



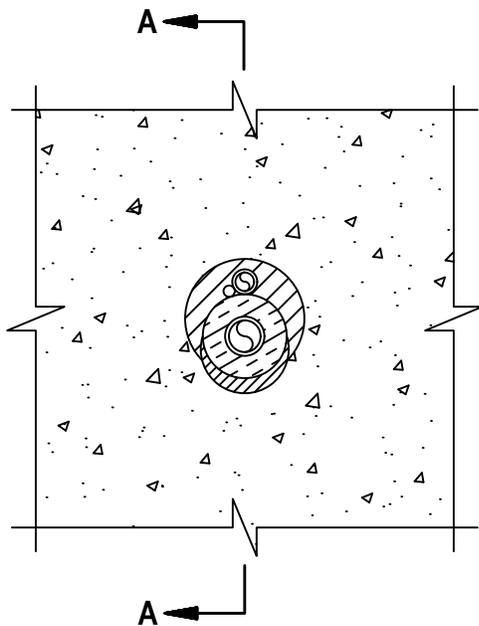
Classified by Underwriters Laboratories, Inc. to UL 1479 and CAN/ULC-S115

System No. W-J-8101

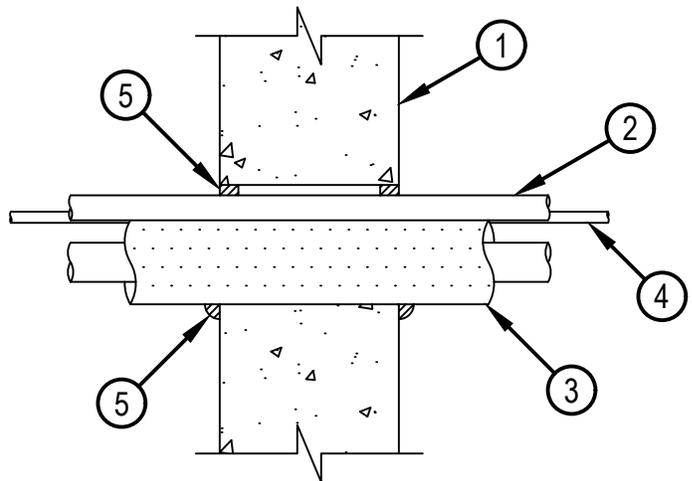
WJ 8101

| 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 – 0, 1/4 and 1/2 Hr (See Item 3) | FT Ratings – 0, 1/4 and 1/2 Hr (See Item 3) |
| L Rating at Ambient — Less Than 1 CFM/Sq Ft | FH Rating – 1 and 2 Hr |
| L Rating at 400°F — Less Than 1 CFM/Sq Ft | FTH Ratings – 0, 1/4 and 1/2 Hr (See Item 3) |
| | 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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System No. W-J-8101

WJ 8101

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 diam of opening is 3-1/2 in. (89 mm)

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

2. Through Penetrants — One or more (max quantity of 2) pipe or tubing to be installed concentrically or eccentrically within the opening. The space between any penetrant and the periphery of the opening shall be min 0 in. (point contact) to max 1/2 in. (13 mm). Pipes or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes or tubing may be used:

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

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

3. Tube Insulation — Plastics+ — Tube insulation to be installed on one or more of the metallic pipes or tubes. The following types may be used:

A. Ethylene Propylene Diene Monomer (EPDM) —Max 3/4 in. (19 mm) thick EPDM rubber furnished in the form of tubing.

B. Acrylonitrile Butadiene/Polyvinyl Chloride (AB/PVC) —Max 3/4 in. (19 mm) thick AB/PVC flexible foam furnished in the form of tubing.

When Tube Insulation A is used, the T, FT and FTH Ratings are 1/2 hr. When Tube Insulation B is used, the T, FT and FTH Ratings are 1/4 Hr.

See Plastics+ (QMFZ2) category in the Plastics Recognized Component Directory for names of manufacturers. Any Recognized Component tube insulation material meeting the above specifications and having a UL 94 Flammability Classification of 94-5VA may be used.

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

5. 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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