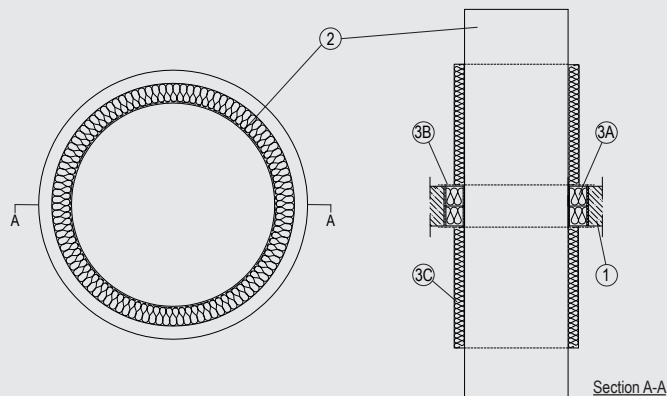


Through-penetration Firestop Systems

System No. F-A-1167

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. 4-1/2 in. (115 mm) thick lightweight or normal weight (100-150 pcf or 1600 - 2400 kg/m³) concrete. Opening shall be rectangular or circular with max dimensions of 15-3/4 in. (400 mm).

2. Duct

Single to be installed within the opening. The annular space between the duct and the periphery of the opening to be 1-1/4 in (30 mm). Ducts to be rigidly supported on both sides of the floor assembly. The following penetrants may be used:

- A. 11-3/4 in. (300 mm) galvanized steel duct.

3. Firestop System

The Firestop System shall consist of the following:

- A. Packing material – 2 layer of Nom. 2-3/8 in. (60 mm) thick mineral wool board min. 9.3 pcf (150 kg/m³) firmly packed into the opening of the floor as a permanent form.
- B. Fill, Void or Cavity Material* – Min. 1/16 in. (2 mm) dry film thickness to be applied inside the aperture before installation and over the full surface of the mineral wool boards, and overlapping onto the floor by min. 3/4 in. (20 mm).
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- C. Duct Insulation – Nom. 1-1/4 in. (30 mm) thick 'Klimarock' mineral fibre lamella mat, min density 2.5 pcf (40 kg/m³), wrapped around duct for min. 10 in. (250 mm) on both faces.

*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 the Online Certifications Directory with permission from UL.