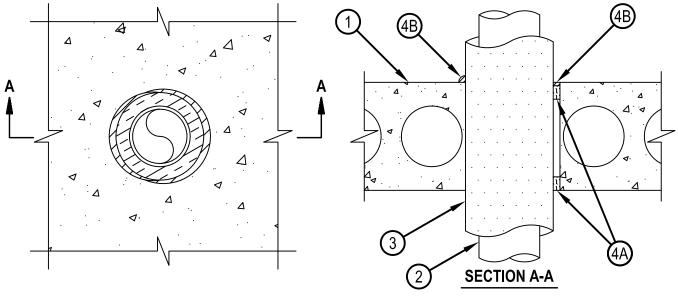


System No. C-BJ-5018

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 3 Hr	F Rating — 3 Hr
T Rating — 1/2 Hr	FT Rating — 1/2 Hr
	FH Rating — 3 Hr
	FTH Rating — 1/2 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. 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. Tube Insulation Plastics+ Nom 1 in. (25 mm) thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing. The annular space between the insulated pipe or tubing and periphery of the opening shall be min 0 in. (point contact) to max 7/8 in. (22 mm).
 - See Plastics+ (QMFZ2) category in the Plastic Component Directory for names of manufacturers. Any Recognized Component tube insulation material meeting the above specifications and having a UL94 Flammability Classification of 94-5VA 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 floor or both sides of the wall 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 or both sides of the wall. An additional 1/4 in. (6 mm) bead shall be installed at penetrant/concrete interface on top surface of floor or both sides of the wall.
 - 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.
- +Bearing the UL Recognized Component Mark

