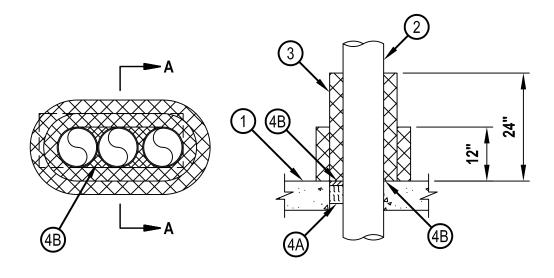


System No. F-A-1127

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 2 Hr	F Rating — 2 Hr
T Rating — 2 Hr	FT Rating — 2 Hr
	FH Rating — 2 Hr
	FTH Rating — 2 Hr



1. Floor Assembly — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete. As an alternate, any min 2 hr fire rated D700, D800 or D900 Series Floor-Ceiling Design in the UL Fire Resistance Directory having a min 2-1/2 in. (64 mm) thickness of lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete topping over the steel deck may be used. Floor may also be constructed of any min 6 in. (152 mm) thick hollow core UL Classified Precast Concrete Units*. Max area of opening is 96 sq in. with a max

dim of 16 in. Max are of opening in floor constructed of hollow-core precast concrete units is 49 in.2 (316 cm2) with a max dim of 7 in. (178 mm).

SECTION A-A

- See Precast Concrete Units (CFTV) category in Fire Resistance Directory for names of manufacturers.
- 2. Through-Penetrant One or more metallic pipes, conduits or tubing installed concentrically or eccentrically within opening. Pipes, conduits, or tubing spaced min 0 in. (point contact) to max 1/2 in. (13 mm) apart. Annular space between penetrant and periphery of opening shall be min 0 in. (point contact) to max 2 in. (51 mm). Penetrants 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 10 (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. (152 mm) diam (or smaller) steel conduit or steel electrical metallic tubing (EMT) or nom 1 in. (25 mm) diam (or smaller) flexible steel conduit.
- 3. Duct Wrap Material* Min 1-1/2 in. (38 mm) thick duct wrap tightly wrapped around penetrants to extend 24 in. (610 mm) above floor. An additional layer of min 1-1/2 in. (38 mm) thick duct wrap tightly wrapped around the first layer of duct wrap to extend 12 in. (305 mm) above floor. The spaces between penetrants at the top of the duct wrap are to be tightly-packed with a nominal 2 in. (51 mm) depth of duct wrap material, flush with the top of the inner layer of duct wrap. All longitudinal seams of both layers of duct wrap are sealed with foil tape.

THERMAL CERAMICS INC — FireMaster FastWrap+, FireMaster FastWrap XL, or Pyroscat Duct Wrap XL. UNIFRAX I L L C — FyreWrap Duct Insulation or FyreWrap Duct 1.5 Insulation



FA 1127

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- 4. Firestop System The details of the firestop system shall be as follows:
 - A. Packing Material Min 2 in. thick min 4 pcf (64 kg/m3) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed at top surface of floor to accommodate the required thickness of fill material. In hollow-core floors, an additional min 2 in. thick min 4 pcf (64 kg/m3) mineral wool batt insulation firmly packed into opening, flush with the bottom of the floor.
 - B. Fill, Void or Cavity Materials* Sealant Min 1/2 in. (13 mm) thickness of sealant applied within the annulus, flush with top surface of floor. At point contact, apply min 1/4 in. (6 mm) bead at penetrant/concrete interface on top surface of floor.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE Sealant or FS-ONE MAX Intumescent Sealant.

Indicates such products shall bear the UL or cUL	. Certification Mark for	jurisdictions employi	ng the UL or cl	JL Certification	(such as	Canada)
respectively.						

