



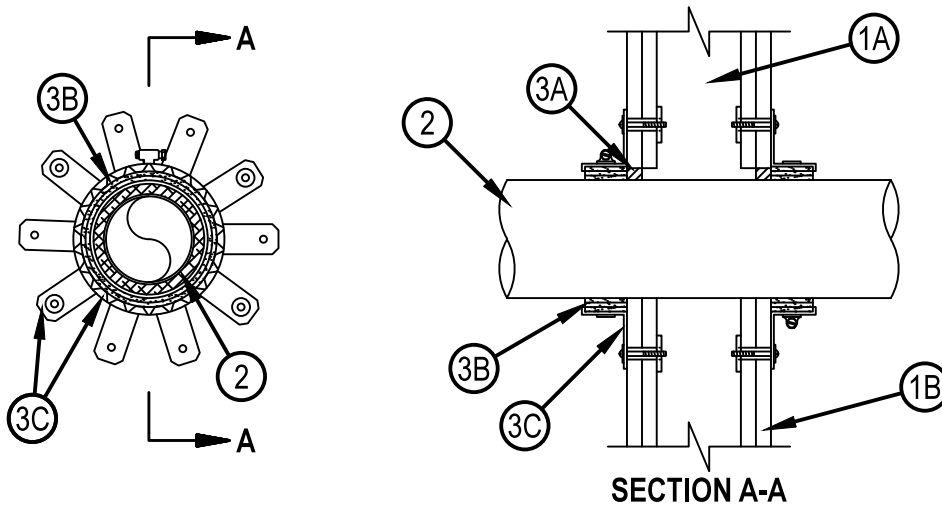
Classified by  
Underwriters Laboratories, Inc.  
to CAN/ULC-S115

## System No. W-L-2052

**F Ratings — 1 and 2 Hr (See Item 1)**  
**FT Ratings — 1 and 2 Hr (See Item 1)**  
**FH Ratings — 1 and 2 Hr (See Item 1)**  
**FTH Ratings — 1 and 2 Hr (See Item 1)**



WL 2052



1. Wall Assembly — The 1 and 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 and 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 51 by 102 mm (2 by 4 in.) lumber spaced 406 mm (16 in.) OC. Steel studs to be min 89 mm (3-1/2 in.) wide and spaced max 610 mm (24 in.) 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 and Partition Design. Max diam of opening is 140 mm (5-1/2 in.).

The hourly F, FT, FH and FTH 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 to be installed concentrically or eccentrically within the firestop system. Annular space between pipe and periphery of opening to be min 0 in. (point contact) and max 13 mm (1/2 in.). Pipe to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of nonmetallic pipes may be used:

- A. Polypropylene (PP) Pipe — Nom 100 mm (4 in.) diam (or smaller) SDR11 PP pipe for use in closed (process or supply) piping systems.
- B. Polypropylene (PP) Pipe — Nom 125 mm OD (or smaller) Fusiotherm® SDR11 PP pipe or Faser® SDR7.4 PP 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 Materials\* — Sealant — Min 16 mm (5/8 in.) 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.

- B. Fill, Void or Cavity Material\* — Wrap Strip — Nom 5 mm (3/16 in.) thick by 44 mm (1-3/4 in.) wide intumescent wrap strip. Three layers of wrap strip are continuously wrapped around the through-penetrant with ends butted and held in place with tape. Wrap strip butted tightly against both surfaces of wall.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP648-E W45/1-3/4" Firestop Wrap Strip

- C. Steel Collar — Steel collar fabricated from coils of precut min 0.4 mm (0.016 in.) thick (No. 28 gauge) galv steel available from fill material manufacturer. Collar shall be nom 44 mm (1 3/4 in.) deep with 25 mm (1 in.) wide by 51 mm (2 in.) long anchor tabs on 44 mm (1-3/4 in.) centers for attachment to both surfaces of wall. The opposite side incorporates retainer tabs, 13 mm (1/2 in.) wide by 5 mm (3/16 in.) long, which are bent toward the pipe surface. Collar shall be tightly wrapped over the wrap strip, overlapping min 25 mm (1 in.) at seam. A nom 13 mm (1/2 in.) wide stainless steel hose clamp shall be secured to the collar at its mid-height. Collar secured to both surfaces of wall with a min of four 6 mm (1/4 in.) diam steel toggle bolts along with min 19 mm (3/4 in.) diam steel washers symmetrically spaced.

\* 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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