



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

System No. W-J-5214

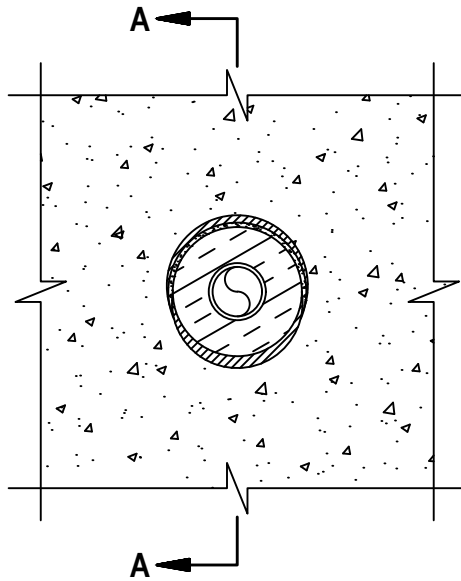


WJ 5214

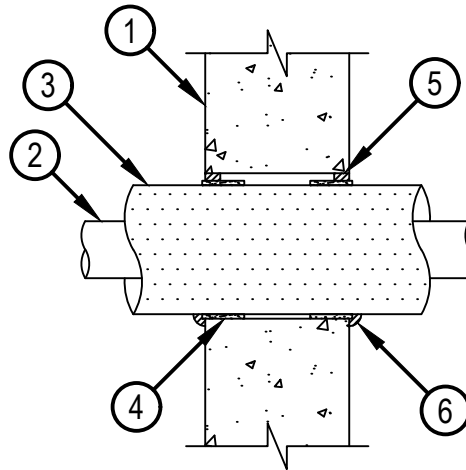
CAN/ULC S115
F Rating – 1 or 2 Hr (See Item 1)
FT Ratings – 1 or 2 Hr (See Config A and B)
FH Rating – 0 Hr
FTH Ratings – 0 Hr
L Rating At Ambient — Less Than 5.1 L/s/m ² (for Config B)
L Rating At 204°C — Less Than 5.1 L/s/m ² (for Config B)

CONFIGURATION A

FRONT VIEW

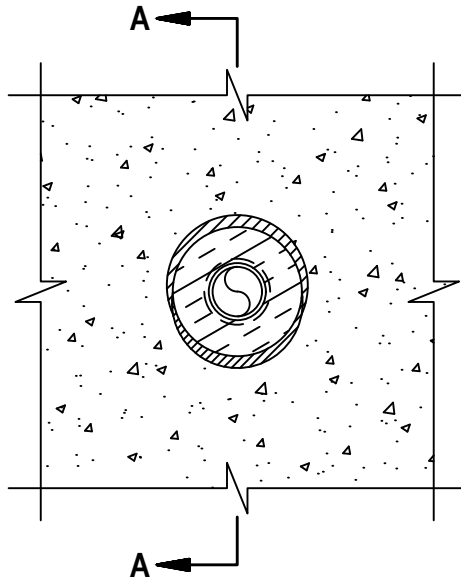


SECTION A-A

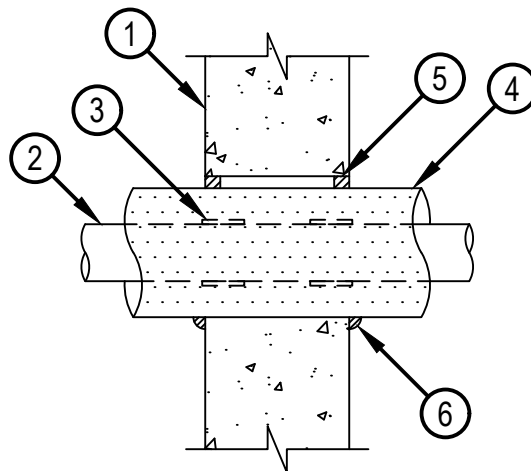


CONFIGURATION B

FRONT VIEW



SECTION A-A



Hilti Firestop Systems

Reproduced by HILTI, Inc. Courtesy of
Underwriters Laboratories, Inc.
October 3, 2022

System No. W-J-5214



WJ 5214

1. Wall Assembly —Min 124 mm (4-7/8 in.) and 156 mm (6-1/8 in.) 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 153 mm (6 in.).

