

**PLASTIC PIPE THROUGH CONCRETE FLOOR OVER METAL DECK ASSEMBLY**

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

T-RATING = 0-HR.

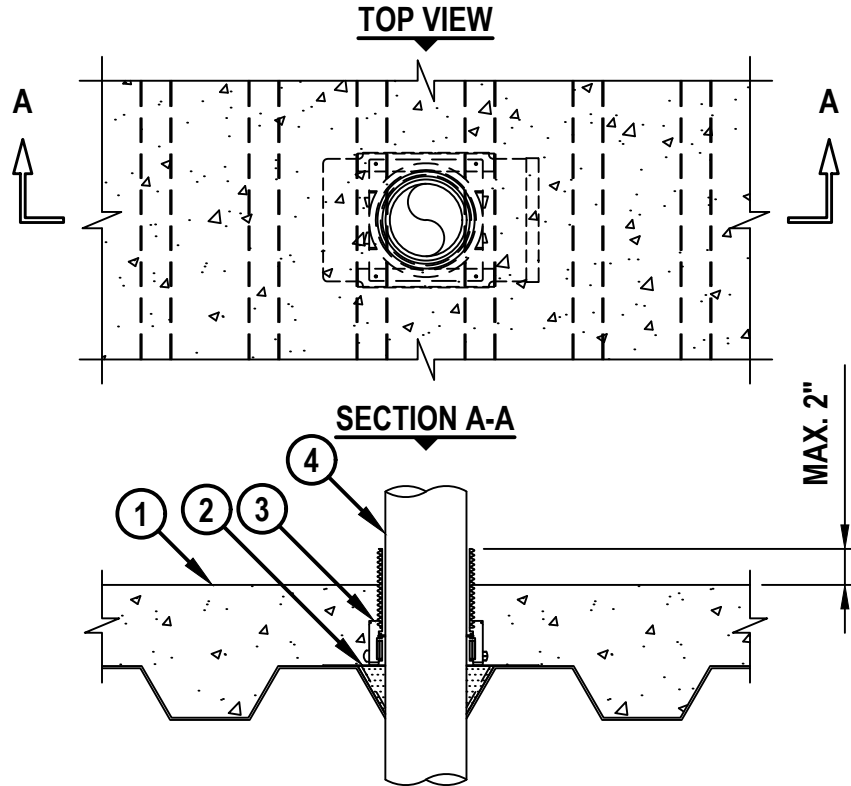
L-RATING AT AMBIENT = LESS THAN 1 CFM / SQ FT (SEE NOTE NO. 3 BELOW)

L-RATING AT 400°F = LESS THAN 1 CFM / SQ FT (SEE NOTE NO. 3 BELOW)

W-RATING = CLASS I (SEE NOTES NO. 1 AND 2 BELOW)

NOTE : TESTED WITH A 2.5 Pa PRESSURE DIFFERENTIAL

FA2310b.111319



1. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR OVER METAL DECKING ASSEMBLY (UL/cUL CLASSIFIED D900 SERIES) WITH 2" OR 3" FLUTED DECKS :
  - A. MINIMUM 2-1/2" THICK (2-HR. FIRE-RATING).
  - B. MINIMUM 4-1/2" THICK (3-HR. FIRE-RATING).
2. HILTI CFS-CID MD PLT [W2" OR W3"] METAL DECK PLATFORM SECURED TO DECK WITH ONE FASTENER IN EACH CORNER.
3. HILTI CFS-CID MD [P OR PX] [2", 3", OR 4"]/[2.5" OR 4"] FIRESTOP CAST-IN DEVICE FOR METAL DECK SECURED TO HILTI CFS-CID MD PLT METAL DECK PLATFORM WITH SCREWS. THE 2.5" HEIGHT DEVICES ARE INTENDED FOR A 2-1/2" CONCRETE TOPPING AND THE 4" HEIGHT DEVICES FOR CONCRETE TOPPING GREATER THAN 2-1/2" THICK.
4. PENETRATING ITEM TO BE ONE OF THE FOLLOWING (CLOSED OR VENTED PIPING SYSTEMS EXCEPT AS INDICATED) :
  - A. MAXIMUM 4" NOMINAL DIAMETER PVC PLASTIC PIPE (SCHEDULE 40) (CELLULAR OR SOLID CORE).
  - B. MAXIMUM 4" NOMINAL DIAMETER CPVC PLASTIC PIPE (SDR 11 OR SDR 13.5) (CLOSED PIPING SYSTEM ONLY).



