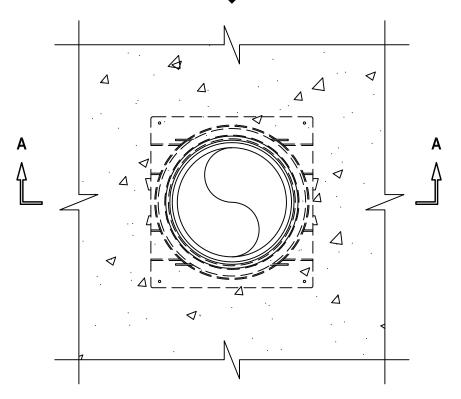
UL SYSTEM NO. F-A-2166

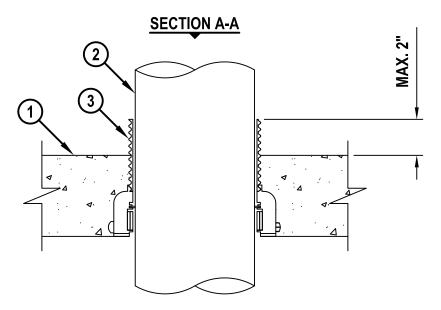
PLASTIC PIPE THROUGH CONCRETE FLOOR/CONCRETE OVER METAL DECKING

F-RATING = 4-HR. T-RATING = 1/4-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 NOTE NO. 3 AND 4 BELOW)

TOP VIEW







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Sheet	1 of 2
Scale	3/16" = 1"
Date	July 10, 2015

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UL SYSTEM NO. F-A-2166

PLASTIC PIPE THROUGH CONCRETE FLOOR/CONCRETE OVER METAL DECKING

F-RATING = 4-HR.
T-RATING = 1/4-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 NOTE NO. 3 AND 4 BELOW)

- 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 (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).
- 3. HILTI CP 680-P OR HILTI 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"
6"	CP 680-P 6"

- NOTES: 1. CLOSED OR VENTED PIPING SYSTEMS (PVC, RNC = SCH 40; CPVC = SDR 13.5).
 - 2. FOR CONCRETE FLOOR OVER METAL DECKING APPLICATIONS, A METAL DECK ADAPTER KIT IS REQUIRED.
 - 3. WATER BARRIER MODULE MAY BE THREADED ON TOP OF CAST-IN FIRESTOP DEVICE 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.
 - 4. 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.
 - 5. L-RATING APPLIES ONLY WHEN DIAMETER OF PIPE EQUALS SIZE OF DEVICE (3" PIPE IN 3" DEVICE, ETC.).



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 Sheet
 2 of 2

 Scale

 Date
 July 10, 2015

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