

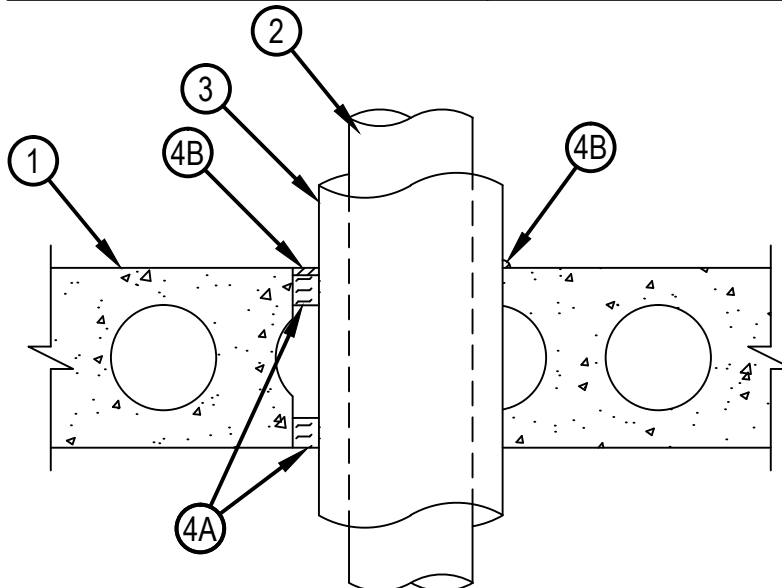


Classified by
Underwriters Laboratories, Inc.
to UL 1479 and CAN/ULC-S115

System No. C-BJ-5013

CBJ 5013

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating - 2 Hr	F Rating - 2 Hr
T Rating - 1 Hr	FT Rating - 1 Hr
	FH Rating - 2 Hr
	FTH Rating - 1 Hr



1. Floor Assembly — Min 8 in. (203 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Floor assembly may also be constructed of any 8 in. (203 mm) thick UL Classified hollow-core Precast Concrete Units*. Max diameter of opening is 7 in. (178 mm).
See Precast Concrete Units CFTV category in the Fire Resistance Directory for names of manufacturers.
2. Through Penetrants — One metallic pipe or tube to be installed concentrically or eccentrically within the firestop system. Annular space between pipe or tube and edge of opening to be min 0 in. (point contact) to max 7/8 in. (22 mm). Pipe or tube to be rigidly supported on both sides of floor-ceiling assembly. The following types and sizes of metallic pipes or tubes may be used:
 - A. Steel Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - B. Copper Tubing — Nom 4 in. (102 mm) diam (or smaller) Type L (or heavier) copper tubing.
 - C. Copper Pipe — Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe.
3. Pipe Covering Materials* — Nom 1 in. (25 mm) thick hollow cylindrical heavy density (min 3.5 pcf or 56 kg/m³) 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 0 in. (point contact to max 7/8 in. (22 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 of 25 or less and a Smoke Developed Index of 50m or less may be used.
4. Firestop System — The firestop system shall consist of the following:
 - A. Packing Material — Min 1 in. (25 mm) thickness of 4 pcf (64 kg/m³) mineral wool insulation tightly packed into the opening as a permanent form. Packing material to be installed flush with the bottom surface of floor assembly and recessed from the top surface of the assembly to accommodate the required thickness of fill material.
 - B. Fill, Void or Cavity Materials*-Sealant — Min 1/4 in. (6 mm) thickness of fill material applied within the annulus, flush with top surface of floor. An additional 1/4 in. (6 mm) bead shall be installed 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 employing the UL or cUL Certification (such as Canada), respectively.



Hilti Firestop Systems

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