

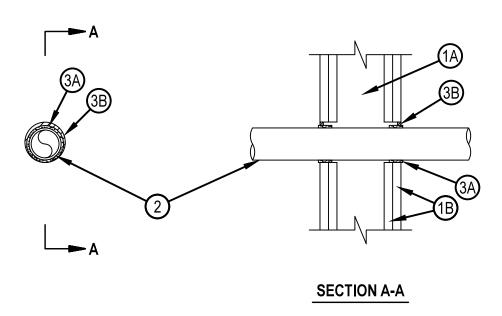
System No. W-L-2583

F Ratings — 1 and 2 Hr (See Item 1)

T Rating — 0 Hr

L Rating At Ambient - 1.2 CFM/sq ft

L Rating At 400 F - Less Than 1 CFM/sq ft



- 1. Wall Assembly The fire-rated gypsum board/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 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC.
 - B. Gypsum Board* One or two layers of nom 5/8 in. (16 mm) thick gypsum board, as specified in the individual Wall and Partition Design. See Table under Item 3B for max diam of opening.
 - The hourly F rating 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 installed within the firestop system. See Table under Item 3B for annular space between the penetrant and periphery of opening. Pipe to be rigidly supported on both sides of assembly. The following types and sizes of nonmetallic pipes may be used:
 - A. Polyvinylidene Fluoride (PVDF) Pipe Nom 2 in. (51 mm) diam (or smaller) Schedule 40 PVDF pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.
 - B. Polypropylene (PP) Pipe Nom nominal 1 in. (25 mm) diam (or smaller) Schedule 80 polypropylene pipe for use in closed (process or supply) piping systems.



System No. W-L-2583

- 3. Firestop System The firestop system shall consist of the following:
 - A. Fill, Void or Cavity Material* Wrap Strip See Table under Item 3B for type and min size of intumescent wrap strip. The wrap strip is continuously wrapped around the outer circumference of the pipe once and slid into the annular space such that approx 1/8 in. (3 mm) of the wrap strip protrudes from the wall surface. Wrap strip ends are to be butted end-to-end and held in place with tape. Wrap strip installed on each side of wall.
 - HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC CP 648S 1.5" US, CP 648S 2" US, CP 648-E W25/1"
 - B. Fill, Void or Cavity Material* Caulk Min 1/4 in. (6 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-One Sealant or FS-ONE MAX Intumescent Sealant

Nom Pipe Diam. in. (mm)	Pipe Type	Wrap Strip	Wrap Strip Size, thick. x width, in. (mm)	Max Diam of Opening, in. (mm)	Annular Space, in. (mm)	
					Min	Max
1 (25)	PP, PVDF	CP 648E - W25/1" US	3/16 x 1 (5 x 25)	2 (51)	3/16 (5)	1/2 (13)
1-1/2 (38)	PVDF	CP 648S - 1.5" US or CP 648E - W25/1" US	3/16 x 1 (5 x 25)	2-3/8 (60)	3/16 (5)	7/16 (11)
2 (51)	PVDF	CP 648S - 2" US or CP 648E - W25/1" US	3/16 x 1 (5 x 25)	3 (76)	3/16 (5)	7/16 (11)

^{*} Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

