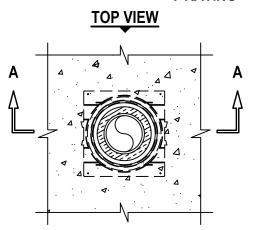
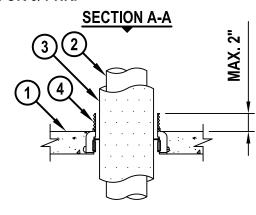
UL/cUL SYSTEM NO. F-A-5015

INSULATED METAL PIPE THROUGH CONCRETE FLOOR OR CONCRETE OVER METAL DECKING

F-RATING = 2-HR. T-RATING = 1/2-HR. OR 3/4-HR.





- 1. CONCRETE FLOOR ASSEMBLY (2-HR. FIRE-RATING):
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 2-1/2" THICK).
 - B. STEEL FLOOR UNIT/FLOOR ASSEMBLY LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 2-1/2" THICK) OVER METAL DECKING.
- 2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING (SEE TABLE BELOW):
 - A. MAXIMUM 4" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
 - B. MAXIMUM 4" NOMINAL DIAMETER COPPER PIPE OR TUBING.
- 3. NOMINAL 3/4" OR 1" THICK AB/PVC FLEXIBLE FOAM PIPE INSULATION.
- 4. HILTI CP 680-M, CP 680-P, OR CP 680-PX CAST-IN FIRESTOP CAST OR GROUTED INTO CONCRETE FLOOR (SEE TABLE BELOW).

NOMINAL PIPE DIAMETER	AB/PVC THICKNESS	PRODUCT DESCRIPTION
1/2"	1"	CP 680-M 2", CP 680-P 2", OR CP 680-PX 2"
1"	3/4"	CP 680-P 3" OR CP 680-PX 3"
1"	1"	CP 680-M 3", CP 680-P 3", OR CP 680-PX 3"
1" (SEE NOTE NO. 2)	1"	CP 680-M 4"
2"	1"	CP 680-M 4" OR CP 680-P 4"
2"	3/4" OR 1"	CP 680-M 4" OR CP 680-P 4"
4"	3/4" OR 1"	CP 680-M 6" OR CP 680-P 6"

- NOTES: 1. FOR CONCRETE FLOOR OVER METAL DECKING APPLICATIONS, A METAL DECK ADAPTER KIT IS REQUIRED.
 - 2. WHEN USING A NOMINAL 1" DIAMETER PIPE WITH 1" THICK INSULATION IN A 4" DEVICE, TIGHTLY PACK 2" THICKNESS OF MINERAL WOOL (MINIMUM 4 PCF DENSITY) FLUSH WITH THE TOP OF DEVICE.



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Sheet	1 of 1
Scale	3/32" = 1"
Date	July 14, 2015

FA 5015h