



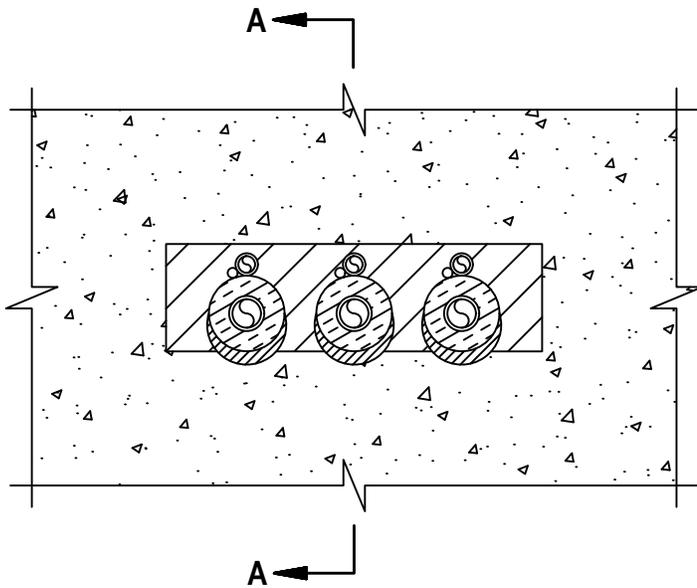
Classified by
Underwriters Laboratories, Inc.
to UL 1479 and CAN/ULC-S115

System No. W-J-8102

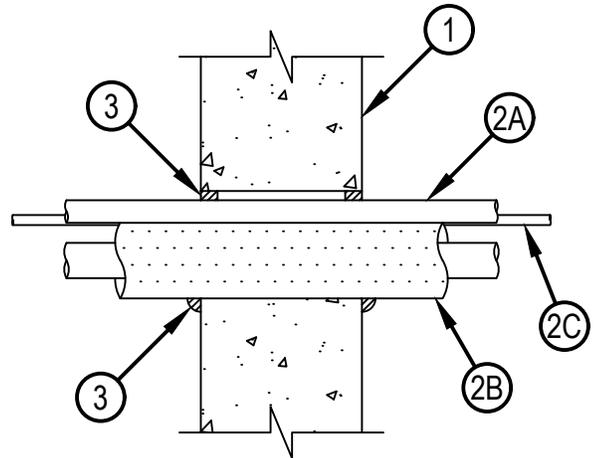
WJ 8102

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating – 1 and 2 Hr (See Item 1)	F Rating – 1 and 2 Hr (See Item 1)
T Ratings – 1/4 Hr	FT Ratings – 1/4 Hr
L Rating at Ambient — Less Than 1 CFM/Sq Ft	FH Rating – 1 or 2 Hr (See Item 1)
L Rating at 400°F — Less Than 1 CFM/Sq Ft	FTH Ratings – 1/4 Hr
	L Rating At Ambient — Less Than 5.1 L/s/m ²
	L Rating At 204°C — Less Than 5.1 L/s/m ²

FRONT VIEW



SECTION A-A



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October 3, 2022

System No. W-J-8102

WJ 8102

1. Wall Assembly — Min 4-7/8 in. (124 mm) and 6-1/8 in. (156 mm) thick normal weight or lightweight (100-150 pcf or 1600-2400 kg/m³) concrete for 1 and 2 hour rated assemblies, respectively. Wall may also be constructed of any UL Classified Concrete Blocks*. Max opening size is 10 in. (254 mm) by 3 in. (76 mm).

See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.

F and FH ratings are 1 and 2 hour for 1 and 2 hour rated assemblies, respectively.

2. Air Conditioning (AC) Line Set — One or more AC line sets installed eccentrically or concentrically 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 3/4 in. (19 mm). The space between the AC line sets and the periphery of the opening shall be min 0 in. (point contact) to max 1-1/2 in. (38 mm) to one side of opening.

2A. Through Penetrant — 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 1/2 in. (13 mm) Annular space between pipes or tubing and periphery of opening shall be min 0 in. (point contact) to max 1-1/2 in. (38 mm). Pipes or tubing to be rigidly supported on both sides of the wall assembly. The following types and sizes of through penetrants may be used:

1. Copper Tube — Nom 1 in. (25 mm) diam (or smaller) Type L (or heavier) copper tube.

2. Copper Pipe — Nom 1 in. (25 mm) diam (or smaller) Regular (or heavier) copper pipe.

2B. Tube Insulation - Plastics+ — Max 3/4 in. (19 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 1/2 in. (13 mm) diam pipe or tube in each AC line set. The annular space between the penetrating item and the periphery of the opening shall be min 0 in. (point contact) to max 3/4 in. (19 mm). The space between the pipes or tubing within each AC line set shall be 0 in. (point contact).

See Plastics+ (QMFZ2) 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 94-5VA may be used.

2C. Cables — Max of one 4 pair No. 18 AWG (or smaller) cable with PVC insulation and jacket materials.

3. Fill, Void or Cavity Material - Sealant* — Min 5/8 in. (16 mm) thickness of fill material applied within annulus between penetrants and concrete, flush with both surfaces of wall. At point contact, a 1/2 in. (5 mm) bead of fill material shall be applied at the penetrant/concrete interface on both sides of 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.



Hilti Firestop Systems

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