

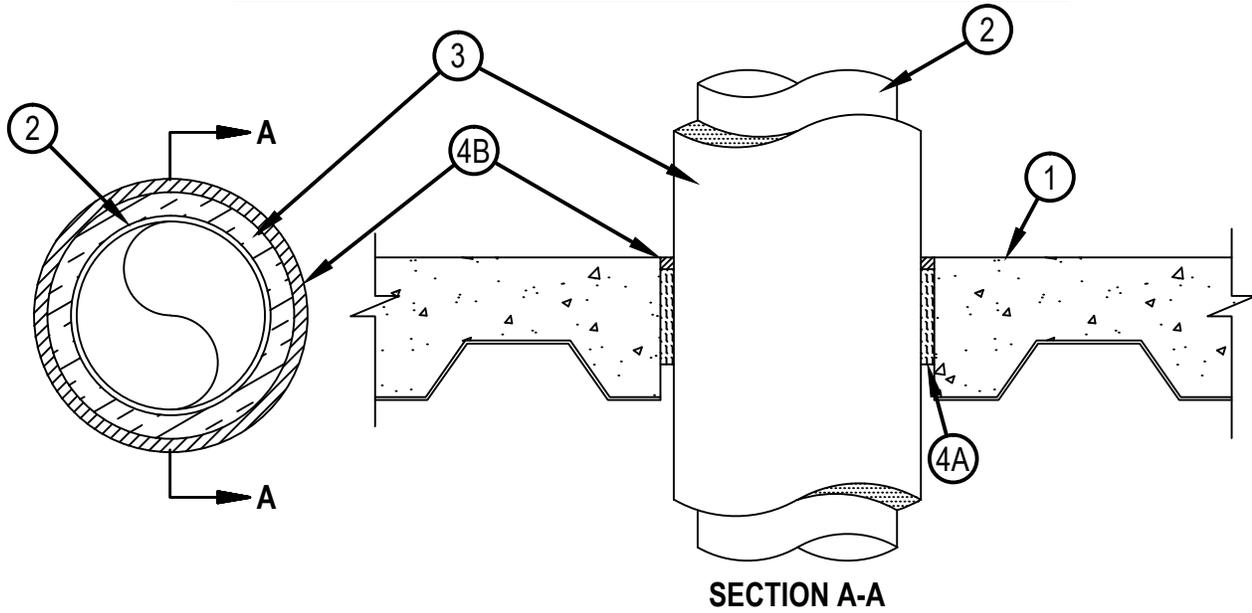


Classified by
Underwriters Laboratories, Inc.
to UL 1479 and CAN/ULC-S115

System No. F-A-5047

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 3 Hr	F Rating — 3 Hr
T Rating — 1 Hr	FT Rating — 1 Hr
	FH Rating — 3 Hr
	FTH Rating — 1 Hr

F A 5047



- 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:
 - Concrete — Min 3-1/2 in. (89 mm) thickness of reinforced lightweight or normal weight concrete (100-150 pcf or 1600-2400 kg/m³), as measured from the top plane of the floor units.
 - Steel Floor and Form Units* — Composite or noncomposite 2 to 3 in. (51 to 76 mm) deep fluted galv units as specified in the individual Floor-Ceiling design. Max diam of opening cored-drilled through floor assembly is 11-1/2 in. (292 mm).
- Through Penetrants — One metallic pipe or tubing to be installed either concentrically or eccentrically within the firestop system. Pipe or tubing to be rigidly supported on both sides of floor assembly. The following types and sizes of metallic pipes or tubing may be used:
 - Steel Pipe — Nom 8 in. (203 mm) diam (or smaller) Schedule 40 (or heavier) steel pipe.
 - Iron Pipe — Nom 8 in. (203 mm) diam (or smaller) cast or ductile iron pipe.
 - Copper Tubing — Nom 4 in. (102 mm) diam (or smaller) Type L (or heavier) copper tubing.
 - Copper Pipe — Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe.
- Pipe Covering* — Nom 1 in. (25 mm) thick hollow cylindrical heavy density (min 3.5 pcf (56 kg/cu meter)) glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product. The annular space shall be min 1/4 in. (6 mm) to max 5/8 in. (16 mm).
See Pipe and Equipment Covering — Materials (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.
- Firestop System — The firestop system shall consist of the following:
 - Packing Material — Min 4 in. (102 mm) thickness of min 4.0 pcf (64 kg/cu meter) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor as required to accommodate the required thickness of fill material.
 - Fill, Void or Cavity Material* — Caulk — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with top surface of floor.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CFS-S SIL GG, CFS-S SIL SL

*Bearing the UL Classification Mark



Hilti Firestop Systems

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