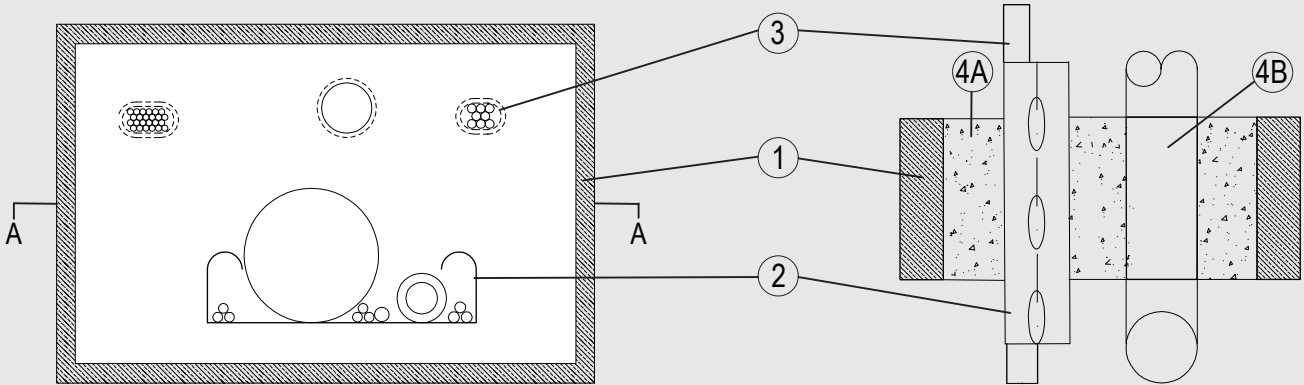


# Through-penetration Firestop Systems

## System No. F-A-8045

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



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 Assembly

Min. 4-1/2 in. (115 mm) thick lightweight or normal weight (100-150 pcf or 1600 - 2400 kg/m<sup>3</sup>) concrete. Opening shall be rectangular with max dimensions of 23-5/8 in. (600 mm) by 15-3/4 in. (400 mm).

### 2. Cable Tray\*

Max 11-3/4 in. (300 mm) wide by 2-3/8 in. (60 mm) deep open-perforated or solid sheet cable tray with side rails formed of min 0.05 in. (1.5 mm) thick steel. Cable trays to be rigidly supported on both sides of the floor assembly.

### 3. Services

Aggregate cross-sectional area of cables in cable tray not to exceed 46.62 percent of the cross-sectional area of the cable tray based on a max 2-3/8 in. (60 mm) cable loading depth within the tray. The annular space between the tray and the periphery of the opening to be 4 in (100 mm). Services to be incorporated shall consist of the following:

- A. Max 1/C 5-3/4 in. 148 mm diameter (or smaller), copper conductor cable with XLPE insulation and HDPE jacket.
- B. Nominal 1-1/2 in (37mm) diameter PE-HD SRV-G 7x10 tc 'speed pipe' for use in closed (process or supply) or vented (drain, waste or vent) piping systems. The annular space between the pipe and the periphery of the opening to be 2 in (50 mm).
- C. Nominal 2-1/4 in. (56 mm) diameter HD 240 synthetic rubber hydraulic hose for use in closed (process or supply) or vented (drain, waste or vent) piping systems. The annular space between the pipe and the periphery of the opening to be 2 in (50 mm).
- D. Nominal 1-3/4 in (43 mm) diameter PE-HD SRV-G 24x7 tc 'speed pipe' for use in closed (process or supply) or vented (drain, waste or vent) piping systems. The annular space between the pipe and the periphery of the opening to be 2 in (50 mm).
- E. Max 5/C No. 15 AWG (1.5 mm) diameter (or smaller), copper conductor cable with EPR insulation and Rubber jacket.
- F. Max 5/C No. 15 AWG (1.5 mm) diameter (or smaller), copper conductor cable with XPLE insulation and EVA jacket.
- G. Max 5/C No. 15 AWG (1.5 mm) diameter (or smaller), copper conductor cable with PVC insulation and PVC jacket.
- H. Max 1/C 2-1/8 in. (55.2 mm) diameter (or smaller), copper conductor cable with XLPE insulation and PVC jacket.

### 4. Firestop System

The Firestop System shall consist of the following:

- A. Fill, Void or Cavity Material\* – Mortar - Nom 4-1/2 in. (115 mm) thickness cast in to aperture in the floor and around the services.

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- B. Fill, Void or Cavity Material\* – 1 layer of 1/16 in (1.5 mm) by 5 in. (125 mm) wrap positioned centrally within the depth of the seal around hydraulic pipe or speed pipes.

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