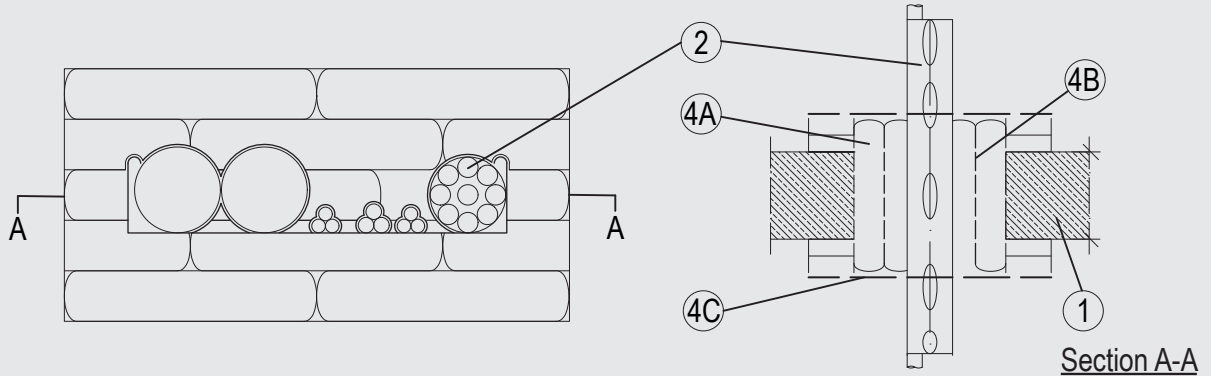


# Through-penetration Firestop Systems

## System No. F-B-4008

ANSI/UL1479 (ASTM E814)	CAN / ULC S115
F Rating – 3 Hr	F Rating – 3 Hr
T Rating – 1 - 1/2 Hr	FT Rating – 1 - 1/2 Hr
	FH Rating – 3 Hr
	FTH Rating – 1 - 1/2 Hr



### 1. Floor Assembly

Min 7-7/8 in. (200 mm) thick lightweight or normal weight (100-150 pcf or 1600-2400 kg/m<sup>3</sup>) concrete or Min 4-1/2 in. (115 mm) thick lightweight or normal weight (100-150 pcf or 1600-2400 kg/m<sup>3</sup>) concrete increased in depth to min 7-7/8 in. (200 mm) around the seal by the fixing on non-combustible boards. Opening shall be rectangular with max dimensions of 15-3/4 in. (400 mm) by 7-7/8 in. (200 mm).

See Concrete Blocks (CAZT) in the Fire Resistance Directory for names of manufacturers.

### 2. Cable Tray\*

Nom 11-3/4 in. (300 mm) wide by max 2-3/8 in. (60 mm) deep open-perforated or solid sheet cable tray with side rails formed of min 1/16 in. (1.5 mm) thick steel. The annular space between the cables trays and the periphery of the opening to be nom 2 in. (50 mm). Cable trays to be rigidly supported on both sides of the floor assembly.

### 3. Cables

Aggregate cross-sectional area of cables in cable tray not to exceed 60 percent of the cross-sectional area of the cable tray based on a max 2-3/4 in. (68 mm) cable loading depth within the tray. Cable bundles of different types shall be separated by min 1/4 in. (5 mm). Any combination of the following types and sizes of cables may be used:

- A. Max 3/C 185 mm diam (or smaller), copper conductor cable with PVC insulation and PVC jacket.
- B. Max 5/C No. 15 AWG (1.5 mm) diam (or smaller), copper conductor cable with EPR insulation and Rubber jacket.
- C. Max 5/C No. 15 AWG (1.5 mm) diam (or smaller), copper conductor cable with XPLE insulation and EVA jacket.
- D. Max 20/C No. 19 AWG (0.6 mm) diam (or smaller), copper conductor telecommunication cables PE jacket.
- E. Max 5/C No. 15 AWG (1.5 mm) diam (or smaller), copper conductor cable with PVC insulation and PVC jacket.

### 4. Firestop System

The Firestop System shall consist of the following:

- A. Fill, Void or Cavity Material\* – 200 mm deep pillows to be tightly packed into the opening in the floor and around the services, flush to both faces. Different size of pillow are used to best fill the space.  
**Flamro Brandschutz-Systeme GmbH – BIO-BAG**
- B. Fill, Void or Cavity Material\* – Any open/free space between cables and pillows to be filled to full depth.  
**Flamro Brandschutz-Systeme GmbH – FLAMMOTECT-A**
- C. Steel Mesh Guard\* – Min 50 x 50 mm steel mesh guard to be mechanically fixed to both faces of the floor, completely covering the through penetration firestop.

\*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.