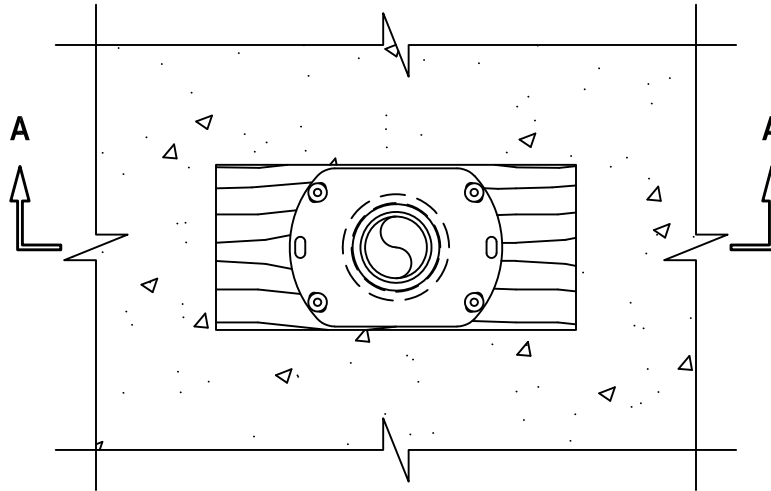


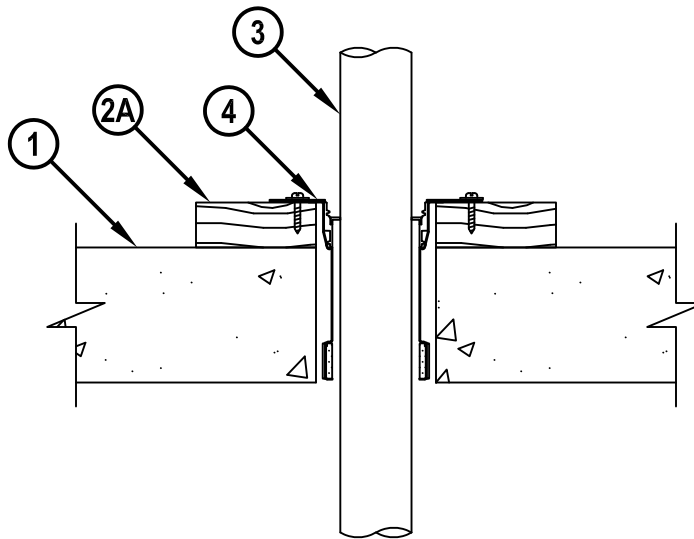
UL/cUL SYSTEM NO. F-A-1170
METAL PIPE THROUGH CONCRETE FLOOR ASSEMBLY

F-RATING = 3-HR.
T-RATING = 0-HR. OR 1/2-HR.

TOP VIEW



SECTION A-A



FA1170a.032118



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Sheet	1 of 2
Scale	5/32" = 1"
Date	Mar. 21, 2018

Drawing No.
**FA
1170a**

Saving Lives through Innovation and Education

METAL PIPE THROUGH CONCRETE FLOOR ASSEMBLY

F-RATING = 3-HR.

T-RATING = 0-HR. OR 1/2-HR.

FA1170a.032118

1. CONCRETE FLOOR ASSEMBLY (3-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 4-1/2" TO MAXIMUM 10-1/2" THICK).
 - B. ANY UL/cUL CLASSIFIED PRECAST (HOLLOW-CORE) CONCRETE FLOOR (MINIMUM 6" TO MAXIMUM 11" THICK).
2. GYPSUM CHASE WALL ASSEMBLY (RATED OR NON-RATED) TO INCLUDE THE FOLLOWING CONSTRUCTION FEATURES :
 - A. MINIMUM 2" x 6" LUMBER SOLE PLATE SECURELY ATTACHED TO CONCRETE FLOOR.
 - B. [NOT SHOWN] NOMINAL 2" x 6" LUMBER STUDS.
 - C. [NOT SHOWN] NOMINAL 1/2" THICK GYPSUM WALLBOARD.
3. PENETRATING ITEM TO BE ONE OF THE FOLLOWING :
 - A. MAXIMUM 2" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
 - B. MAXIMUM 2" NOMINAL DIAMETER CAST OR DUCTILE IRON PIPE.
 - C. MAXIMUM 2" NOMINAL DIAMETER COPPER PIPE OR TUBING.
 - D. MAXIMUM 2" NOMINAL DIAMETER STEEL CONDUIT OR EMT.
4. HILTI CFS-DID FIRESTOP DROP-IN DEVICE INSERTED INTO OPENING (SEE TABLE BELOW) AND SECURED TO TOP OF LUMBER SOLE PLATE WITH FOUR MINIMUM 1" (25 mm) LONG TYPE W STEEL SCREWS IN CONJUNCTION WITH MINIMUM 1" (25 mm) DIAMETER STEEL WASHERS, TWO FASTENERS AT EACH SIDE OF DEVICE. FOR HOLLOW-CORE FLOORS, HILTI CFS-DID DEVICE MAY EXTEND A MAXIMUM 1/2" BELOW BOTTOM OF FLOOR OR BE RECESSED A MAXIMUM 1/2" FROM BOTTOM OF HOLLOW-CORE CONCRETE FLOOR.

CORE HOLE DIAMETER	PRODUCT DESCRIPTION	NOMINAL PIPE DIAMETER	MIN-MAX CONCRETE FLOOR THICKNESS
4"	CFS-DID 2" C	2" (OR SMALLER)+	4-1/2" TO 10-1/2"
4"	CFS-DID 2" HC8	2" (OR SMALLER)+	6" TO 7"
4"	CFS-DID 2" HC10	2" (OR SMALLER)+	8" TO 9"
4"	CFS-DID 2" HC12	2" (OR SMALLER)+	10" TO 11"

+ FOR PIPE SMALLER THAN NOMINAL 2" DIAMETER, AN ADAPTER AND HILTI IPS OR CPS TOP SEAL PLUG MUST BE USED IN CONJUNCTION WITH THE CFS-DID 2" C, HC8, HC10, AND HC12 DEVICES.



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Scale	-
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