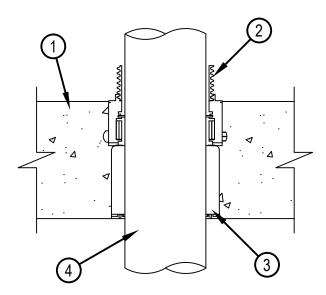


System No. F-B-1009

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



- 1. Floor Assembly Min 6 in. (152 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete. When aerator adaptor for CP 680-M or -P 4 in. device is used, min floor thickness is 6-1/2 in. (165 mm). When aerator adaptor for CP 680-M or -P 3 in. device is used, min floor thickness is 5 in. (127 mm).
- 2. Firestop Device* Cast in place firestop device sized to specific diameter of through-penetrant and permanently embedded during concrete placement or grouted in concrete floor assembly in accordance with accompanying installation instructions with a max 2 in. (51 mm) projection above the top surface of the concrete.
- HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC CP 680N-110/4", CP 682-110/4"N, CP 680-M 3", CP 680-M 4", CP 680-P 3", CP 680-P 4", CP 680-P 3"
- 3. Aerator Adapter Nom 3-1/2 in. (89 mm) deep (CP 680N/CP682N 4" devices) and nom 3-15/16 in. (100 mm) deep (CP 680-M and -P devices in 4 in. size only), and nom 2-1/2 in. (64 mm) deep (CP 680-M and -P devices in 3 in. size only), cast-in-place adapter attached to the device in accordance with the manufacturer's installation instructions, and fastened to form prior to placement of the concrete.
- 4. Through Penetrants One metallic pipe to be installed concentrically within the firestop device. Pipe, conduit or tubing to be rigidly supported on both sides of floor assembly. The following types of pipe may be used:
 - A. Steel Pipe Nom 3 or 4 in. (76 or 102 mm) diam Schedule 40 (or heavier) steel pipe.
 - B. Iron Pipe Nom 3 or 4 in. (76 or 102 mm) diam cast or ductile iron pipe.
- 5. Aerator Fitting (Not Shown) Nom 3 or 4 in. (76 or 102 mm) diam cast iron aerator fitting. Fitting shall not penetrate the firestop device.
- * Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

