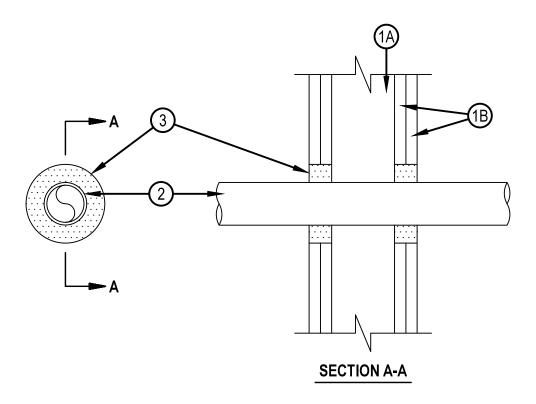


System No. W-L-2098

F Ratings — 1 and 2 Hr (See Item 1)
T Ratings — 1 and 2 Hr (See Item 1)
L Rating At Ambient — Less Than 1 CFM/Sq Ft
L Rating At 400 F — 4 CFM/Sq Ft



- 1. Wall Assembly The fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400, V400 or W400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
 - A. Studs Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC.
 - B. Gypsum Board* 5/8 in. (16 mm) thick, 4 ft (122 cm) wide with square or tappered edges. The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual Wall and Partition Design. Max diam of opening is 4-3/8 in. (111 mm).

The hourly F and T Ratings of the firestop system are equal to the hourly fire rating of the wall assembly in which it is installed.

- 2. Through Penetrants One nonmetallic pipe installed within the firestop system. Pipe to be rigidly supported on both sides of floor or wall assembly. The space between pipe and periphery of opening shall be min 3/4 in. (19 mm) to max 1-1/4 in. (32 mm). Pipe to be rigidly supported on both sides of the floor or wall assembly. The following types and sizes of nonmetallic pipes may be used:
 - A. Polyvinyl Chloride (PVC) Pipe Nom 2 in. (51 mm) diam (or smaller) Schedule 40 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 Materials* Sealant Installed to completely fill the annular space between the pipes and gypsum wallboard on both sides 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.

