

UL SYSTEM NO. F-A-2054

PLASTIC PIPE THROUGH CONCRETE FLOOR/CONCRETE OVER METAL DECKING

F-RATING = 3-HR.

T-RATING = 0-HR. OR 3-HR.

L-RATING AT AMBIENT = LESS THAN 1 CFM / SQ FT

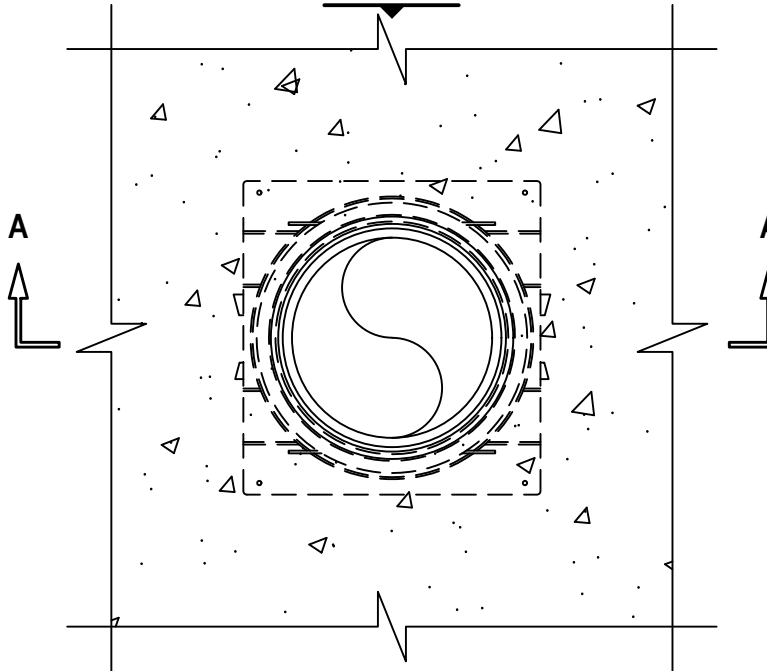
L-RATING AT 400°F = LESS THAN 1 CFM / SQ FT

W-RATING = CLASS I (SEE NOTES NO. 3 AND 4 BELOW)

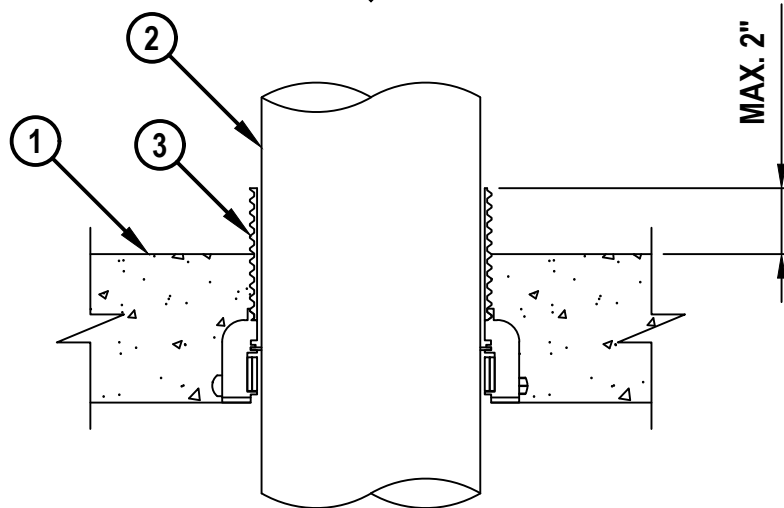
M-RATING = SEE M-RATING TABLE

FA2054r.092023

TOP VIEW



SECTION A-A



HILTI, Inc.
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Sheet	1 of 3
Scale	1 1/64" = 1"
Date	Sep. 20, 2023

Drawing No.

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FA2054r.092023

1. CONCRETE FLOOR ASSEMBLY (3-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 4-1/2" THICK).
 - B. STEEL FLOOR UNIT/FLOOR ASSEMBLY - LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 4-1/2" THICK) OVER METAL DECKING.
2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING (SEE TABLE BELOW) :
 - A. MAXIMUM 6" NOMINAL DIAMETER PVC PLASTIC PIPE (CELLULAR AND SOLID CORE).
 - B. MAXIMUM 6" NOMINAL DIAMETER CPVC PLASTIC PIPE (CLOSED PIPING SYSTEM ONLY).
 - C. MAXIMUM 6" NOMINAL DIAMETER RIGID NON-METALLIC CONDUIT (RNC).
 - D. MAXIMUM 4" NOMINAL DIAMETER PEX TUBING (SDR 9) (CLOSED PIPING SYSTEM ONLY).
3. HILTI CP 680-P OR CP 680-PX CAST-IN FIRESTOP 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.



Hilti Firestop Systems

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Sheet	2 of 3
Scale	-
Date	Sep. 20, 2023

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FA2054r.092023

M-RATING TABLE

MOVEMENT DIRECTION	PENETRANT ITEM	NOMINAL PENETRANT DIAMETER	DEVICE SIZE	MOVEMENT	SEALANT DEPTH	L-RATING	W-RATING
Y	3A	2"	2"	100%**	N/A	N/A	N/A
Z	3A	2"	2"	3.21 IN.	N/A	N/A	N/A

**PERCENTAGE MOVEMENT BASED ON THE MINIMUM DISTANCE BETWEEN OUTER DIAMETER OF PENETRANT AND INSIDE DIMENSIONS OF THE FIRESTOP DEVICE.

NOMINAL PIPE DIAMETER	PRODUCT DESCRIPTION	T-RATING
3/4" TO 2"	CP 680-P 2" OR CP 680-PX 2"	3-HR.
3"	CP 680-P 3" OR CP 680-PX 3"	3-HR.
3"	CP 680-P 4"	3-HR.
4"	CP 680-P 4"	3-HR.
6"	CP 680-P 6"	0-HR.

- NOTES :**
1. CLOSED OR VENTED PIPING SYSTEMS (PVC, RNC = SCH 40; CPVC = SDR 11 OR SDR 13.5).
 2. FOR CONCRETE FLOOR OVER METAL DECKING APPLICATIONS, A METAL DECK ADAPTER KIT IS REQUIRED.
 3. 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.
 4. WATER BARRIER MODULES MAY BE THREADED ON TOP OF CAST-IN FIRESTOP DEVICES FOR NOMINAL 2", 3", 4", AND 6" PLASTIC PIPES (LISTED ABOVE). W-RATING WITH WATER BARRIER MODULE ONLY APPLIES WHEN DIAMETER OF PIPE EQUALS SIZE OF MODULE AND WHEN PIPE IS INSTALLED FROM BOTTOM OF DEVICE.
 5. L-RATING APPLIES ONLY WHEN DIAMETER OF PIPE EQUALS SIZE OF DEVICE (3" PIPE IN 3" DEVICE, ETC.).



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Sheet	3 of 3
Scale	-
Date	Sep. 20, 2023

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