

UL/cUL SYSTEM NO. F-A-5046

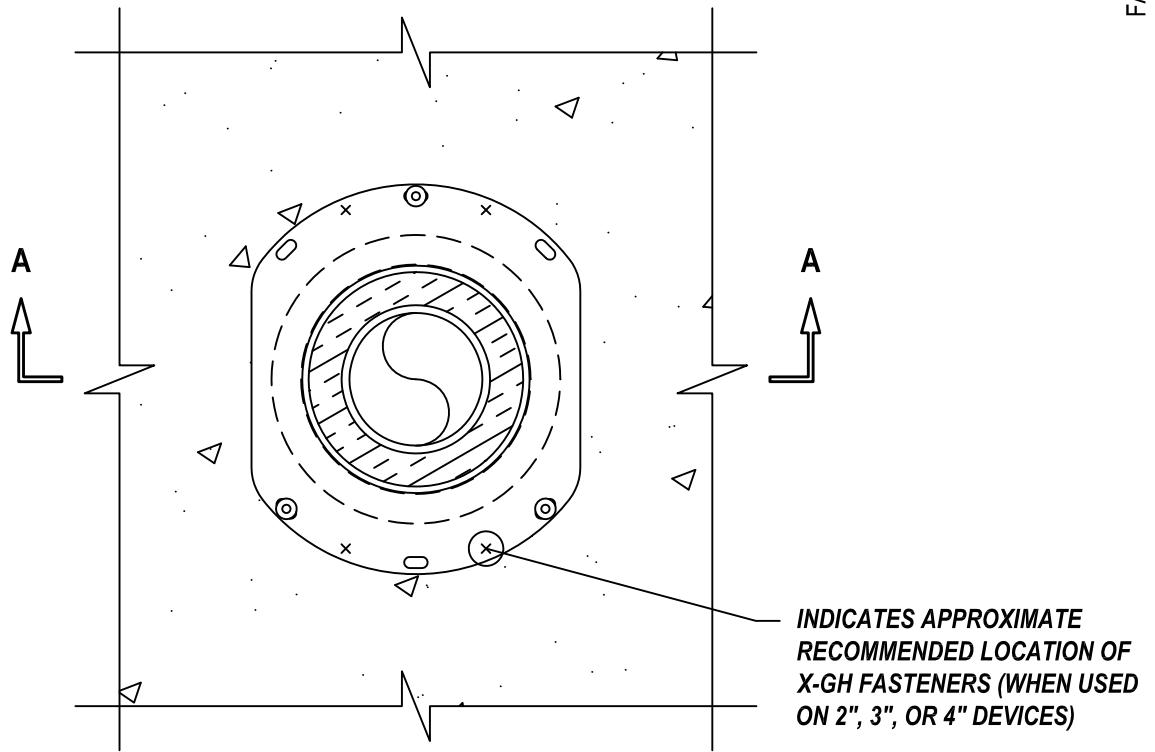
INSULATED METAL PIPE THROUGH CONCRETE FLOOR ASSEMBLY

F-RATING = 2-HR. OR 3-HR.

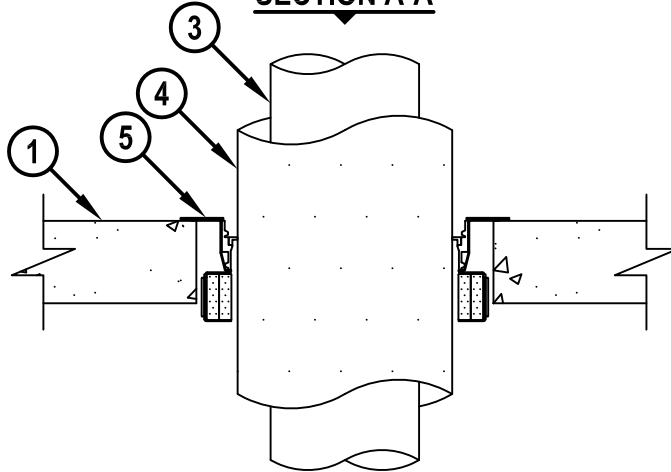
T-RATING = 0-HR. OR 1/2-HR.

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TOP VIEW



SECTION A-A



1. CONCRETE FLOOR ASSEMBLY (2-HR. OR 3-HR. FIRE-RATING) :

A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 2-1/2" TO 8" THICK).

