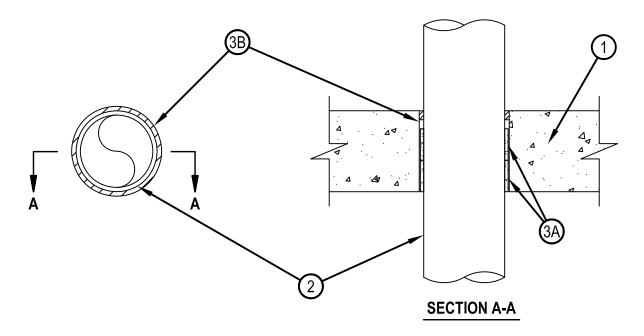


System No. C-AJ-2393

F Rating - 2 Hr T Rating - 1 Hr



- 1. 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 or 5 in. (127 mm) thick reinforced lightweight or normal weight concrete wall. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diameter of opening is 5 in. (127 mm).
 - See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
- 2. Through Penetrants One nonmetallic pipe to be installed either concentrically or eccentrically within the firestop system. Annular space between pipe and edge of opening shall be min. 3/16 in. (5 mm) to a max. 5/16 in. (8 mm). Pipe to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of nonmetallic pipes may be used:
 - A. Polyvinyl Chloride (PVC) Pipe Nom 4 in. (102 mm) diam (or smaller) Schedule 40 solid or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
 - B. Chlorinated Polyvinyl Chloride (CPVC) Pipe Nom 4 in. (102 mm) diam (or smaller) SDR 13.5 CPVC pipe for use in closed (process or supply) piping systems.
- 3. 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 1-3/4 in. (44 mm) wide intumescent wrap strip. Two layers of wrap strip individually wrapped around pipe with ends butted and held in place with tape. In floors, wrap strip butted side to side and slid into annular space with the lower edge flush with bottom surface of floor. In walls, one wrap strip inserted into annular space from each side of wall, and recessed ½ in.
 - HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC CP648-E-W45/1-3/4" Wrap Strip
 - B. Fill, Void or Cavity Materials* Sealant -Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with top surface of floor of 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.

