

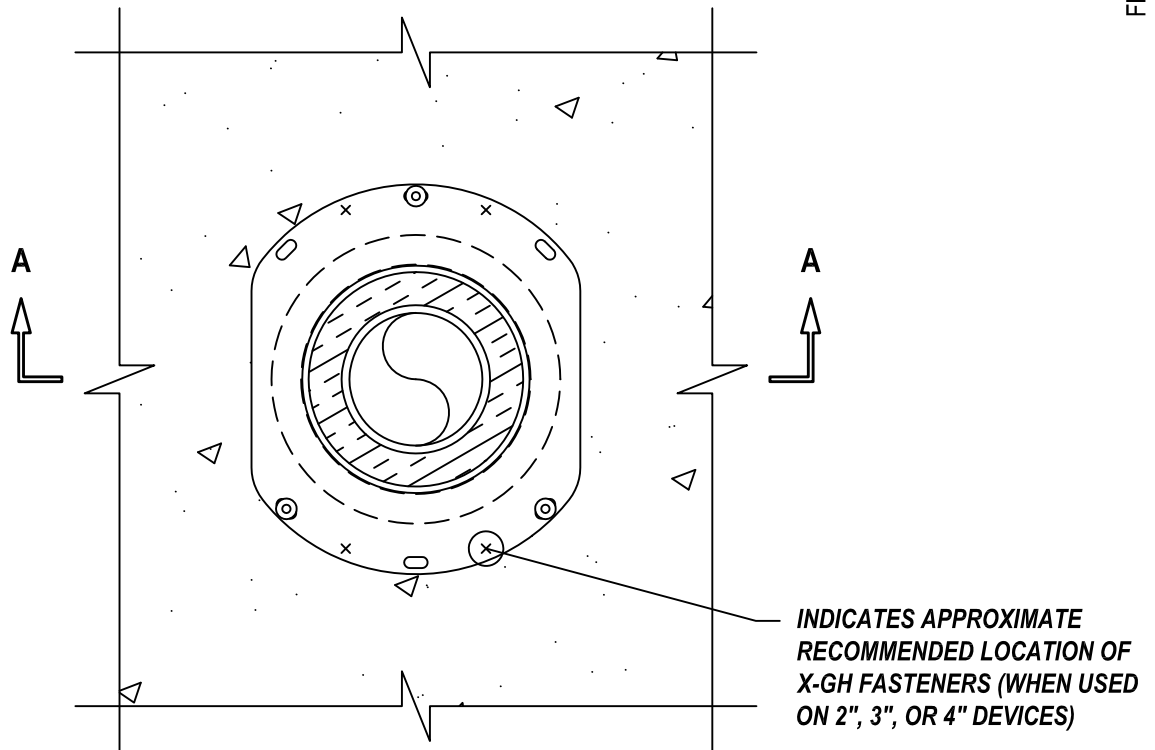
UL/cUL SYSTEM NO. F-B-5004

INSULATED METAL PIPE THROUGH CONCRETE FLOOR ASSEMBLY

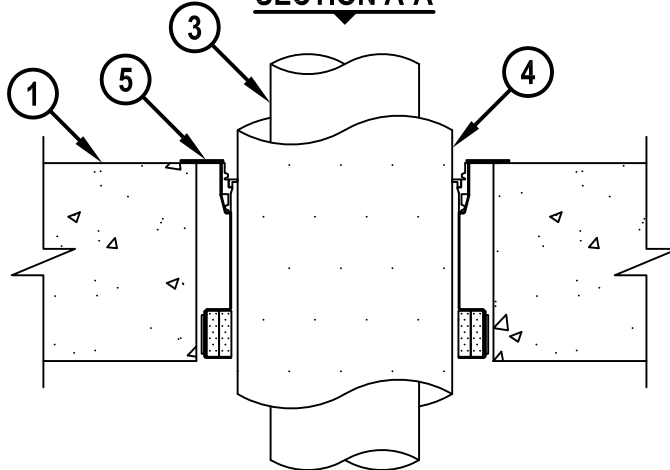
F-RATING = 3-HR.

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

TOP VIEW



SECTION A-A



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

A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 6" TO 12" THICK).

B. STEEL FLOOR UNIT/FLOOR ASSEMBLY - LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 6" TO 12" 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.

**FB
5004b**

Saving Lives through Innovation and Education

FB5004b.051311

INSULATED METAL PIPE THROUGH CONCRETE FLOOR ASSEMBLY

F-RATING = 3-HR.

T-RATING = 0-HR. OR 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" C	4"
1"	3/4" OR 1" AB/PVC	CFS-DID 3" C	5"
2"	3/4" OR 1" AB/PVC	CFS-DID 4" C	6"
4"	3/4" OR 1" AB/PVC	CFS-DID 6" C	9"
1/2"	1" GLASS-FIBER	CFS-DID 2" C	4"
1"	1" GLASS-FIBER	CFS-DID 3" C	5"
1"	1-1/2" GLASS-FIBER	CFS-DID 4" C	6"
2"	1" GLASS-FIBER	CFS-DID 4" C	6"
2"	2" GLASS-FIBER	CFS-DID 6" C	9"
4"	1" GLASS-FIBER	CFS-DID 6" C	9"

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



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