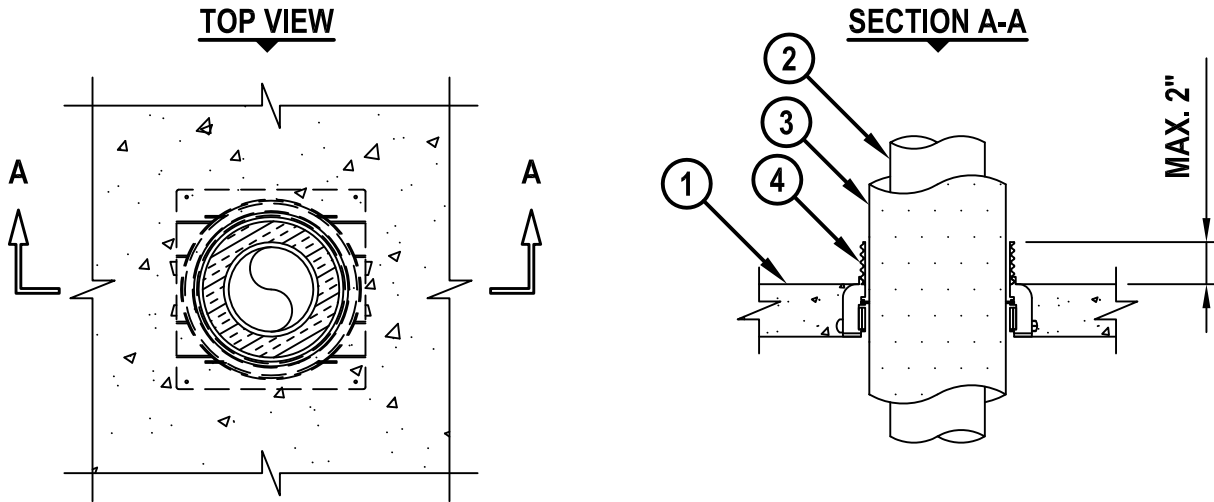


**INSUALTED METAL PIPE THROUGH CONCRETE FLOOR OR
CONCRETE OVER METAL DECKING**

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

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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 :
 - A. MAXIMUM 4" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
 - B. MAXIMUM 4" NOMINAL DIAMETER COPPER PIPE OR TUBING.
3. NOMINAL 1", 1-1/2" OR 2" THICK GLASS-FIBER PIPE INSULATION.
4. HILTI CP 680-M, CP 680-P, OR CP 680-PX CAST-IN FIRESTOP DEVICE, CAST OR GROUTED INTO CONCRETE FLOOR (SEE TABLE BELOW).

NOMINAL PIPE DIAMETER	GLASS-FIBER THICKNESS	PRODUCT DESCRIPTION
1/2"	1"	CP 680-M 2", CP 680-P 2", OR CP 680-PX 2"
1"	1"	CP 680-M 3", CP 680-P 3", OR CP 680-PX 3"
1" (SEE NOTE 2)	1-1/2" (SEE NOTE 2)	CP 680-M 4" OR CP 680-P 4"
2"	1"	CP 680-M 4" OR CP 680-P 4"
2"	2"	CP 680-M 6" OR CP 680-P 6"
4"	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 1-1/2" THICK INSULATION IN A 4" DEVICE, TIGHTLY PACK A MINIMUM 2" THICKNESS OF MINERAL WOOL (MINIMUM 4 PCF DENSITY) FLUSH WITH THE TOP OF FIRESTOP DEVICE.



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

Sheet	1 of 1
Scale	7/64" = 1"
Date	July 18, 2015

Drawing No.
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