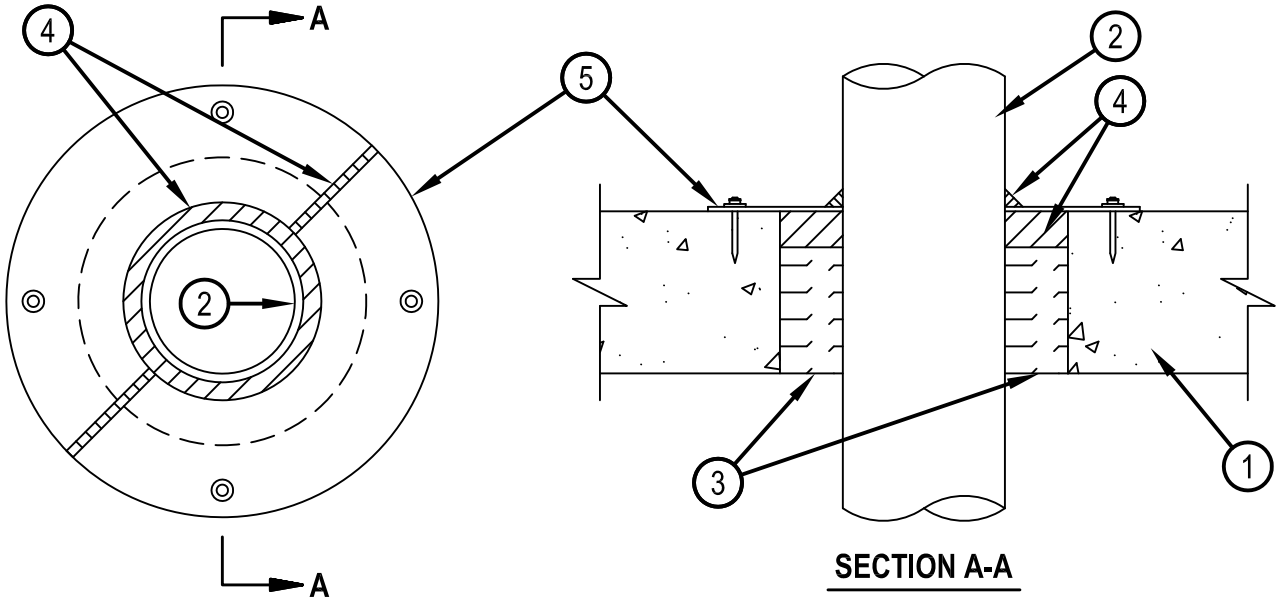
System No. C-BJ-1034

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

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 4 Hr	F Rating — 4 Hr
T Rating — 0 Hr	FT Rating — 0 Hr
	FH Rating — 4 Hr
	FTH Rating — 0 Hr



SECTION A-A

1. Floor or Wall Assembly — Min 5-1/2 in. (140 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete floor or min 6 in. (152 mm) thick reinforced lightweight or normal weight concrete wall. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 10-1/2 in. (267 mm).
   See Concrete Blocks (CAZT) category in Fire Resistance Directory for names of manufacturers.
2. Through-Penetrants — One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the firestop system. An annular space between pipe, conduit or tubing and periphery of opening shall be min 3/4 in. (19 mm) to max 3 in. (76 mm). Pipe, conduit or tubing to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
   A. Steel Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
   B. Conduit — Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing or steel conduit.
3. Packing Material — Min 4 in. (102 mm) thickness of min 4.0 pcf mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of wall as required to accommodate the required thickness of fill material.
4. Fill, Void or Cavity Material* — Caulk — Min 1 in. (25 mm) thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall. A min 1/2 in. (13 mm) diam bead fill material to be installed at interface of pipe, conduit or tubing and metal cover plate (Item No. 5) and over butted seams of metal cover plate.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS605, FS-ONE Sealant or FS-ONE MAX Intumescent Sealant
5. Metal Cover Plate — Two piece cover plate of min 18 gauge steel with I.D. same as O.D. of pipe, conduit or tubing. O.D. of cover plate to be sized to overlap the periphery of opening a min 1-1/2 in. (38 mm). Installed at top surface of floor or both sides of wall. Two pieces to be butted together around perimeter of pipe or conduit and secured with 1/4 in. (6 mm) diam by min 1 in. (25 mm) long steel expansion bolts, or equivalent, in conjunction with steel nuts and washers a max of 1 in. (25 mm) from each side of each seam and a max of 4 in. (102 mm) OC throughout.

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.