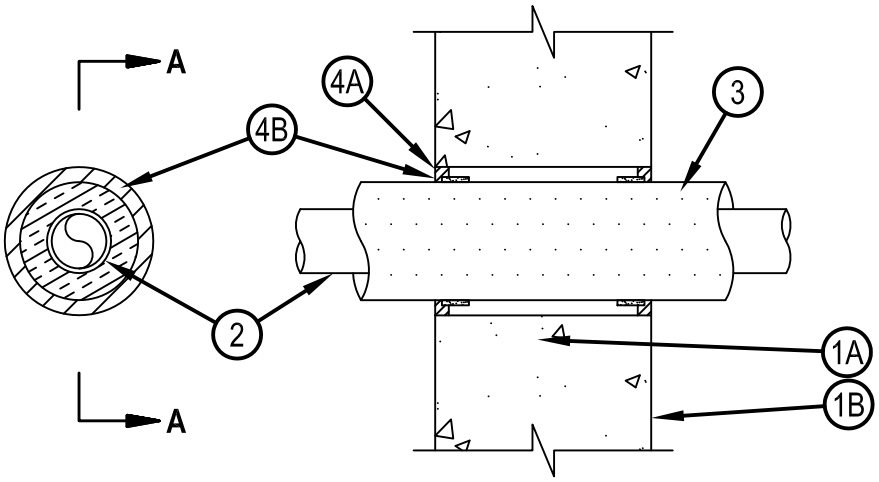
Classified by
Underwriters Laboratories, Inc.
to UL 1479

System No. W-J-5152

F Rating — 2 Hr
T Rating — 1-3/4 and 2 Hr (See Item 3)



SECTION A-A

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 5-1/2 in. (140 mm).
   See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Through Penetrants — One Chlorinated Polyvinyl Chloride (CPVC) Pipe nonmetallic pipe to be installed concentrically or eccentrically within the firestop system. Nom 2 in. (51 mm) diam (or smaller) SDR 11 or SDR 13.5 CPVC pipe for use in closed (process or supply) piping systems. Pipe to be rigidly supported on both sides of the wall.
3. Pipe Covering* — One of the following types of pipe coverings shall be used:
   A. Pipe and Equipment Covering - Materials* — Nom 1 in. (25 mm) thick hollow cylindrical heavy density (min 3.5 pcf) 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 the insulated pipe or tubing and periphery of the opening shall be min. 3/16 in. (4.8 mm) to max 15/16 in. (24 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+ — Nom 1 in. (19 mm) thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing. The annular space between the insulated pipe or tubing and periphery of the opening shall be min. 3/16 in. (4.8 mm) to max 15/16 in. (24 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 95-5VA may be used.
   The hourly T, FT and FTH Ratings are 1-3/4 and 2 hr when 3B and 3A are used, respectively.
4. Firestop System — The firestop system shall consist of the following:
   A. Fill, Void or Cavity Material* — Wrap Strip — Nom 3/16 in. (5 mm) thick by 1 in. (25 mm) wide intumescent wrap strip. One layer wrapped around the pipe covering with the ends butted and held in place with tape. Wrap strip to be installed on each side of wall and recessed into opening 1/4 in. (6 mm) from each surface of wall.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP-648E Wrap Strip
   B. Fill, Void or Cavity Material* — Sealant — Min 1/2 in. (13 mm) thickness of sealant applied within annulus, flush with both surfaces of wall. At area where wrap strip is installed, sealant thickness to be 1/4 in. (6 mm).
   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.
+Bearing the UL Recognized Mark

Hilti Firestop Systems