

UL SYSTEM NO. F-A-2145

FGG/BM SYSTEM COMPATIBLE

FLOWGUARD GOLD® OR BLAZEMASTER® PIPE THROUGH CONCRETE FLOOR OR CONCRETE OVER METAL DECKING

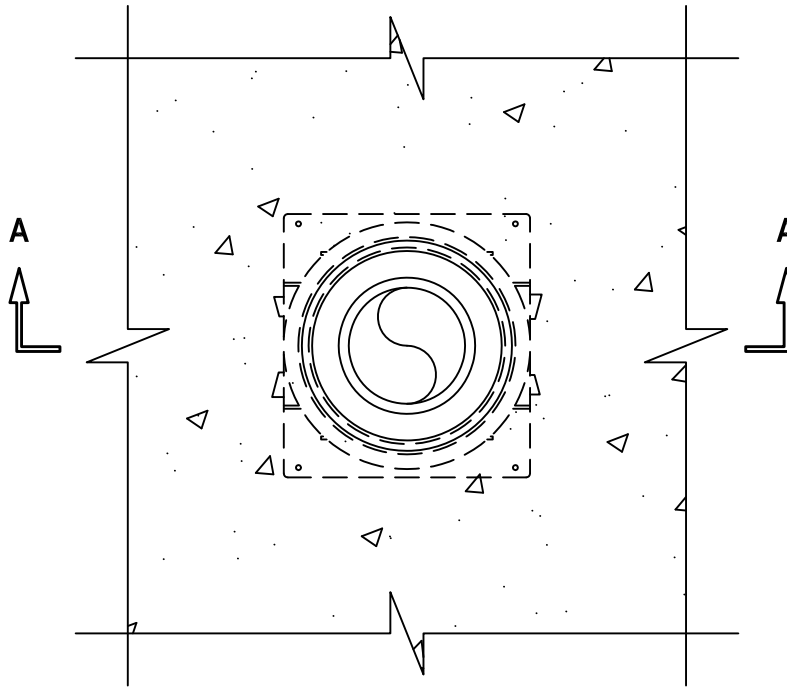
F-RATING = 2-HR. OR 3-HR.

T-RATING = 0-HR.

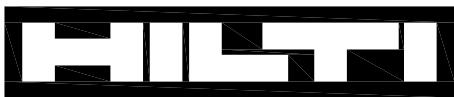
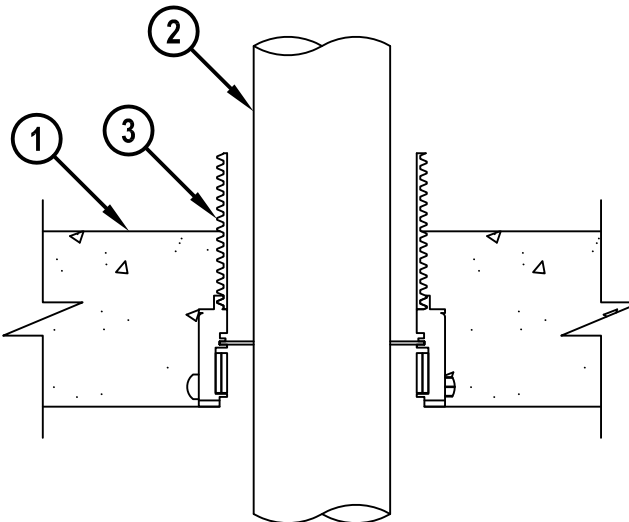
W-RATING = CLASS I (SEE NOTES NO. 4 AND 5 BELOW)

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FRONT VIEW



SECTION A-A



Hilti Firestop Systems

HILTI, Inc.
Tulsa, Oklahoma USA (800) 879-8000

Sheet	1 of 2
Scale	13/64" = 1"
Date	July 9, 2015

Drawing No.

**FA
2145e**

Saving Lives through Innovation and Education

**FLOWGUARD GOLD® OR BLAZEMASTER® PIPE THROUGH CONCRETE FLOOR OR
CONCRETE OVER METAL DECKING**

F-RATING = 2-HR. OR 3-HR.

T-RATING = 0-HR.

W-RATING = CLASS I (SEE NOTES NO. 4 AND 5 BELOW)

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1. CONCRETE FLOOR ASSEMBLY (2-HR. OR 3-HR. FIRE-RATING) (SEE NOTE NO. 1 BELOW) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 2-1/2" OR 4-1/2" THICK).
 - B. STEEL FLOOR UNIT/FLOOR ASSEMBLY - LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 2-1/2" OR 4-1/2" THICK) OVER METAL DECKING.
2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING (CLOSED PIPING SYSTEM) (SEE TABLE BELOW) :
 - A. MAXIMUM 2" NOMINAL DIAMETER FLOWGUARD GOLD® CPVC PIPE (SDR 11).
 - B. MAXIMUM 3" NOMINAL DIAMETER BLAZEMASTER® CPVC PIPE (SDR 13.5).
3. HILTI CP 680-P OR CP 680-PX CAST-IN DEVICE, CAST OR GROUTED INTO CONCRETE FLOOR (SEE TABLE BELOW).
4. [NOT SHOWN] HILTI IPS OR CPS TOP SEAL PLUG INSTALLED FLUSH WITH TOP SIDE OF DEVICE AROUND NOMINAL PIPE SIZES 1/2" TO 1-1/2". TOP SEALS ARE OPTIONAL ON 1-1/2" DIAMETER PIPES.

NOMINAL PIPE DIAMETER	PRODUCT DESCRIPTION	MAXIMUM EXTENSION OF DEVICE ABOVE FLOOR
1-1/2" TO 2"	CP 680-P 2" OR CP 680-PX 2"	NOT RESTRICTED
3"	CP 680-P 3", CP 680-PX 3" OR CP 680-P 4"	2"

- NOTES :**
1. F-RATING IS 2-HR. FOR MINIMUM 2-1/2" THICK CONCRETE AND 3-HR. FOR MINIMUM 4-1/2" THICK CONCRETE.
 2. FOR CONCRETE FLOOR OVER METAL DECKING APPLICATIONS, A METAL DECK ADAPTER KIT IS REQUIRED.
 3. WHEN PIPE DIAMETER IS SMALLER THAN INDICATED ABOVE, A MINIMUM 4" THICKNESS TIGHTLY PACKED MINERAL WOOL (MIN. 4 PCF DENSITY) SHALL BE APPLIED WITHIN THE ANNULUS BETWEEN THE PIPE AND PERIPHERY OF DEVICE, FLUSH WITH TOP SURFACE OF DEVICE.
 4. W-RATING FOR TOP SEAL ONLY APPLIES TO THE IPS TOP SEAL PLUG AND 2" PIPES, AND TO CPS TOP SEAL PLUGS WITH 1/2" TO 2" PIPES.
 5. WATER BARRIER MODULE MAY BE THREADED ON TOP OF CAST-IN FIRESTOP DEVICE FOR NOMINAL 2", 3", AND 4" PLASTIC PIPES (LISTED ABOVE). W-RATING WITH WATER BARRIER MODULE ONLY APPLIES WHEN DIAMETER OF PIPE EQUALS SIZE OF MODULE.



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Sheet	2 of 2
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