

System No. F-A-1227

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 2 Hr	F Rating — 2 Hr
T Ratings — 1 and 2 Hr (See Item 4)	FT Ratings — 1 and 2 Hr (See Item 4)
L Rating At Ambient —1 CFM/sq ft	FH Rating — 2 Hr
L Rating At 400°F — Less Than 1 CFM/sq ft	FTH Ratings — 1 and 2 Hr (See Item 4)
W Rating – Class 1	L Rating At Ambient — 5.1 L/s/m²
	L Rating At 204°C — Less Than 5.1 L/s/m²



System No. F-A-1227

- 1. Floor Assembly Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete.
- 2. Firestop Device* Cast in place firestop device, with optional accessories including sleeve extensions, permanently embedded during concrete placement or grouted in concrete floor assembly in accordance with accompanying installation instructions. Device sized to nom diam of penetrant. Device is to be installed flush with the top surface of the floor.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CFS-CID U 2", CFS-CID U 2" CA, CFS-CID U 3", CFS-CID U 4"

- 3. Through-Penetrant One metallic pipe installed concentrically or eccentrically within opening. Penetrant to be rigidly supported on both sides of floor assembly. The following types and sizes of penetrants may be used:
 - A. Steel Pipe Nom 4 in. (102 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - B. Iron Pipe Nom 4 in. (102 mm) diam (or smaller) cast or ductile iron pipe.
 - C. Conduit Nom 4 in. (102 mm) diam (or smaller) rigid steel conduit or nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing.
- 4. Pipe Covering Material*— Nom 0.5 in. (12.7 mm) flexible sheet material. One layer of pipe covering shall be continuously wrapped around the penetrant, extending min 12 in. (305 mm) above the floor. For a 2 hr T, FT and FTH Rating, an additional layer of pipe covering shall be tightly wrapped around the first layer and extend min 6 in. (152 mm) above floor. All seams to overlap min 2 in. (51 mm) and to be sealed with FSK or foil tape.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CFP-ES Endo-Shield

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