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

Sheet	1 of 2
Scale	3/32" = 1"
Date	Nov. 13, 2019

Drawing No.  
**FA  
2310b**

**PLASTIC PIPE THROUGH CONCRETE FLOOR OVER METAL DECK ASSEMBLY**

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

T-RATING = 0-HR.

L-RATING AT AMBIENT = LESS THAN 1 CFM / SQ FT (SEE NOTE NO. 3 BELOW)

L-RATING AT 400°F = LESS THAN 1 CFM / SQ FT (SEE NOTE NO. 3 BELOW)

W-RATING = CLASS I (SEE NOTES NO. 1 AND 2 BELOW)

NOTE : TESTED WITH A 2.5 Pa PRESSURE DIFFERENTIAL

FA2310b.111319

- C. MAXIMUM 4" NOMINAL DIAMETER PVC RIGID NONMETALLIC CONDUIT (SCHEDULE 40).
- D. MAXIMUM 4" NOMINAL DIAMETER PEX PLASTIC TUBING (SDR 9) CLOSED PIPING SYSTEM ONLY) (NOT APPLICABLE TO CANADA).
- E. MAXIMUM 4" NOMINAL DIAMETER ABS PLASTIC STEEL PIPE (SCHEDULE 40) (CELLULAR OR SOLID CORE).
- F. MAXIMUM 4" NOMINAL DIAMETER FRPP PLASTIC STEEL PIPE (SCHEDULE 40) (CELLULAR OR SOLID CORE).
- G. NOMINAL 2" OR 4" DIAMETER PVDF PLASTIC PIPE (SDR 32.5).
- H. NOMINAL 4" DIAMETER PP PLASTIC PIPE (SCHEDULE 40).

NOMINAL PIPE DIAMETER	FIRESTOP DEVICE	F-RATING			
		PVC, CPVC, RNC	PEX	ABS, FRPP	PVDF, PP
1/2" TO 2" (SEE NOTE NO. 1)	CFS-CID MD [P OR PX] 2"	3-HR.	3-HR.	2-HR.	N/A
2"	CFS-CID MD [P OR PX] 2"	3-HR.	3-HR.	3-HR.	2-HR.
3"	CFS-CID MD [P OR PX] 3"	3-HR.	3-HR.	3-HR.	N/A
3" TO 4"	CFS-CID MD [P OR PX] 4"	2-HR.	N/A	3-HR.	N/A
4"	CFS-CID MD [P OR PX] 4"	3-HR.	3-HR.	3-HR.	2-HR.

- NOTES : 1. HILTI IPS OR CPS TOP SEAL SHALL BE USED ON ALL PIPES SMALLER THAN 1-1/2" WITH HILTI 2" CAST-IN DEVICES. HILTI TOP SEAL IS OPTIONAL FOR NOMINAL 1-1/2" PIPES. FOR A 2.5" HEIGHT DEVICE, AN EXTENSION TUBE MUST BE THREAD INTO TOP OF DEVICE TO ACCOMMODATE TOP SEAL PLUG. W-RATING APPLIES ONLY TO THE IPS TOP SEAL PLUG AND 2" PIPES, AND TO CPS TOP SEAL PLUG WITH 1/2" TO 2" PIPES AND WHEN DEVICE EXTENSIONS ARE CAST-IN.
2. FOR W-RATING, A WATER BARRIER MODULE MAY BE THREAD ON TOP OF CAST-IN FIRESTOP DEVICES AFTER THE HOLE IN THE FLUTED DECK HAS BEEN MADE FOR NOMINAL 2", 3", AND 4" PLASTIC PIPES (LISTED ABOVE). W-RATING WITH WATER BARRIER MODULE ONLY APPLIES WITH A 4" HEIGHT DEVICE AND IS USED WHEN PIPE IS INSTALLED FROM THE BOTTOM OF DEVICE.
3. L-RATING APPLIES ONLY WHEN NOMINAL DIAMETER OF PIPE EQUALS SIZE OF DEVICE (2" PIPE IN 2" DEVICE, ETC.).



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

Sheet	2 of 2
Scale	-
Date	Nov. 13, 2019

Drawing No.

**FA  
2310b**