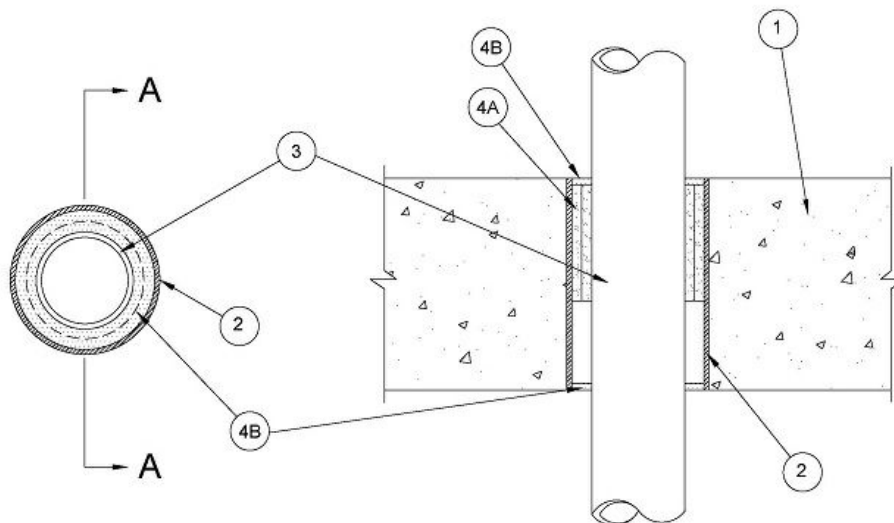


December 6, 2023

ANSI/UL 1479 (ASTM E814)	CAN/ULC S115
F Rating - 2 Hr	F Rating - 2 Hr
T Rating – ½ or 2 Hr (see Item 4)	FT Rating – ½ or 2 (see Item 4)
	FH Rating – 2 Hr
	FTH Rating – ½ or 2 Hr (see Item 4)



**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 or Wall Assembly** — Floor or Wall Assembly Lightweight or normal weight (100-150 pcf) concrete. Min thickness of solid concrete floor or wall assembly is 4-1/2 in. Floor may also be constructed of any min 8 in. thick UL Classified hollow core **Precast Concrete Units**. Wall assembly may also be constructed of any UL Classified **Concrete Blocks\***. Max diam of opening is 6 in.

See **Concrete Blocks** (CAZT) and **Precast Concrete Units** (CFTV) categories in the Fire Resistance Directory for names of manufacturers.

**1A. Floor Assembly** — As an alternate to Item 1. The fire-rated unprotected concrete and steel or concrete floor assembly shall be constructed of the materials and in the manner described in the individual D900 Series Floor-Ceiling Design in the UL Fire Resistance Directory and shall include the following construction features:

**A. Concrete** — Min 2-1/2 in. (64 mm) thick reinforced lightweight or normal weight (100-150 pcf, 1600-2400 kg/m<sup>3</sup>) concrete.

**B. Steel Floor and Form Units\*** — Composite or noncomposite max 3 in. (76 mm) deep galv steel fluted units as specified in the individual Floor-Ceiling design. Max diam of opening is 6 in. (152 mm).

2. **Metallic Sleeve** — (Optional) Nom 6 in. (152 mm) diam (or smaller) Schedule 40 (or heavier) steel sleeve cast or grouted into floor or wall assembly, flush with floor or wall surfaces.

3. **Through Penetrants** — One nonmetallic penetrant installed concentrically within the firestop system. The annular space between pipe and periphery of opening shall be max 3/4 in. Pipe to be rigidly supported on both sides of the floor or wall assembly. The following types and sizes of non-metallic pipe may be used:

A. **Polyvinyl Chloride (PVC) Pipe** — Nom 4 in. (102 mm) 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 systems.

B. **Chlorinated Polyvinyl Chloride (CPVC) Pipe** — Nom 4 in. (102 mm) diam (or smaller) SDR 11, 13.5, 21 CPVC pipe for use in closed (process or supply) piping systems.

