

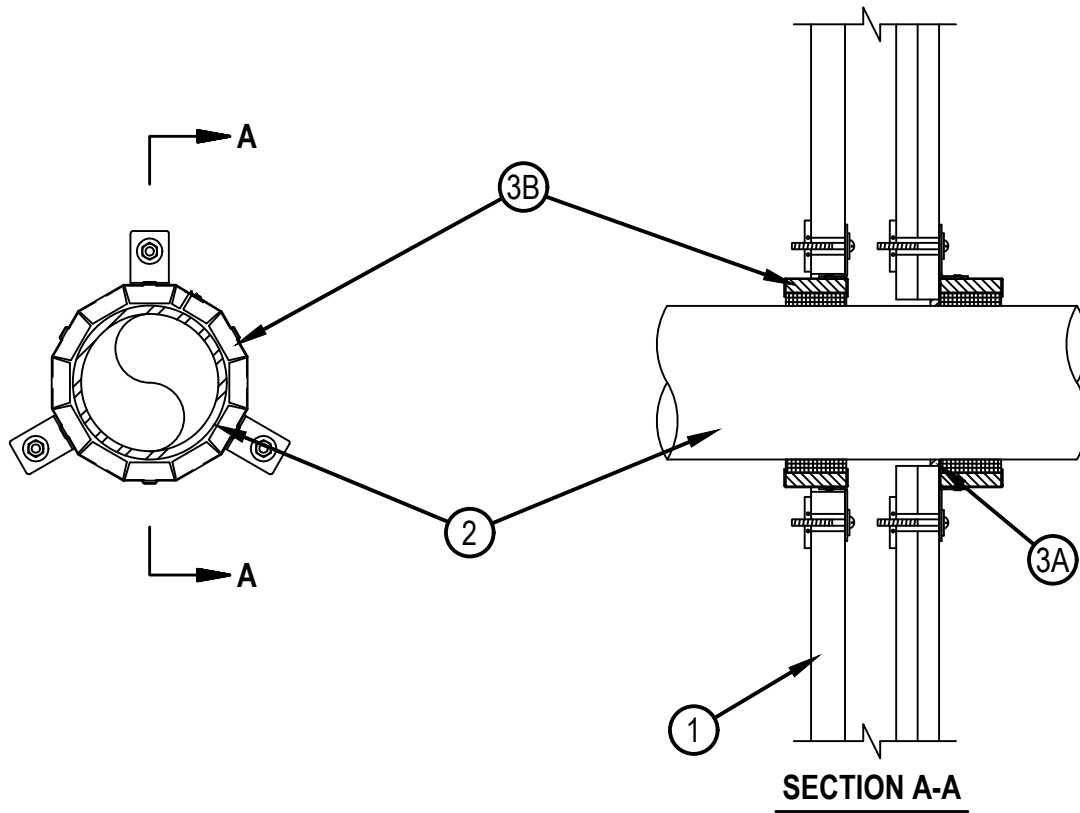


Underwriters Laboratories, Inc.  
to UL 1479

## System No. W-L-2217

F Rating — 2 Hr  
T Rating — 0 Hr

WL 2217



**Hilti Firestop Systems**

Reproduced by HILTI, Inc. Courtesy of  
Underwriters Laboratories, Inc.  
December 18, 2025

1. Wall Assembly — The fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U400, V400 or W400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:
  - A. Studs — "C-H" or "C-T" shaped studs 1-5/8 in. (16 mm) wide by 2-1/2 in. (64 mm) deep, fabricated from 25 MSG galv steel, spaced max 24 in. (610 mm) OC.
  - B. Gypsum Board\* — One layer of nom 1 in. (25 mm) thick, 24 in. (610 mm) wide gypsum liner and two layers of 5/8 in. (16 mm) thick, 4 ft. (122 cm) wide gypsum board with square or tapered edges as specified in the individual Wall and Partition Design. Max diam of opening in liner panel shall be sized to accept the outside diam of the firestop device. Max diam of opening in room side gypsum board is 5 in. (127 mm).
- 1A. Wall Assembly — As an alternate to the above wall assembly, the 2 hr fire rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400 or V400 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. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC.
  - B. Gypsum Board\* — Thickness, type, number of layers and fasteners as required in the individual Wall and Partition Design. Max diam of opening in one side of wall (either side) shall be sized to accept the outside diam of the firestop device. Max diam of opening on the other side of wall is 5 in. (127 mm).
2. Through-Penetrants — One nonmetallic pipe to be centered within the firestop system. The annular space between the pipe and the periphery of the opening on the room side of the wall shall be nom 1/4 in. (6 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) Schedule 40 solid or cellular core 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) SDR13.5 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 — Sealant\* — Min 1/4 in. (6 mm) thickness of fill material applied within annulus of 5/8 in. (16 mm) thick gypsum board, flush with surface of wall.  
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE MAX Intumescent Sealant
  - B. Firestop Device — Firestop Collar — Firestop collar shall be friction fit from the interior of the wall into a max 6 in. (152 mm) diam opening in the 1 in. (25 mm) thick gypsum liner panel. Diam of opening to reflect outside diam of collar. The collar shall be secured to the liner with anchor hooks provided with the collar. (Min 2 anchor hooks for 1-1/2 and 2 in. (38 and 51 mm) diam pipes and 3 anchor hooks for 3 and 4 in. (76 and 102 mm) diam pipes). The anchor hooks are to be secured to the firestop collar with No. 7 by 7/16 in. (11 mm) long screws. The collar shall be fastened to the liner panel with 3/16 in. (5 mm) by 2-1/2 in. (64 mm) toggle bolts with min 3/4 in. (19 mm) diam steel washers. The external firestop collar shall be installed in accordance with the accompanying installation instructions. The collar shall be installed and latched around the pipe and secured to the 5/8 in. (16 mm) thick gypsum board with the anchor hooks provided with the collar. (Min 2 anchor hooks for 1-1/2 and 2 in. (38 and 51 mm) diam pipes and 3 anchor hooks for 3 and 4 in. (76 and 102 mm) diam pipes). The anchor hooks are to be secured to the wall with 3/16 in. (5 mm) by 2-1/2 in. (64 mm) toggle bolts along with min 3/4 in. (19 mm) diam steel washers. When alternate wall assembly is used, the one-sided installation of the collars may be from either side of the wall assembly.  
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP643 50/1.5"N, CP643 63/2"N, CP643 90/3"N or CP643 110/4"N Firestop Collar

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