



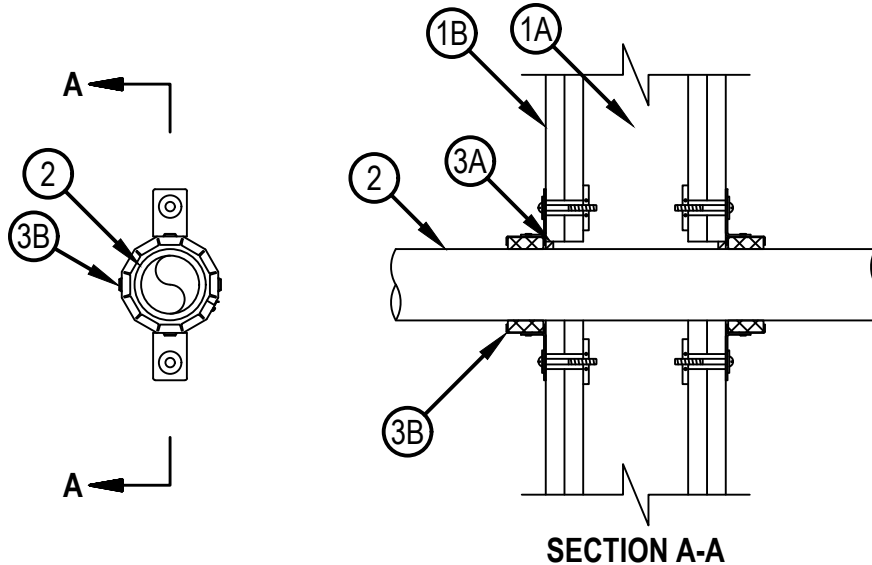
Classified by
Underwriters Laboratories, Inc.
to CAN/ULC-S115

System No. W-L-2045

F Ratings — 1 and 2 Hr (See Item 1)
FT Ratings — 1 and 1-1/4 Hr (See Item 1)
FH Rating — 0 Hr
FTH Rating — 0 Hr



WL 2045



System tested with a pressure differential of 50 Pa between the exposed and the unexposed surfaces with the higher pressure on the exposed side.

1. Wall Assembly — The 1 hr 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 and Partition Design in the UL Fire Resistance Directory and shall include the following construction features:
 - A. Studs — Wall framing shall 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 specified in the individual Wall and Partition Series Design in the UL Fire Resistance Directory. Max diam of opening is 76 mm (3 in.).

The F and FT Ratings of the firestop system are dependent upon the fire rating of the of the wall assembly in which it is installed as shown in the table below :

Fire Rating of Wall, Hr	F Rating, Hr	FT Rating, Hr
2	2	1-1/4
1	1	1

2. Through Penetrant — One nonmetallic pipe installed either concentrically or eccentrically within the firestop system. The annular space between the pipe and the periphery of the opening shall be a min 0 mm (point contact) to a max 16 mm (5/8 in). Pipe to be rigidly supported on both sides of wall assembly. The following types and sizes of pipe may be used:

- A. Polypropylene (PP) Pipe — Nom nominal 51 mm (2 in.) diam (or smaller) Schedule 80 polypropylene pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
- B. Polypropylene (PP-R) Pipe — Nom 2 in. (63 mm OD) diam (or smaller) Aquatherm Greenpipe SDR 7.4 or 11 pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
- C. Polypropylene (PP-RCT) Pipe — Nom 2 in. (63 mm OD) diam (or smaller) Aquatherm Bluepipe SDR 9 or 11 pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
- D. HR Polyvinyl Chloride (PVC-HR) Pipe — Nom 2 in. (63 mm OD) diam (or smaller) NAPSYS-HR PVC Sch 40 pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.



Hilti Firestop Systems

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WL 2045

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

A. Fill, Void or Cavity Material* — Sealant — Min 16 mm (5/8 in.) thickness of fill material applied within annulus, flush with both surfaces of wall assembly.

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

B. Firestop Device* - Firestop Collar — Firestop collar sized to fit the specific diam of through-penetrant shall be wrapped around the outer circumference of the pipe and installed in accordance with the accompanying installation instructions. Collar to be installed and latched around the pipe and secured to both sides of the wall using the anchor hooks provided with the collar. The anchor hooks are to be secured to the surface of wall with min 4.8 mm (3/16 in.) diam by min 64 mm (2-1/2 in.) long steel toggle bolts along with washers.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 643 63/2"N, CP 643 63/1.5"N

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



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