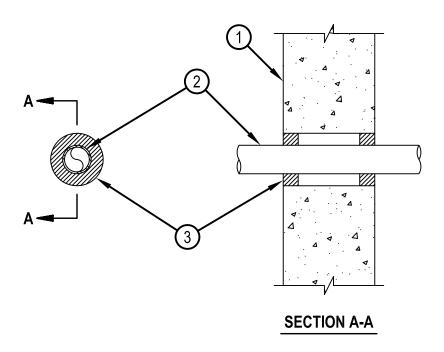


System No. W-J-2019

F Ratings — 1 and 2 Hr (See Item 1) T Ratings — 1 and 2 Hr (See Item 1)



- 1. Wall Assembly Min 4-1/2 in. (114 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 4-3/8 in. (111 mm).
 - See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
 - The hourly F and T Ratings of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.
- 2. Through Penetrants One nonmetallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the firestop system. The annular space between pipe, conduit or tubing and periphery of opening shall be min 3/4 in. (19 mm) to max 1-1/4 in. (32 mm). The following types and sizes of nonmetallic pipes, conduits or tubing may be used:
 - A. Polyvinyl Chloride (PVC) Pipe Nom 2 in. (51 mm) diam (or smaller) Schedule 40 solid-core PVC pipe for use in closed (process or supply) piping system.
 - B. Chlorinated Polyvinyl Chloride (CPVC) Pipe Nom 2 in. (51 mm) diam (or smaller) SDR17 CPVC pipe for use in closed (process or supply) piping systems.
- 3. Fill, Void or Cavity Material* Sealant Min 5/8 in. (16 mm) or 1-1/4 in. (32 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall for 1 or 2 hr walls, respectively.
 - HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC FS611A, 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.