B. STEEL FLOOR UNIT/FLOOR ASSEMBLY - LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 2-1/2" TO 8" THICK) OVER METAL DECKING (UL CLASSIFIED D700, D800, OR D900 SERIES).



Hilti Firestop Systems

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

Sheet 1 of 2

Scale 1 1/64" = 1"

Date May 13, 2011

Drawing No.

**FA
5046b**

Saving Lives through Innovation and Education

INSULATED METAL PIPE THROUGH CONCRETE FLOOR ASSEMBLY

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

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2. [OPTIONAL - NOT SHOWN] ANY OF THE FOLLOWING SLEEVES MAY BE USED :
 - A. NOMINAL 4", 5", OR 6" DIAMETER STEEL PIPE SLEEVE (SCHEDULE 10 OR HEAVIER) CAST OR GROUTED INTO FLOOR ASSEMBLY, FLUSH WITH FLOOR SURFACES.
 - B. NOMINAL 4", 5", 6", OR 9" DIAMETER GALVANIZED STEEL SLEEVE (MIN. 26 GA.) WITH SQUARE FLANGE SPOT WELDED TO BOTTOM OR MID-HEIGHT OF SLEEVE AND SIZED MINIMUM 2" LARGER THAN SLEEVE DIAMETER. SLEEVE IS TO BE CAST IN PLACE, AND MAY EXTEND A MAXIMUM 4" BELOW BOTTOM SURFACE OF FLOOR AND SIT FLUSH WITH TOP SURFACE OF FLOOR.
3. PENETRATING ITEM TO BE ONE OF THE FOLLOWING :
 - A. MAXIMUM 4" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
 - B. MAXIMUM 4" NOMINAL DIAMETER CAST OR DUCTILE IRON PIPE.
 - C. MAXIMUM 4" NOMINAL DIAMETER COPPER PIPE OR TUBING.
4. ONE OF THE FOLLOWING PIPE COVERS TO BE USED :
 - A. NOMINAL 3/4" OR 1" THICK AB/PVC PIPE INSULATION (SEE NOTE NOTES BELOW).
 - B. NOMINAL 1", 1-1/2", OR 2" THICK GLASS-FIBER PIPE INSULATION.
5. HILTI CFS-DID FIRESTOP DROP-IN DEVICE INSERTED INTO OPENING (SEE TABLE BELOW) AND SECURED TO TOP OF FLOOR WITH THREE HILTI 1/4" (6mm) DIAMETER BY 1-1/4" (32mm) LONG KWIK-CON II+ CONCRETE SCREW ANCHORS, HILTI 1/4" (6mm) DIAMETER BY 1-3/4" (45mm) LONG KWIK BOLT 3 STEEL EXPANSION ANCHORS, OR HILTI 1/4" (6mm) BY 3/4" (19mm) LONG METAL HIT ANCHORS (INSTALLED IN A TRIANGULAR FASHION THROUGH HOLES PROVIDED). IN ADDITION, FOR NOMINAL 2", 3", AND 4" DEVICES, FOUR 11/16" (18mm) LONG HILTI X-GH P18 MX STEEL FASTENERS MAY BE INSTALLED THROUGH THE STEEL FLANGE, TWO ON EACH SIDE.

NOMINAL PIPE DIAMETER	INSULATION TYPE AND THICKNESS	FIRESTOP DEVICE	CORE HOLE OR SLEEVE DIAMETER
1/2"	3/4" OR 1" AB/PVC	CFS-DID 2" MD	4"
1"	3/4" OR 1" AB/PVC	CFS-DID 3" MD	5"
2"	3/4" OR 1" AB/PVC	CFS-DID 4" MD	6"
4"	3/4" OR 1" AB/PVC	CFS-DID 6" MD	9"
1/2"	1" GLASS-FIBER	CFS-DID 2" MD	4"
1"	1" GLASS-FIBER	CFS-DID 3" MD	5"
1"	1-1/2" GLASS-FIBER	CFS-DID 4" MD	6"
2"	1" GLASS-FIBER	CFS-DID 4" MD	6"
2"	2" GLASS-FIBER	CFS-DID 6" MD	9"
4"	1" GLASS-FIBER	CFS-DID 6" MD	9"

NOTE : T-RATING = 0-HR. WHEN SLEEVE IS USED.



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