



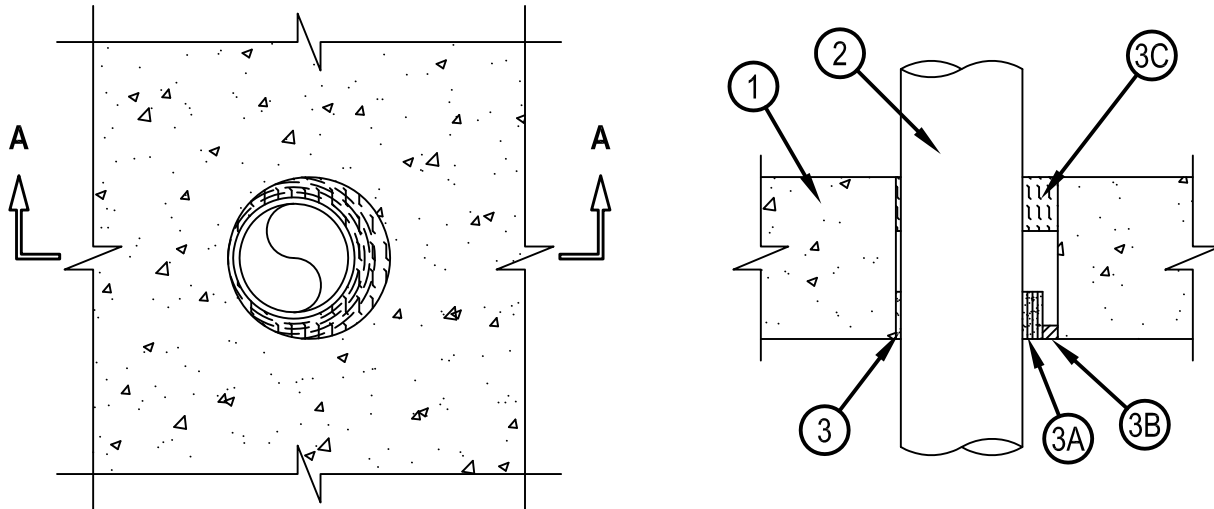
Classified by  
Underwriters Laboratories, Inc.  
to CAN/ULC-S115

## System No. F-A-2026

F Rating — 2 Hr  
FT Ratings — 1/4, 1-3/4 and 2 Hr (See Item 2)  
FH Rating — 0 Hr  
FTH Rating — 0 Hr



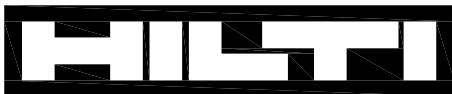
FA 2026



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. Floor Assembly — Min 152 mm (6 in.) thick reinforced lightweight or normal weight (1600-2400 kg/m<sup>3</sup> or 100-150 pcf) concrete. Max diam of opening is 152 mm (6 in.).
2. Through-Penetrant — One nonmetallic pipe or conduit to be installed either concentrically or eccentrically within the firestop system. Penetrant to be rigidly supported on both sides of the floor assembly. The following types of pipe or conduit may be used:
  - A. Polyvinyl Chloride (PVC) Pipe — Nom 102 mm (4 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. The annular space between the PVC penetrant and the periphery of the opening shall be min 5 mm to max 32 mm (3/16 to 1-1/4 in.). The hourly FT Rating for the firestop system is 1-3/4 hr when the PVC pipe is used.
  - B. Rigid Nonmetallic Conduit+ — Nom 102 mm (4 in.) diam (or smaller) Schedule 40 PVC conduit installed in accordance with the National Electrical Code (NFPA No. 70). The annular space between the penetrant and the periphery of the opening shall be min 5 mm to max 32 mm (3/16 to 1-1/4 in.). The hourly FT Rating for the firestop system is 1-3/4 hr when the conduit is used.
  - C. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 102 mm (4 in.) diam (or smaller) SDR11 or SDR13.5 CPVC pipe for use in closed (process or supply) piping systems. The annular space between the CPVC penetrant and the periphery of the opening shall be min 5 mm to max 32 mm (3/16 to 1-1/4 in.). The hourly FT Rating for the firestop system is 1-3/4 hr when the CPVC pipe is used.
  - D. Acrylonitrile Butadiene Styrene (ABS) Pipe — Nom 102 mm (4 in.) diam (or smaller) Schedule 40 cellular or solid core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system. The annular space between the ABS penetrant and the periphery of the opening shall be min 5 mm (3/16 in.) to max 30 mm (1-1/8 in.). The hourly FT Rating for the firestop system is 1/4 hr when the ABS pipe is used.
  - E. Flame Retardant Polypropylene (FRPP) Pipe — Nom 102 mm (4 in.) diam (or smaller) Schedule 40 FRPP pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system. The annular space between the FRPP penetrant and the periphery of the opening shall be min 5 mm (3/16 in.) to max 33 mm (1-1/4 in.). The hourly FT Rating for the firestop system is 1/4 hr when the FRPP pipe is used.
  - F. Polypropylene (PP) Pipe — Nom 51 mm (2 in.) diam (or smaller) Schedule 80 PP pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems. The annular space between the PP penetrant and the periphery of the opening shall be min 5 mm (3/16 in.) to max 37 mm (1-1/2 in.). The hourly FT Rating for the firestop system is 2 hr when the PP pipe is used.
  - G. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 102 mm (4 in.) diam (or smaller) SDR 11 CPVC for use in (process or supply) piping systems.

IPEX INC — AquaRise



Hilti Firestop Systems

Reproduced by HILTI, Inc. Courtesy of  
Underwriters Laboratories, Inc.  
January 15, 2015



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

## System No. F-A-2026



FA 2026

### 3. Firestop System — The details of the firestop system shall be as follows:

A. Fill, Void or Cavity Materials\* - Wrap Strip — Nom 5 mm (3/16 in.) thick intumescent material supplied in 45 mm (1-3/4 in.) wide strips. One layer of wrap strip tightly wrapped around pipe and held in position using tape. An additional three layers of wrap strip tightly wrapped around pipe to the maximum extent possible and held in place with tape. Wrap strip to be flush with bottom surface of floor.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 648E Wrap Strip

B. Fill, Void or Cavity Materials\* - Sealant — Min 13 mm (1/2 in.) thickness of sealant applied within annular space between wrap strip (Item 3A) and periphery of opening, flush with bottom surface of floor.

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

C. Packing Material — Min 51 mm (2 in.) thickness of min 64 kg/m<sup>3</sup> (4 pcf) mineral wool batt insulation firmly packed into annular space between penetrant and periphery of opening, flush with top surface of floor.

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

+ Bearing the UL Listing Mark



**Hilti Firestop Systems**

Reproduced by HILTI, Inc. Courtesy of  
Underwriters Laboratories, Inc.  
January 15, 2015