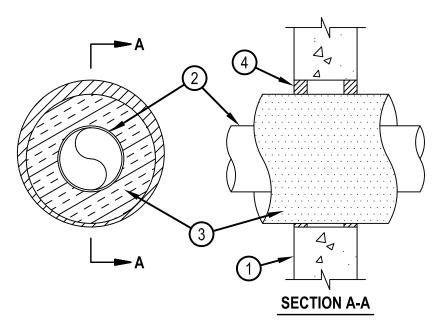


System No. W-J-5191

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 2 Hr	F Rating — 2 Hr
T Rating — 1-3/4 Hr	FT Rating — 1-3/4 Hr
	FH Rating — 2 Hr
	FTH Rating — 1-3/4 Hr



- 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 14-5/8 in. (371 mm).
- See Concrete Blocks (CAZT) in the Fire Resistance Directory for names of manufacturers.
- 2. Through Penetrants — One metallic pipe or tubing to be installed within the firestop system. Pipe 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. Steel Pipe Nom 6 in. (152 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - B. Iron Pipe Nom 6 in. (152 mm) diam (or smaller) cast or ductile iron pipe.
- 3. Pipe Covering* Nom 3 in. (76 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 annular space between insulated penetrant and periphery of opening shall be min 1/4 in. (6 mm) to max 1-3/4 in. (44 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 a Smoke Developed Index of 50 or less may be used.
- 4. Fill, Void or Cavity Material* Sealant Min 1-1/4 in. (32 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall.
- HILTI CONSTRUCTION CHEMICALS. DIV OF HILTI INC 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.

