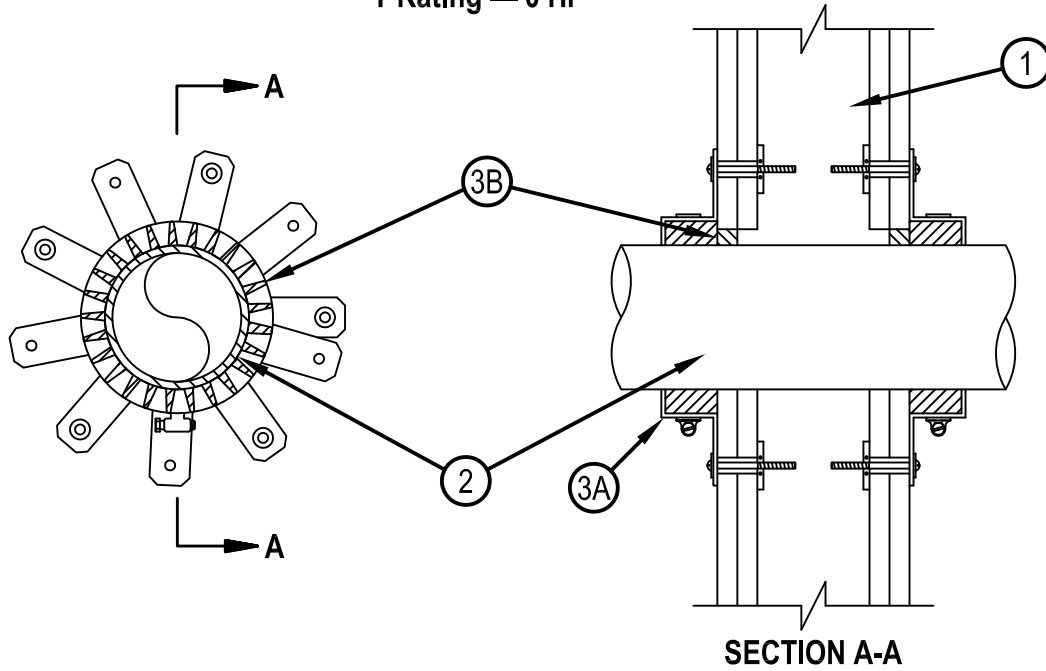




Classified by
Underwriters Laboratories, Inc.
to UL 1479

System No. W-L-2251
F Ratings — 1 and 2 Hr (See Item 1)
T Rating — 0 Hr

WL 2251



1. Wall Assembly — The 1 or 2 hr fire rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300, U400, V400 or W400 Series Wall or Partition Design 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* — The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual Wall or Partition U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 5 in. (127 mm).

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-Penetrant — One nonmetallic pipe installed either concentrically or eccentrically within the firestop system. The annular space between pipe and periphery of opening shall be min of 0 in. (point contact) to a max 1/2 in. (13 mm). Pipe to be rigidly supported on both sides of 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) solid or cellular core Schedule 40 (or heavier) polyvinyl chloride (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 chlorinated polyvinyl chloride (CPVC) pipe for use in closed (process or supply) piping system.

3. Firestop System — The firestop system shall consist of the following:

- A. Steel Collar — Collar fabricated from coils of precut min 0.017 in. (0.43 mm) thick (No. 28 MSG) galv steel available from the sealant manufacturer. Collar shall be nom 1-3/4 in. (44 mm) deep with 1 in. (25 mm) wide by 2 in. (51 mm) long anchors tabs on 2 in. (51 mm) centers for securement to wall assembly. The anchor tabs shall be bent 90 degree outward for securement to the wall assembly. The opposite side incorporates retainer tabs, 1/2 in. (13 mm) wide by 3/16 in. (5 mm) long, prebent toward the pipe surface. Collar shall be wrapped around pipe maintaining a 1 in. (25 mm) distance between pipe and collar, and overlapping min 2 in. (51 mm) at seam. Steel collar is slid along the pipe until it butts the surface of the wall. The collar shall be attached to the gypsum board with 1/4 in. (6 mm) toggler bolts on every other tab. After sealant (Item 3B) is installed, the collar shall be compressed around the pipe using a 1/2 in. (13 mm) wide by 0.028 in. (0.7 mm) thick stainless steel band clamp fastened at the collar mid-height. Collars are installed on each side of wall.
- B. Fill, Void or Cavity Material* — Min 5/8 in. (16 mm) thickness of fill material applied within annulus, flush with both surfaces of wall. Additionally, the steel collars shall be completely filled with sealant, maintaining a 1 in. (25 mm) space between collar and pipe.

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.



Hilti Firestop Systems

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