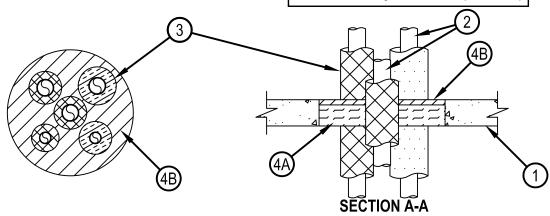


System No. F-A-5036

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



- 1. Floor Assembly Min 2-1/2 in. (64 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Max diam of opening 12 in. (305 mm).
- 2. Through-Penetrant Maximum of five metallic pipes or tubes to be installed within the firestop system. Pipes or tubes to be rigidly supported on both sides of floor assembly. The annular space between insulated through penetrants shall be min 1/4 in. (6 mm) to max 2 in. (51 mm). The following types and sizes of metallic pipes or tubes may be used:
 - A. Steel Pipe Nom 1-1/2 in. (38 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - B. Iron Pipe Nom 1-1/2 in. (38 mm) diam (or smaller) cast or ductile iron pipe.
 - C. Copper Pipe Nom 1-1/2 in. (38 mm) diam (or smaller) Regular (or heavier) copper pipe.
 - D. Copper Tubing Nom 1-1/2 in. (38 mm) diam (or smaller) Type L (or heavier) copper tubing.
- 3. Pipe Coverings* One of the following pipe coverings shall be used on each through-penetrant:
 - A. 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 annular space between insulation and periphery of opening shall be min 1/4 in. (6 mm) to max 2 in. (51 mm).
 - See Pipe and Equipment Covering Materials (BRGU) category in the Building Materials Directory for 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.
 - B. Tube Insulation Plastics+ For use on through penetrants of nom 1 in. (25 mm) diam or smaller. Nom 3/4 in. (19 mm) thick acrylonitrile utadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing. The annular space between insulation and periphery of opening shall be min 1/2 in. (13 mm) to max 2 in. (51 mm).
 - See Plastics (QMFZ2) category in the Plastics 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.
 - The T Rating for the firestop system is 1 hr when pipe covering Item 3A is used and 1/2 hr when Item 3B is used.
- 4. Firestop System The firestop system shall consist of the following:
 - A. Packing Material Min 2 in. (51 mm) thickness of min 4 pcf (64 kg/m³) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor as required to accommodate the required thickness of fill material.
 - B. 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.
- HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC CP604 Self-Leveling Firestop Sealant, CFS-S SIL GG or CFS-S SIL SL Sealant *Bearing the UL Classification Mark
- +Bearing the UL Recognized Component Mark