C. **Acrylonitrile Butadiene Styrene (ABS) Pipe** — Non 4 in. (102 mm) diam (or smaller) Schedule 40 cellular core ABS (ccABS) pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems. Limited for use with nom 2 in. (51 mm) and 3 in. (76 mm) devices (Item 2).

D. **Polypropylene (PP-R) Pipe** — Non 4 in. (102 mm) diam (or smaller) Aquatherm Greenpipe SDR 7.4 or 11, Aquatherm Bluepipe SDR 11 or 17.6 for use in closed (process or supply) piping systems.

E. **Polyvinyl Chloride (PVC-XFR) Pipe** — Non 4 in. (102 mm) diam (or smaller) Schedule 40 solid core PVC XFR for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

F. **Polypropylene (PP-RCT) Pipe** — Non 4 in. (102 mm) diam (or smaller) Niron Clima Pipe or Niron CoolPro Pipe SDR 7.4, 11 or 17, Niron Nero Pipe SDR 11 or 17 for use in closed (process or supply) piping systems.

4. **Firestop System** — The details of the firestop system shall be as follows:

A. **Fill, Void or Cavity Materials\* — Wrap Strip** — One, two or three layers of nom 1/4 in. thick intumescent elastomeric material faced on one side with a plastic film, supplied in 1 or 2 in. (25 or 51 mm) wide strips (See Table 1). Strips tightly wrapped around nonmetallic pipe (film side exposed) with the edges butted. Butted ends in successive layers shall be offset. Wrap strip layers temporarily held in position using tape, wire or equivalent.

**RECTORSEAL** — [Metacaulk Wrap Strip](#)

B. **Fill, Void or Cavity Materials\* — Caulk** — (See Table 1) Min 1/4 in. (6 mm) thickness of fill material applied within annulus flush with top and bottom surfaces of floor or both sides of wall.

**RECTORSEAL** — [Metacaulk 1000](#)

Penetrant Item	Nom Diam of Pipe In. (mm)	Strip Width. In. (mm)	No. of stacks	No. of layers	Annular Space in. (mm)	T Rating	Location of Wrap Strip	Sealant Thickness In. (mm)
A, B, E	4 (102)	1(25)	1	3	3/4 (18)	1/2 Hr	Recessed 3 in. (76 mm) from bottom surface of floor or 1/2 in. (13mm) from both surfaces of wall	1/2 (13mm)
C, D, F	4 (102)	1 (25)	2	2	1/2 (13)	2 Hr	Recessed 2-1/4 in. (57 mm) from bottom surface of floor or 1/4 in. (6mm) from both surfaces of wall	1/4 (6mm)
A, B, E	3 (76)	1 (25)	1	2	1/2 (13)	1/2 Hr	Recessed 3 in. (76 mm) from bottom surface of floor or 1/2 in. (13mm) from both surfaces of wall	

C, D, F	3, 2 or 1-1/2 in. (76, 51, 38)	1 (25)	2	1	1/4 (6)	2 Hr	Recessed 2-1/4 in. (57 mm) from bottom surface of floor	1/4 (6mm)
							or 1/4 in. (6mm) from both surfaces of wall	
A, B, E	2 or 1-1/2 in. (51, 38)	1 (25)	1	1	1/4 (6)	1/2 Hr	Recessed 3 in. (76 mm) from bottom surface of floor	1/2 (13mm)
							or 1/2 in. (13mm) from both surfaces of wall	
A, B, E	3, 2 or 1-1/2 in. (76, 51, 38)	2 (51)	1	1	1/4 (6)	2 Hr	Recessed 2-1/4 in. (57 mm) from bottom surface of floor	1/4 (6mm)
							or 1/4 in. (6mm) from both surfaces of wall	
C, D	4, 3, 2 or 1-1/2 in. (102, 76, 51, 38)	2 (51)	1	2	1/2 (13)	2 Hr	Recessed 2-1/4 in. (57 mm) from bottom surface of floor	1/4 (6mm)
							or 1/4 in. (6mm) from both surfaces of wall	

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