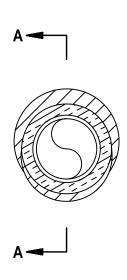
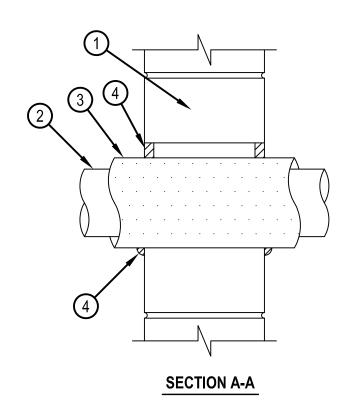


System No. W-J-5136

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 2 Hr	F Rating — 2 Hr
T Ratings — 0 and 1 Hr (See Items 2 and 3)	FT Ratings — 0 and 1 Hr (See Items 2 and 3)
L Rating At Ambient — Less Than 1 CFM/sq ft	FH Rating — 2 Hr
L Rating At 400 F — Less Than 1 CFM/sq ft	FTH Ratings — 0 and 1 Hr (See Items 2 and 3)
	L Rating At Ambient — Less Than 1 CFM/sq ft
	L Rating At 400 F — Less Than 1 CFM/sq ft







System No. W-J-5136

- 1. Wall Assembly Min 6 in. (152 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 7 in. (178 mm).
 - See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
- 2. Through Penetrants One metallic pipe or tubing to be installed eccentrically or concentrically within the firestop system. Pipe or tubing to be rigidly supported on both sides of the wall assembly. The following types and sizes of metallic pipe or tubing may be used:
 - A. Copper Tube Nom 2 in. (51 mm) diam (or smaller) Type L (or heavier) copper tubing.
 - B. Copper Pipe Nom 2 in. (51 mm) diam (or smaller) Regular copper pipe.
 - C. Steel Pipe Nom 4 in. (102 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - D. Iron Pipe Nom 4 in. (102 mm) diam (or smaller) cast or ductile iron pipe.

 The T, FT and FTH Ratings are 1 Hr only when steel or iron pipe is used. When copper tube or pipe is used the T, FT and FTH Ratings are
- 3. Tube Insulation Plastics+ Min 1/2 in. (13 mm) to max 3/4 in. (19 mm) thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing. An annular space of min 0 in. (point contact) to max 7/8 in. (22 mm) is required within the firestop system. When tube insulation thickness is less than 3/4 in. (19 mm), the T, FT and FTH Ratings are 0 Hr.
- 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* Sealant Min 5/8 in. (16 mm) thickness of fill material applied within the annulus, flush with both surfaces of the wall. At the point contact location between the insulated penetrant and the edge of the through opening, a min 1/2 in. (13 mm) diam bead of fill material shall be applied at the insulated penetrant/concrete interface on each side of wall.
- HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC CP606, FS-ONE Sealant or FS-ONE MAX Intumescent Sealant
- +Bearing the UL Recognized Component Mark
- * Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

