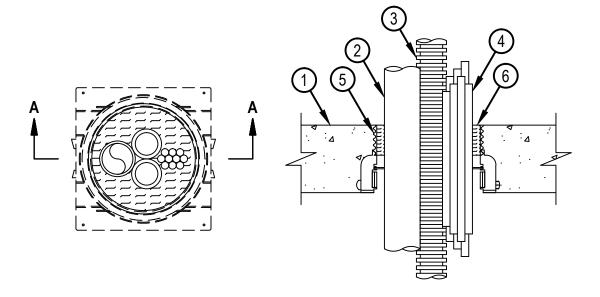


System No. F-A-8023

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 3 Hr	F Rating — 3 Hr
T Rating — 0 Hr	FT Rating — 0 Hr
	FH Rating — 3 Hr
	FTH Rating — 0 Hr



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/m3).
- 1A. Steel Floor Unit/ Floor Assembly (Not Shown)- As an alternate to Item 1, the floor assembly may consist of a fluted steel floor unit/ concrete floor assembly. The floor assembly shall be constructed of the materials and in the manner described in the individual D900 Series Design in the Fire Resistance Directory and shall include the following construction features:
 - A. Steel Floor and Form Units* Composite or non-composite 1-1/2 in. to 3 in. (38 to 76 mm) deep fluted galv steel units as specified in the individual Floor-Ceiling Design.
 - B. Concrete Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete, as measured from the top plane of the floor units.



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- 2. Firestop Device* Cast in place firestop device permanently embedded during concrete placement or grouted in concrete floor assembly in accordance with accompanying installation instructions. Device is to be trimmed flush with the top surface of the floor.

 HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC CP 680-75/2.5"N, CP 680-110/4"N, CP 680-110/6"N, CP 680-P 2", CP 680-P 3", CP 680-P 4", CP 680-P 4", CP 680-PX 2", CP 680-PX 3"
- 3. Through Penetrants Pipes, tubing or cable to be bundled within the device. The annular space between penetrants and the device is min 1/2 in. to max 2 in. (13 mm to max 51 mm). Penetrants to be rigidly supported on both sides of floor assembly. The following types and sizes of penetrants may be used.
- 3A. Metallic Pipes A max of one metallic pipe installed within the device:
 - A. Steel Pipe Nom 2 in. (51 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - B. Iron Pipe Nom 1 in. (25 mm) diam (or smaller) cast or ductile iron pipe.
- 3B. Electrical Nonmetallic Tubing (ENT)+ (Not Applicable to CAN/ULC S115) A max of two nonmetallic pipe or conduit may be used. The following types and sizes of nonmetallic pipes or conduits may be used:
 - See Electrical Nonmetallic Tubing (FKHU) category in the Electrical Construction Materials Directory for names of manufacturers.
- 3C. Cables A 2 in. (51 mm) maximum diam cable bundle consisting of the following
 - A. Maximum 7/C No. 12 AWG (or smaller) cable.
 - B. Maximum 25 pair No. 24 AWG telephone cable.
- 4. Packing Material Min 2 in. (51 mm) thickness of min 4 pcf (64 kg/m3) mineral wool batt insulation firmly packed within top of device, in the annular space between the bundle of penetrants and the edge of the device such that it is flush with the top 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.
- +Bearing the UL Listing Mark

