

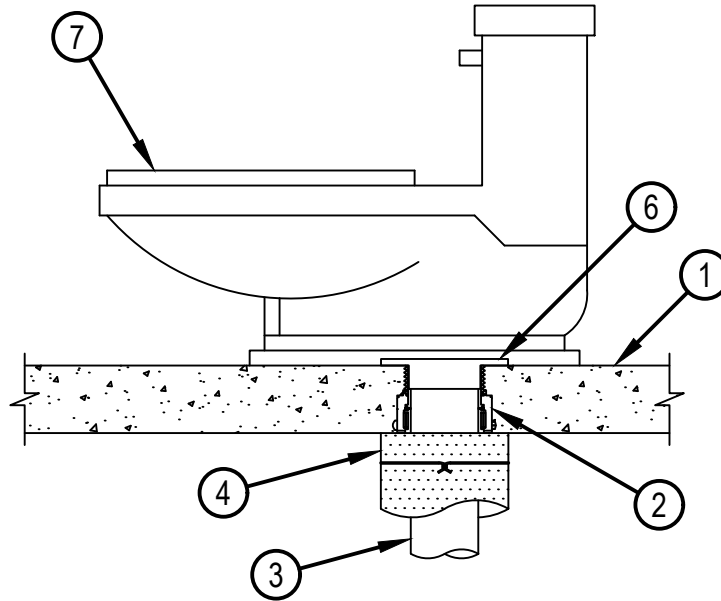


Classified by
Underwriters Laboratories, Inc.
to UL 1479 and CAN/ULC-S115

System No. F-B-1033

FB 1033

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 2 Hr	F Rating — 2 Hr
T Rating — 2 Hr	FT Rating — 2 Hr
	FH Rating — 2 Hr
	FTH Rating — 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.
2. Firestop Device* — Cast in place firestop device permanently embedded during concrete placement in accordance with accompanying installation instructions. Top of device to be cut flush with bottom of toilet flange.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 680N-110/4", CP 682-110/4", CP 680-M 3", CP 680-M 4", CP 680-P 3", CP 680-P 4", CP 680-PX 3"
3. Through Penetrants — One metallic penetrant to be installed concentrically within the firestop device. Penetrant to be rigidly supported on both sides of floor assembly. The following types of penetrants may be used:
 - A. Steel Pipe — Nom 3 or 4 in. (76 or 102 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - B. Iron Pipe — Nom 3 or 4 in. (76 or 102 mm) diam (or smaller) cast or ductile iron pipe.

The firestop device and metallic penetrant shall be sized as follows:

Nom Pipe Diameter +	Firestop Device
3 in. (76 mm)	CP 680-M 3", CP 680-P 3", CP 680-PX 3"
4 in. (102 mm)	CP 680N-110/4", CP 682-110/4" CP 680-M 4", CP 680-P 4"



Hilti Firestop Systems

Reproduced by HILTI, Inc. Courtesy of
Underwriters Laboratories, Inc.
November 03, 2015

System No. F-B-1033

FB 1033

4. Pipe Covering Materials* — Nom 2 in. (51 mm) thick unfaced mineral fiber pipe insulation (min 7.0 pcf or 112 kg/m³) sized to the outside diam of pipe or tube. Pipe insulation shall extend 30 in. (762 mm) along length of pipe, flush with lower surface of floor. Pipe insulation secured with nom 16 AWG steel wire spaced max 6 in. (152 mm) OC.

See Pipe and Equipment Covering — Materials (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.

5. Sheathing Material* — (Not shown - Optional) - Used in conjunction with Item 4. Foil-scrim-kraft or all service jacket material shall be wrapped around the outer circumference of the pipe insulation with the kraft side exposed. Longitudinal joints and transverse joints sealed with metal fasteners or butt tape.

See Sheathing Materials (BVDV) category in the Building Materials Directory for names of manufacturers. Any sheathing material meeting a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.

6. Toilet Flange — Cast iron toilet flange with throat sized to fit the drain piping, secured to floor with concrete anchors. Toilet flange secured inside metallic pipe (Item 3) and secured to top surface of floor with closet bolts.

7. Water Closet — Floor mounted vitreous china water closet.

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



Hilti Firestop Systems

Reproduced by HILTI, Inc. Courtesy of
Underwriters Laboratories, Inc.
November 03, 2015

Page: 2 of 2