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

Configuration A

FT Rating is 2 hour for 2 hour rated assemblies, and 1 hour for 1 hour rated assemblies.

2. Through Penetrants —One pipe or tubing to be centered within the firestop system. Pipe to be rigidly supported on both sides of wall. The following types and sizes of pipes may be used:

A. Copper Tube —Nom 51 mm (2 in.) diam (or smaller) Type L (or heavier) copper tube.

B. Copper Pipe —Nom 51 mm (2 in.) diam (or smaller) Regular (or heavier) copper pipe.

3. Tube Insulation - Plastics+ —Max 38 mm (1-1/2 in.) thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing. The annular space shall be min 5 mm (3/16 in.) to max 16 mm (5/8 in.).

See Plastics+ (QMFZ2) category in the 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. Fill, Void or Cavity Material* — Wrap Strip —Nom 5 mm (3/16 in.) thick by 44 mm (1-3/4 in.) wide intumescent wrap strip. Layers individually wrapped around the through-penetrant with the ends butted and held in place with tape. Butted ends in successive layers shall be offset. Each wrap strip layer is to be installed flush with both surfaces of wall. Wrap strips are installed on each surface of the wall.

Product Designation	Max Pipe Size, in. (mm)	Number of Layers
CP648-E W45/1-3/4"	2 (51)	1

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP-648E Wrap Strip

5. Fill, Void or Cavity Material - Sealant* —Min 16 mm (5/8 in.) thickness of fill material applied within annulus between penetrants and concrete, flush with both surfaces of wall. Sealant omitted from annular space when the wrap strip is at point contact to the concrete.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE Sealant or FS-ONE MAX Intumescent Sealant

6. Fill, Void or Cavity Material - Sealant* —At point contact, a 5 mm (1/2 in.) 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



Hilti Firestop Systems

Reproduced by HILTI, Inc. Courtesy of
Underwriters Laboratories, Inc.
October 3, 2022

System No. W-J-5214



WJ 5214

Configuration B

FT Rating is 1 hour.

2. Through Penetrants —One pipe or tubing to be centered within the firestop system. Pipe to be rigidly supported on both sides of wall. The following types and sizes of pipes may be used:
 - A. Copper Tube —Nom 51 mm (2 in.) diam (or smaller) Type L (or heavier) copper tube.
 - B. Copper Pipe —Nom 51 mm (2 in.) diam (or smaller) Regular (or heavier) copper pipe.
3. Fill, Void or Cavity Material* — Wrap Strip —Nom 5 mm (3/16 in.) thick by 44 mm (1-3/4 in.) wide intumescent wrap strip. Layers individually wrapped around the through-penetrant prior to addition of Tube Insulation with the ends butted and held in place with tape. Butted ends in successive layers shall be offset. Each wrap strip layer is to be installed flush with both surfaces of wall. Wrap strips are installed on each surface of the wall.

Product Designation	Max Pipe Size, in. (mm)	Number of Layers
CP648-E W45/1-3/4"	2 (51)	1

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP-648E Wrap Strip

4. Tube Insulation - Plastics+ —Max 38 mm (1-1/2 in.) thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing. The annular space shall be min 0 mm (0 in.) to max 32 mm (1-1/4 in.).

See Plastics+ (QMFZ2) category in the 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.

5. Fill, Void or Cavity Material - Sealant* —Min 16 mm (5/8 in.) thickness of fill material applied within annulus between penetrants and concrete, flush with both surfaces of wall.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE Sealant or FS-ONE MAX Intumescent Sealant

6. Fill, Void or Cavity Material - Sealant* —At point contact, a 5 mm (1/2 in.) 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

Reproduced by HILTI, Inc. Courtesy of
Underwriters Laboratories, Inc.
October 3, 2022