

UL/cUL SYSTEM NO. F-A-1091

**METAL PIPE THROUGH CONCRETE FLOOR OR CONCRETE OVER METAL DECKING**

F-RATING = 4-HR.

T-RATING = 1/2-HR.

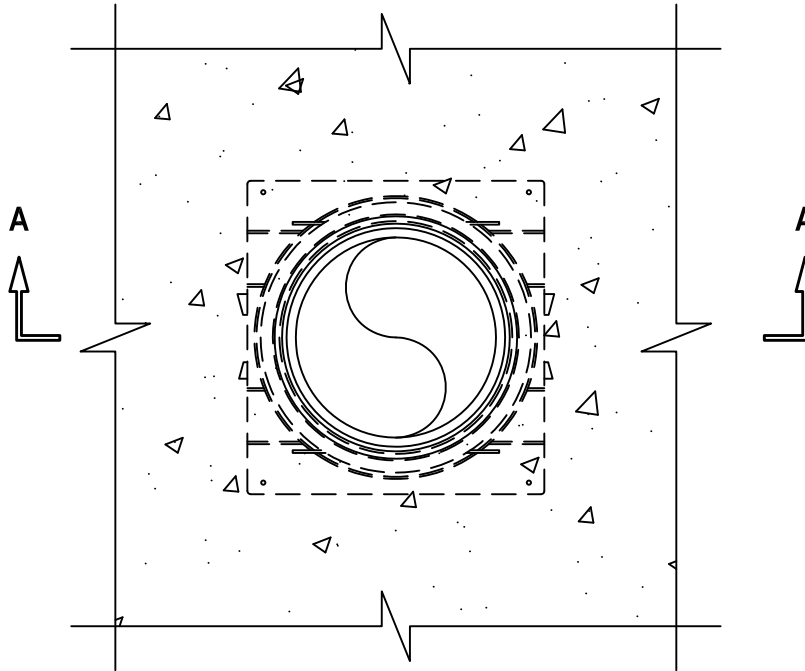
L-RATING AT AMBIENT = 1 CFM/SQ. FT.

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

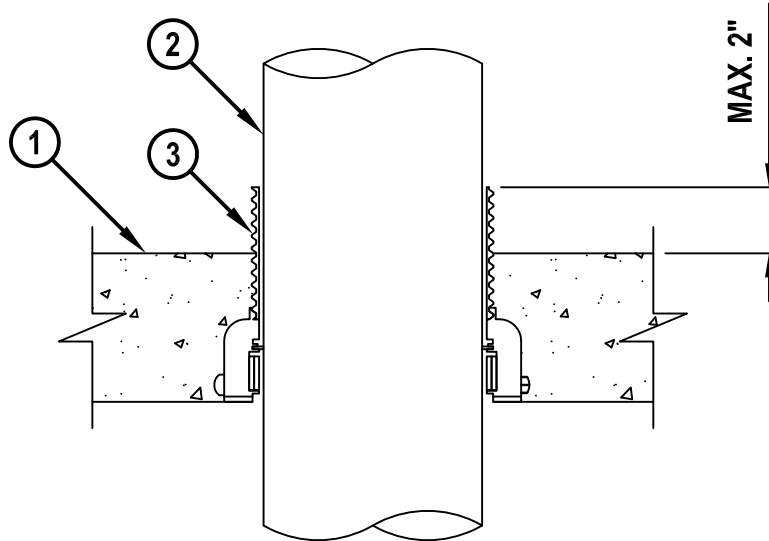
W-RATING = CLASS I (SEE NOTES NO. 2 AND 3 BELOW)

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**TOP VIEW**



**SECTION A-A**



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

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

Drawing No.  
**FA  
1091d**

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1. CONCRETE FLOOR ASSEMBLY (4-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 :
  - A. MAXIMUM 6" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
  - B. MAXIMUM 6" NOMINAL DIAMETER CAST OR DUCTILE IRON PIPE.
  - C. MAXIMUM 6" NOMINAL DIAMETER STEEL CONDUIT.
  - D. MAXIMUM 4" NOMINAL DIAMETER EMT.
  - E. MAXIMUM 2" NOMINAL DIAMETER COPPER PIPE OR TUBING.
3. HILTI CP 680-P OR CP 680-PX CAST-IN FIRESTOP DEVICE CAST OR GROUTED INTO CONCRETE FLOOR (SEE TABLE BELOW).

NOMINAL PIPE DIAMETER	PRODUCT DESCRIPTION
2"	CP 680-P 2" OR CP 680-PX 2"
3"	CP 680-P 3" OR CP 680-PX 3"
3" TO 4"	CP 680-P 4"
GREATER THAN 4" TO 6"	CP 680-P 6"

- NOTES :**
1. FOR CONCRETE FLOOR OVER METAL DECKING APPLICATIONS, A METAL DECK ADAPTER KIT IS REQUIRED.
  2. WATER BARRIER MODULES MAY BE THREADED ON TOP OF CAST-IN FIRESTOP DEVICES FOR NOMINAL 2", 3", 4", AND 6" METAL 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.
  3. HILTI IPS OR CPS TOP SEAL MAY BE USED FOR W-RATING ON 2" NOMINAL DIAMETER PIPES IN CONJUNCTION WITH HILTI 2" CAST-IN FIRESTOP DEVICES.
  4. L-RATING APPLIES ONLY WHEN DIAMETER OF PIPE EQUALS SIZE OF DEVICE (3" PIPE IN 3" DEVICE, ETC.).



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