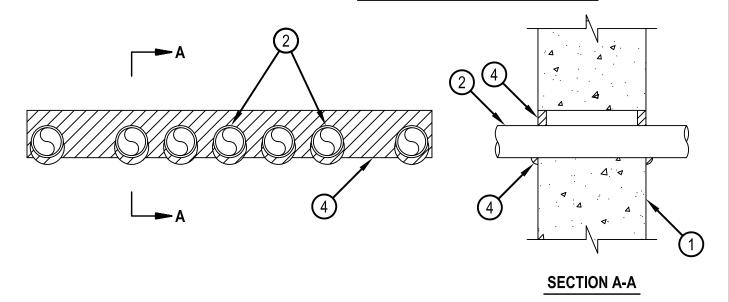


## System No. W-J-1191

	ANSI/UL1479 (ASTM E814)	CAN/ULC S115
	F Ratings — 1 or 2 hours Hr (See Item 4)	F Ratings — 1 or 2 hours Hr (See Item 4)
	T Rating — 0 Hr	FT Rating — 0 Hr
		FH Ratings — 1 or 2 hours Hr (See Item 4)
		FTH Rating — 0 Hr



- Wall Assembly Min 5 in. (165 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 height of opening is 3-1/2 in. (89 mm). Max width of opening is 32 in. (813 mm).
  See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers..
- 2. Through Penetrants Multiple pipes or conduits installed in single layer array within the firestop system. The annular space between the pipes and conduits and the edges of the opening shall be min 0 in. (point contact) to max 1-3/8 in. (35 mm). The separation between pipes and conduits to be a min 0 in. (0 mm, point contact) to a max 1-1/4 in. (32 mm). Pipes and conduits to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes or conduits may be used:
  - A. Steel Pipe Nom 2 in. (51 mm) diam (or smaller) Schedule 5 (or heavier) steel pipe.
  - B. Conduit Nom 2 in. (51 mm) diam (or smaller) rigid steel conduit or steel electrical metallic tubing (EMT).
- 3. Forming Material (Optional, Not Shown) Foam backer rod, mineral wool batt insulation or glass fiber insulation packed into opening and recessed from each surface of the wall to accommodate fill material.
- 4. Fill Void or Cavity Materials\* Sealant Min 5/8 in. (13 mm) thickness of fill material installed to completely fill annular space between pipes, conduits and concrete flush with each surface of wall. Min 1/2 in. (13 mm) diam bead of fill material applied to the through penetrant/wall interface at the point contact locations on both sides of the wall. Two hour F Rating only applies only when the FS-One or FS-One Max Sealant is used. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC Hilti CP 606 Flexible Firestop Sealant or 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.

