



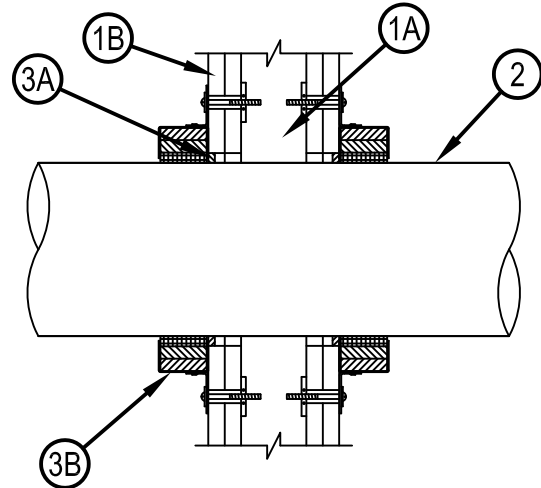
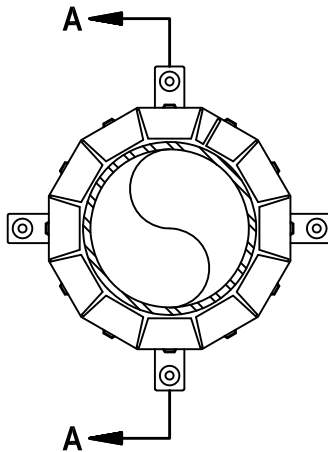
Classified by  
Underwriters Laboratories, Inc.  
to CAN/ULC-S115

## System No. W-L-2028

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



WL 2028



**SECTION A-A**

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 or 2 hr 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 construction features noted below. The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.

The hourly F and FH Ratings of the firestop system are equal to the hourly fire rating of the wall assembly in which it is installed. The hourly FT Rating of the firestop system is 0 hr for 1 hr rated walls and 1 hr for 2 hr rated walls.

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 64 mm (2-1/2 in.) wide and spaced max 610 mm (24 in.) OC.

B. Gypsum Board\* — Nom 16 mm (5/8 in.) thick gypsum board, as specified in the individual Wall and Partition Design. Max diam of opening is 178 mm (7 in.).

2. Through-Penetrants — One nonmetallic pipe to be installed within the firestop system. The annular space between pipe and periphery of opening shall be min 0 in. (point contact) to max 13 mm (1/2 in.). Pipe to be rigidly supported on both sides of the wall assembly. The following types and sizes of nonmetallic pipes may be used:

A. Polyvinyl Chloride (PVC) Pipe — Nom 152 mm (6 in.) diam (or smaller) Schedule 40 solid-core or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.

B. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 152 mm (6 in.) diam (or smaller) SDR11 or SDR13.5 CPVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

C. Acrylonitrile Butadiene Styrene (ABS) Pipe — Nom 152 mm (6 in.) diam (or smaller) Schedule 40 solid-core or cellular core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

D. Flame Retardant Polypropylene (FRPP) Pipe — Nom 152 mm (6 in.) diam (or smaller) Schedule 40 FRPP pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.

E. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 152 mm (6 in.) diam (or smaller) SDR 11 CPVC for use in closed (process or supply) piping systems.

IPEX INC — AquaRise

F. Rigid Nonmetallic Conduit+ — Nom 102mm (4 in.) diam (or smaller) Schedule 40 PVC conduit installed in accordance with the National Electrical Code (NFPA No. 70).



**Hilti Firestop Systems**

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

A. Fill, Void or Cavity Material\* — Sealant — Min 6 mm (1/4 in.) thickness of fill material applied within the annulus, flush with both sides of wall.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 606 or FS-One Sealant or FS-ONE MAX Intumescent Sealant.

Note: CP 606 not suitable for use with CPVC pipes

B. Firestop Device\* — Galvanized steel collar lined with an intumescent material sized to fit the specific diam of through-penetrant. Device shall be installed around the through-penetrant 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. (Minimum 2 anchor hooks for 38 and 51 mm (1-1/2 and 2 in.) diam pipes, 3 anchor hooks for 76 and 102 mm (3 and 4 in.) diam pipes, and 4 anchor hooks for 152 mm (6 in.) diam pipes). The anchor hooks are to be secured to the surface of wall with 5 mm (3/16 in.) diam by 64 mm (2-1/2 in.) long toggle bolts along with min 32 mm (1-1/4 in.) steel washers. As an alternate for pipe sizes of nom 4 in. diam or less, min No. 10 by 1-1/2 in. (27 mm) long drywall or laminate screws with min 3/4 in. (19 mm) steel washers may be used. When the drywall or laminate screw is used, T Rating shall not exceed 1 hr.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 643 50/1.5"N, CP 643 63/2"N, CP 643 90/3"N, CP 643 110/4"N, CP 643 160/6"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.

