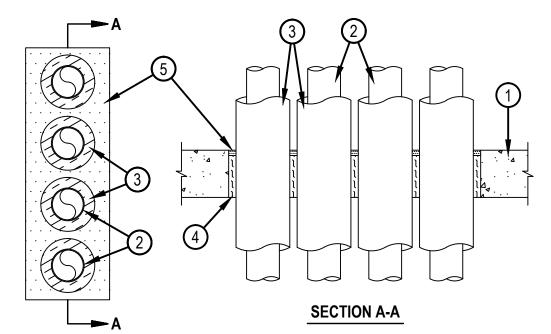
System No. C-AJ-5044

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating - 3 Hr	F Rating - 3 Hr
T Rating - 1 Hr	FT Rating - 1 Hr
L Rating At Ambient -15 CFM/sq ft	FH Rating- 3 Hr
L Rating At 400 F - Less Than 1 CFM/sq ft	FTH Rating - 1 Hr
	L Rating At Ambient -15 CFM/sq ft
	L Rating At 400 F - Less Than 1 CFM/sq ft



- Floor or Wall Assembly Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete floor or min 5 in. (127 mm) thick reinforced lightweight or normal weight concrete wall. Wall may also be constructed of any UL Classified Concrete Blocks*. Max area of opening is 192 sq in. (1239 cm2) with max dimension of 24 in. (610 mm).
 See Concrete Blocks (CAZT) extension in the Fire Resistance Directory for normal extension.
 - See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
- 2. Through Penetrants A max of four pipes or tubing to be installed within the firestop system. Pipes or tubing to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic pipes or tubing may be used:
 - A. Steel Pipe Nom 3 in. (76 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - B. Copper Tubing Nom 3 in. (76 mm) diam (or smaller) Type L (or heavier) copper tubing.
 - C. Copper Pipe Nom 3 in. (76 mm) diam (or smaller) Regular (or heavier) copper pipe.



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

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- 3. Pipe Covering* Nom 1 in. (25 mm) thick hollow cylindrical heavy density (min 3.5 pcf or 56 kg/m3) glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product. The space between pipes or tubing shall be min 1-1/2 in. (38 mm) to max 1-5/8 in. (41 mm). The space between pipes or tubing and periphery of opening shall be min 1-5/8 in. (41 mm) to max 2-1/2 in. (64 mm). See Pipe and Equipment Covering* Materials (BRGU) category in the Building Material Directory for the names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and Smoke Developed Index of 50 or less may be used.
- 4. Packing Material Min 4 in. (102 mm) thickness of min 4.0 pcf (64 kg/m3) mineral wool batt insulation firmly packed into opening as permanent form. Packing material to be recessed from top surface of floor or from both surfaces of wall as required to accommodate the required thickness of fill material.
- 5. Fill, Void or Cavity Material* Sealant Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces 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.



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