

UL/cUL SYSTEM NO. F-A-1222
METAL PIPE THROUGH CONCRETE FLOOR

F-RATING = 3-HR.

T-RATING = 0-HR.

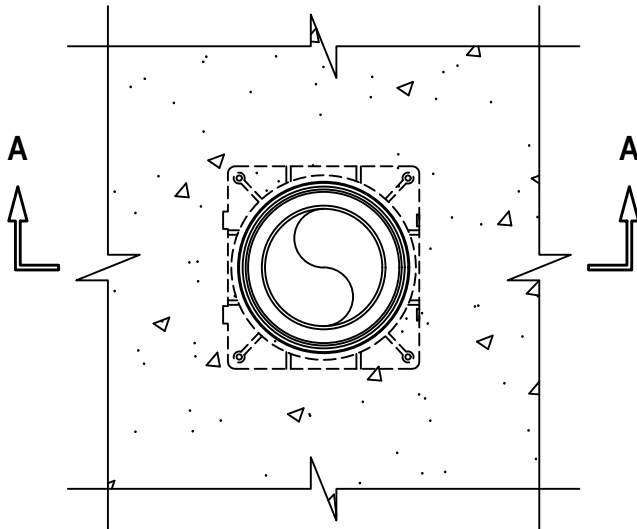
L-RATING AT AMBIENT = LESS THAN 1 CFM / SQ FT (SEE TABLE 2 BELOW)

L-RATING AT 400°F = LESS THAN 1 CFM / SQ FT (SEE TABLE 2 BELOW)

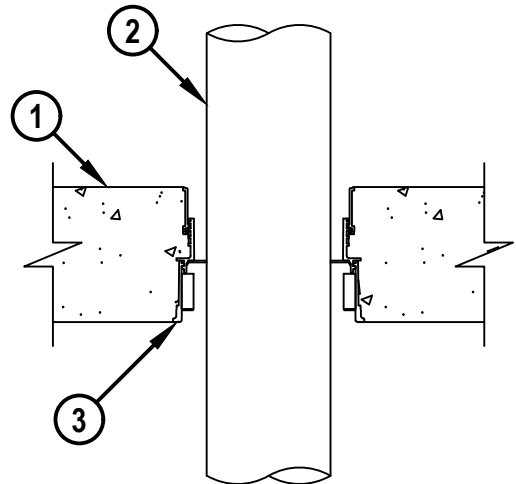
W-RATING = CLASS I (SEE TABLE 2 BELOW)

FA1222b.051324

TOP VIEW



SECTION A-A



HILTI
Hilti Firestop Systems

HILTI, Inc.
Plano, Texas USA (800) 879-8000

Sheet	1 of 3
Scale	5/32" = 1"
Date	May 15, 2024

Drawing No.
**FA
1222b**

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1. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 4-1/2" THICK) (3-HR. FIRE-RATING).
2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING :
 - A. MAXIMUM 6" NOMINAL DIAMETER STEEL PIPE OR STAINLESS STEEL PIPE (SCHEDULE 10 OR HEAVIER).
 - B. MAXIMUM 6" NOMINAL DIAMETER CAST OR DUCTILE IRON PIPE.
 - C. MAXIMUM 6" NOMINAL DIAMETER COPPER PIPE OR TUBING.
 - D. MAXIMUM 6" NOMINAL DIAMETER STEEL CONDUIT.
 - E. MAXIMUM 4" NOMINAL DIAMETER STEEL EMT.
3. HILTI CFS-CID U OR HILTI CFS-CID U CA CAST-IN FIRESTOP DEVICE CAST OR GROUTED INTO CONCRETE FLOOR (SEE TABLE BELOW) WITH MAXIMUM 2" EXTENSION ABOVE FLOOR.

NOMINAL PIPE DIAMETER	FIRESTOP DEVICE
1-1/4" TO 2"	CFS-CID U 2", CFS-CID U 2" CA
2" TO 3"	CFS-CID U 3"
3" TO 4"	CFS-CID U 4"
6"	CFS-CID U 6"

TABLE 1

4. [OPTIONAL - NOT SHOWN] MINIMUM 4" THICKNESS MINERAL WOOL (MINIMUM 4 PCF DENSITY) TIGHTLY PACKED INTO DEVICE, COMPLETELY FILLING ANNULAR SPACE AROUND METALLIC PENETRANT. WHEN ITEM 5 IS USED MINERAL WOOL TO BE RECESSED TO ACCOMMODATE SEALANT (SEE NOTES NO. 1 AND 2 BELOW).
5. [OPTIONAL - NOT SHOWN] MINIMUM 1/4" DEPTH HILTI CFS-S SIL SL FIRESTOP SILICONE SEALANT OR HILTI CFS-S SIL GG FIRESTOP SILICONE SEALANT INSTALLED FLUSH WITH TOP OF DEVICE (SEE NOTES NO. 1 AND 2 BELOW).



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DEVICE SIZE	PENETRANT WITH (IPS) DIAMETER IN.	PENETRANT WITH (CTS) DIAMETER IN.	W-RATING (SEE NOTE NO. 2 BELOW)	L-RATING
CFS-CID U 2", CFS-CID U 2" CA	1-1/4" TO 2"	1-1/2" TO 2"	YES	YES
CFS-CID U 2", CFS-CID U 2" CA	≤ 2"	≤ 2"	YES WITH ITEMS 4 AND 5	YES WITH ITEMS 4 AND 5
CFS-CID U 3"	2" TO 3"	2-1/2" TO 3"	YES	YES
CFS-CID U 3"	≤ 3"	≤ 3"	YES WITH ITEMS 4 AND 5	YES WITH ITEMS 4 AND 5
CFS-CID U 4"	3" TO 4"	3-1/2" TO 4"	YES	YES
CFS-CID U 4"	≤ 4"	≤ 4"	YES WITH ITEMS 4 AND 5	YES WITH ITEMS 4 AND 5
CFS-CID U 6"	6"	6"	YES	YES
CFS-CID U 6"	≤ 6"	≤ 6"	YES WITH ITEMS 4 AND 5	YES WITH ITEMS 4 AND 5

****WHEN W-RATING IS REQUIRED – WHEN NOMINAL PIPE DIAMETER MATCHES DEVICE SIZE, PIPE MAY BE INSTALLED IN ANY ORIENTATION. WHEN NOMINAL PIPE DIAMETER IS SMALLER THAN DEVICE SIZE, PIPE MUST BE INSTALLED FROM THE BOTTOM, UNLESS ITEMS 4 AND 5 ARE FULFILLED.**

TABLE 2

- NOTES :** 1. WHEN PIPE DIAMETER IS SMALLER THAN THOSE INDICATED IN TABLE 1 ABOVE, A MINIMUM 1" THICKNESS HILTI CP 618 FIRESTOP PUTTY FLUSH WITH TOP SURFACE OF CAST-IN FIRESTOP DEVICE OR ITEM 4 SHALL BE INSTALLED.
2. WHEN SEALANT (ITEM 5) IS REQUIRED FOR W-RATING, SEALANT MUST BE INSTALLED MINIMUM 1/2" DEPTH.
3. [OPTIONAL - NOT SHOWN] FOR USE WITH IRON PIPE ONLY, ONE NOMINAL 6" PVC TESTRITE TEE FITTING MAY BE INSTALLED EXTENDING A MINIMUM 6" ABOVE THE FLOOR SURFACE AND A MINIMUM 12" BELOW THE BOTTOM SURFACE OF THE FLOOR.



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