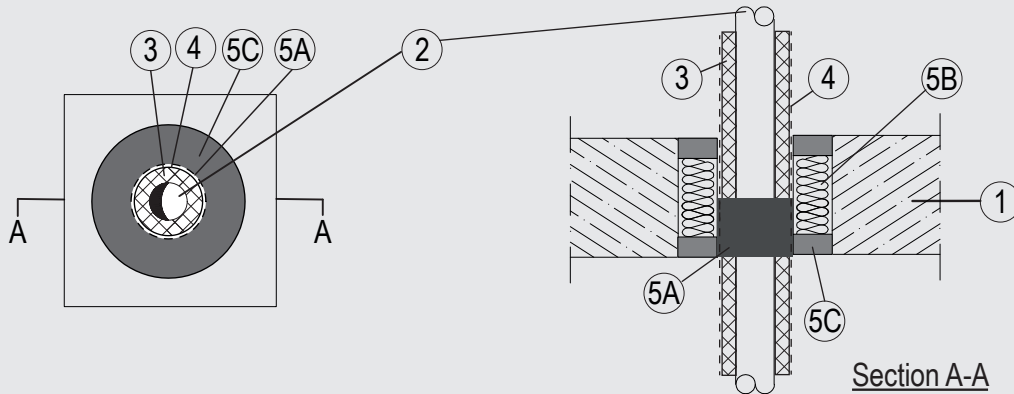


Through-penetration Firestop Systems

System No. C-AJ-5454

ANSI/UL1479 (ASTM E814)	CAN / ULC S115
F Rating – 3 Hr	F Rating – 0 or 3 Hr (see Item 2)
T Rating – 2 Hr	FT Rating – 0 or 2 Hr (see Item 2)
	FH Rating – 0 or 3 Hr (see Item 2)
	FTH Rating – 2 Hr (see Item 2)



System tested with a pressure differential of 2.5 Pa between the exposed and the unexposed surfaces with the higher pressure on the exposed side.

1. Floor or Wall Assembly

Min. 4-1/2 in. (115 mm) thick normal weight (nom. 135-150 pcf or nom. 2160-2400 kg/m³) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Opening shall be circular or rectangular with max diameter or dimensions of 7-2/3in. (195 mm).

See Concrete Blocks (CAZT) category in UL ProductIQ for names of manufacturers.

2. Through Penetrant

One pipe or tubing to be installed concentrically (Item 2A,2C and 2D), concentrically or eccentrically (Item 2B) within the firestop system. Pipe or tubing to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of pipes or tubes may be used:

- A. Steel Pipe – Nom 4-1/2 in. (114.3 mm) diam (or smaller) 0.12 in. (3.2 mm) (or thicker) steel pipe.
- B. Steel Pipe – Nom 2 in. (50 mm) diam (or smaller) 0.08 in. (2 mm) (or thicker) steel pipe.
- C. Polyvinyl Chloride (PVC) Pipe – Nom 4-1/3 in. (110 mm) diam (or smaller) 0.13 in (3.2 mm) wall thickness PVC pipe for use in closed (process or supply) piping systems.
- D. Polyvinyl Chloride (PVC) Pipe – Nom 2 in. (50 mm) diam (or smaller) 0.15 in (3.7 mm) wall thickness PVC pipe for use in closed(process or supply) or vented (drain, waste or vent) piping systems.

Item 2C is not eligible for cUL rating.

3. Pipe Covering Mineral Wool Insulation

Nom 1.2 in. (30 mm) thick aluminium foil faced mineral wool units (min. 5 pcf (80 kg/m³)) sized to the outside diam of the pipe. Pipe insulation installed on pipe in accordance with the manufacturer's instructions. The annular space between insulated pipe or tubing and periphery of opening shall be 0.4 in. (10 mm) in conjunction with Item 2A,2C and 2D or min 0 in. (point contact) to max 0.8 in. (20 mm) in conjunction with Item 2B.

DEUTSCHE ROCKWOOL GmbH & Co. KG – Rockwool 800

4. Coating*

Nom 0.08 in. (2 mm) dry film thickness to be applied onto insulated pipe or tubing in accordance with the manufacturer's instructions.

H B FULLER CO – Foster 30-36

*Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively. Reprinted from Product iQ with permission from UL Solutions. ©2024 UL LLC.



5. Firestop System

The Through-Penetration Firestop System shall consist of the following:

- A. Fill, Void or Cavity Material* – (Not required when Item 2B is installed) - 1 layer of 1/16 in (1.5 mm) by 2 in. (50 mm) wrap flush mounted on the exposed side of floor or both sides of wall assembly and wrapped around the coated pipe covering (Item 3).

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- B. Packing Material – Min 4-1/3 in. (110 mm) thickness of min 6 pcf (100 kg/m³) mineral wool insulation firmly packed into annulus as a permanent form. Packing material to be recessed from both surfaces of floor or wall to accommodate the required thickness of fill material.

- C. Fill, Void or Cavity Material* – Min 0.08 in. (2 mm) thickness of fill material applied within the annulus, flush with both surfaces of floor or wall assembly.

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