

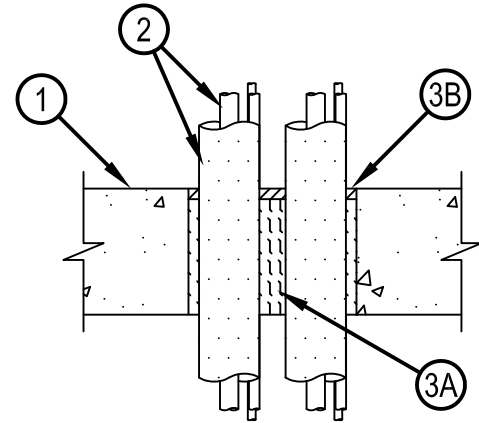
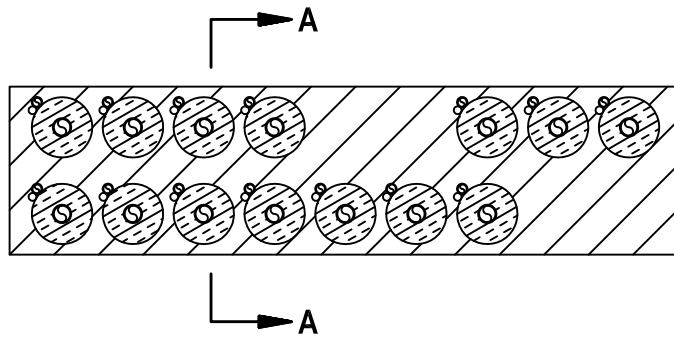


Classified by
Underwriters Laboratories, Inc.
to UL 1479 and CAN/ULC-S115

System No. C-BJ-8024

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

CBJ 8024



SECTION A-A

1. Floor or Wall Assembly — Min 6 in. (152 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete floor or min 6-1/2 in. (165 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete wall. Wall may also be constructed of any UL Classified Concrete Blocks*. Max area of opening is 256 in² (1652 cm²) with maximum dimension of 32 in. (813 mm). See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Air Conditioning (AC) Line Sets — One or more AC line sets installed within opening. Each AC line set consists of two pipes or tubes (Item 2A), tubing insulation (Item 2B) and a thermostat cable (Item 2C). The space between the AC line sets shall be min 1/2 in. (13 mm) to max 12 in. (305 mm). The space between the AC line sets and the periphery of the opening shall be min 1/2 in. (13 mm) to max 12 in. (305 mm). The AC line sets shall be rigidly supported on both sides of the floor or wall assembly.
 - 2A. Metallic Penetrants — A max of two pipes or tubes to be installed in each AC line set. Of the two pipes or tubes, only one may have a nom diam greater than 3/8 in. (10 mm). The following types and sizes of through penetrants may be used:
 - A. Steel Pipe — Nom 1 in. (25 mm) diam (or smaller) Schedule 5 (or heavier) steel pipe.
 - B. Iron Pipe — Nom 1 in. (25 mm) diam (or smaller) cast or ductile iron pipe.
 - C. Copper Pipe — Nom 1 in. (25 mm) diam (or smaller) Regular (or heavier) copper pipe.
 - D. Copper Tube — Nom 1 in. (25 mm) diam (or smaller) Type L (or heavier) copper tube.
 - 2B. Tube Insulation - Plastics# — Nom 1 in. (25 mm) thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing. The tube insulation may be installed on one max 1 in. (25 mm) diam pipe or tube in each AC line set. The space between the insulated and uninsulated pipes or tubes within each AC line set shall be 0 in. (point contact).
See Plastics (QMFFZ2) category in the Plastics Recognized Component Directory for names of manufacturers. Any Recognized Component tube insulation meeting the above specifications and having a UL 94 Flammability Classification of 945VA may be used.
 - 2C. Cable — One 4 pair No. 18 AWG (or smaller) thermostat cable with polyvinyl chloride (PVC) insulation and jacket materials may be installed with each AC line set.
3. Firestop System — The firestop system shall consist of the following:
 - A. Packing Material — Min 5-1/2 in. (140 mm) thickness of min 4 pcf (64 kg/m³) mineral wool batt insulation tightly packed into opening. Packing material recessed from top surface of floor assembly or from both surfaces of wall to accommodate the required thickness of fill material.
 - B. Fill, Void or Cavity Materials*-Sealant — Min 1/2 in. depth of fill material applied within the annulus, flush with top surface of floor assembly or with both surfaces of the wall assembly.
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 Components Mark



Hilti Firestop Systems

Reproduced by HILTI, Inc. Courtesy of
Underwriters Laboratories, Inc.

January 16, 2015