

UL SYSTEM NO. F-A-2411

PLASTIC PIPE THROUGH CONCRETE FLOOR

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

T-RATING = 0-HR., 2-HR., OR 3-HR. (SEE TABLE BELOW)

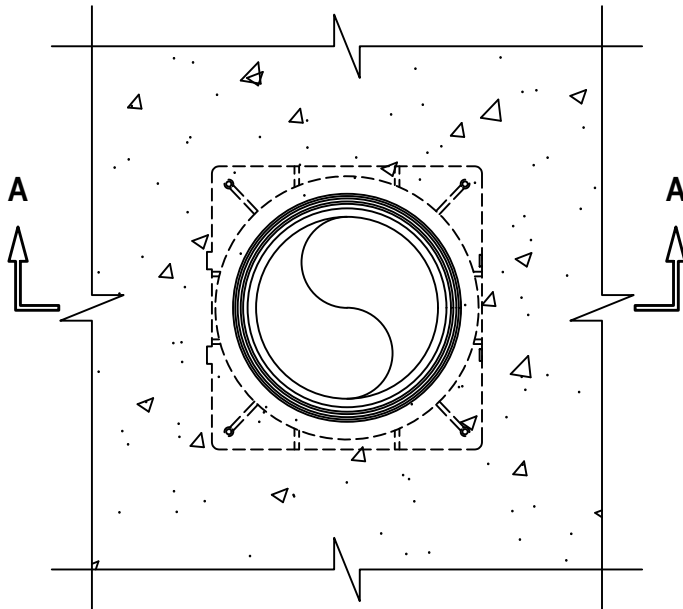
L-RATING AT AMBIENT = LESS THAN 1 CFM / SQ FT (SEE TABLE BELOW)

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

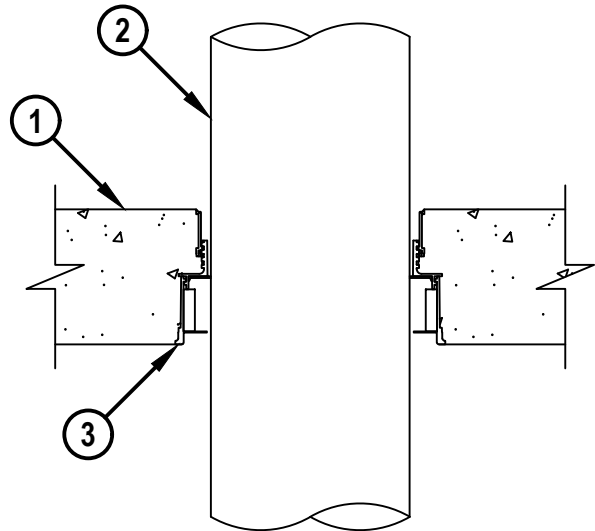
W-RATING = CLASS I (SEE TABLE AND NOTE NO. 2 BELOW)

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TOP VIEW



SECTION A-A



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 (SEE TABLE BELOW) :
 - A. MAXIMUM 6" NOMINAL DIAMETER PVC PLASTIC PIPE (SCHEDULE 40) (CELLULAR AND SOLID CORE).
 - B. MAXIMUM 6" NOMINAL DIAMETER CPVC PLASTIC PIPE (SDR 11 OR SDR 13.5) (CLOSED PIPING SYSTEM ONLY).
 - C. MAXIMUM 6" NOMINAL DIAMETER PVC (SCHEDULE 40) RIGID NON-METALLIC CONDUIT (RNC).
 - D. MAXIMUM 4" NOMINAL DIAMETER PEX TUBING (SDR 9) (CLOSED PIPING SYSTEM ONLY).
3. HILTI CFS-CID U [2", 3", 4", OR 6"] OR CFS-CID U 2" CA CAST-IN FIRESTOP DEVICE CAST OR GROUTED INTO CONCRETE FLOOR (SEE TABLE BELOW) WITH MAXIMUM 2" EXTENSION ABOVE TOP SURFACE OF CONCRETE FLOOR.
4. [OPTIONAL - NOT SHOWN] MINIMUM 2" THICKNESS MINERAL WOOL (MIN. 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 NOTE NO. 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 NOTE NO. 2 BELOW).



Hilti Firestop Systems

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

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Scale	5/32" = 1"
Date	June 04, 2024

Drawing No.

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NOMINAL PIPE DIAMETER	PRODUCT DESCRIPTION	F-RATING	T-RATING
1-1/4"	CFS-CID U 2", CFS-CID U 2" CA	2-HR.	2-HR.
1-1/2" TO 2"	CFS-CID U 2", CFS-CID U 2" CA	3-HR.	3-HR.
2" TO 3"	CFS-CID U 3"	3-HR.	3-HR.
3" TO 4"	CFS-CID U 4"	3-HR.	3-HR.
6"	CFS-CID U 6"	3-HR.	0-HR.

DEVICE SIZE	PENETRANTS WITH (IPS) DIAMETER	PENETRANTS WITH (CTS) DIAMETER	W-RATING	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	N/A	1-1/4"	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"	N/A	2"	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"	3" TO 4"	3" TO 4"	YES WITH ITEMS 4 AND 5	YES WITH ITEMS 4 AND 5
CFS-CID U 6"	6"	6"	YES	YES

*IPS IS IRON DIAMETER AND CTS IS COPPER TUBE DIAMETER STANDARD.

**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 ITES 4 AND 5 ARE FULFILLED.

NOTES : 1. CLOSED OR VENTED PIPING SYSTEMS UNLESS STATED OTHERWISE ABOVE.
 2. WHEN SEALANT (ITEM 5) IS REQUIRED FOR W-RATING, SEALANT MUST BE INSTALLED MINIMUM 1/2" DEPTH.



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Sheet 2 of 2

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