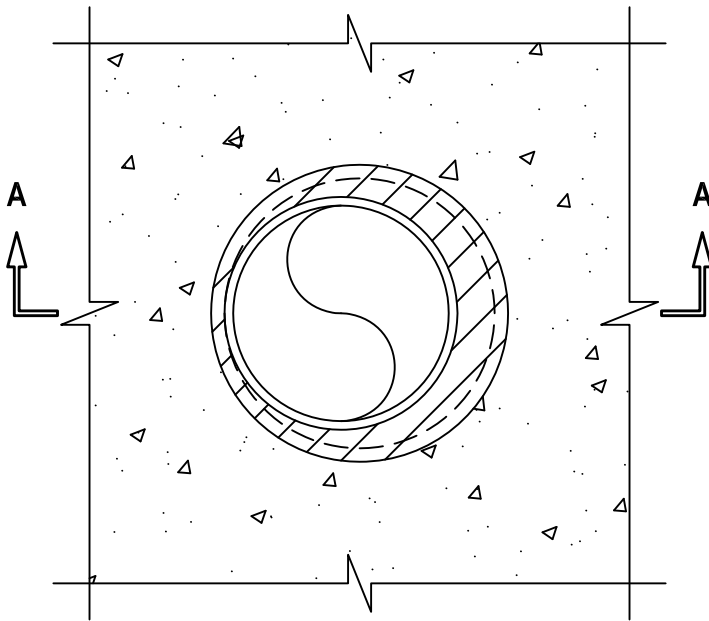


METAL PIPE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL ASSEMBLY

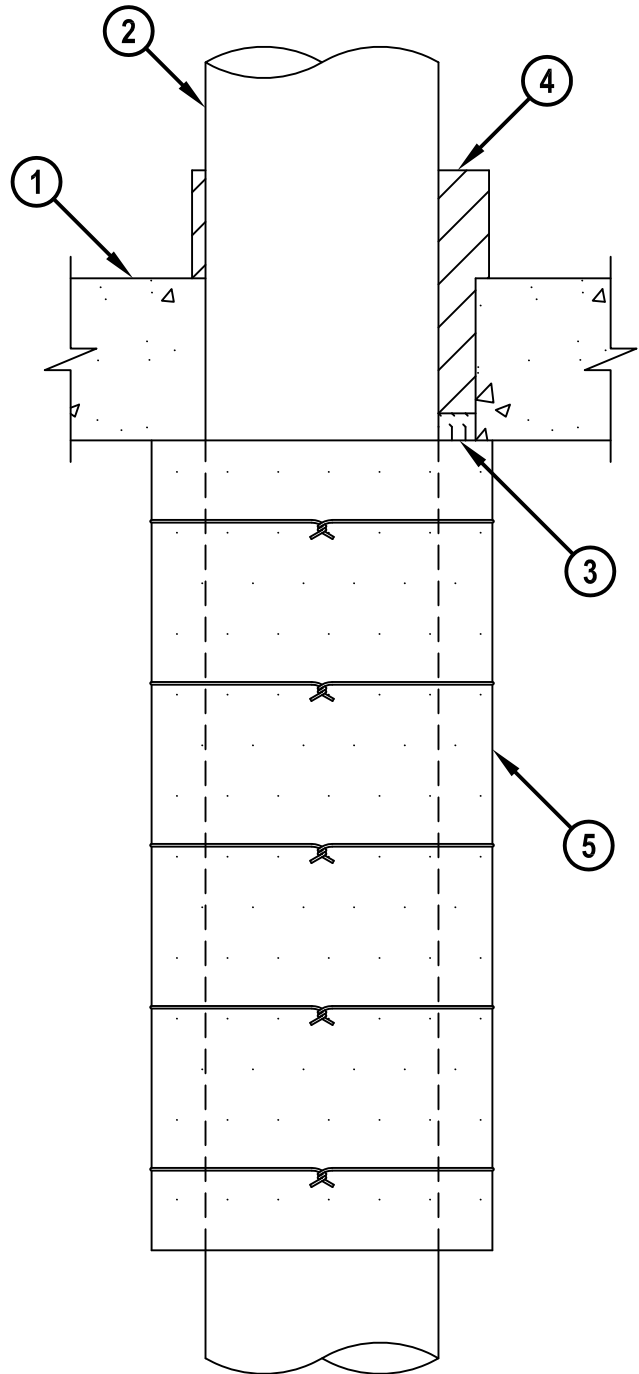
F-RATING = 2-HR.
 FT-RATING = 2-HR.
 FH-RATING = 0-HR.
 FTH-RATING = 0-HR.

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TOP VIEW



SECTION A-A



METAL PIPE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL ASSEMBLY

F-RATING = 2-HR.
 FT-RATING = 2-HR.
 FH-RATING = 0-HR.
 FTH-RATING = 0-HR.

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1. CONCRETE FLOOR OR WALL ASSEMBLY (2-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR OR WALL ASSEMBLY (MINIMUM 6" THICK).
 - B. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING (ALSO SEE NOTE NO. 3 BELOW) :
 - A. MAXIMUM 8" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 40 OR HEAVIER).
 - B. MAXIMUM 8" NOMINAL DIAMETER CAST OR DUCTILE IRON PIPE.
3. MINIMUM 1" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED AND FLUSH WITH THE BOTTOM OF CONCRETE FLOOR. WALL INSTALLATIONS DO NOT REQUIRE MINERAL WOOL.
4. MINIMUM 5" DEPTH HILTI CP 660 FIRESTOP FOAM INSTALLED WITHIN THE ANNULAR SPACE AND EXTENDING ABOVE THE FLOOR IN ACCORDANCE WITH TABLE BELOW. CP 660 FIRESTOP FOAM TO OVERLAP CONCRETE 1/2" AROUND THE PERIMETER OF THE OPENING. WALLS REQUIRE MINIMUM 6" DEPTH CP 660 FLUSH WITH BOTH SIDES OF WALL.
5. NOMINAL 2" THICK MINERAL FIBER PIPE INSULATION TO EXTEND MINIMUM 30" BELOW FLOOR OR BOTH SIDES OF A WALL. PIPE INSULATION TO BE TIGHTLY BUTTED TO BOTTOM OF FLOOR OR SIDE OF WALL AND SECURED WITH 18 GA. STEEL TIE WIRE (SPACED MAXIMUM 6" C/C) (ALSO SEE NOTE NO. 4 BELOW).

CONCRETE THICKNESS	FIRE FOAM EXTENSION ABOVE SURFACE
6"	4"
7"	3"
8"	2"
9"	1"
10"	NONE

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 10".
 2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 1-3/8".
 3. PIPE MAY RUN VERTICALLY OR TURN 90° HORIZONTALLY BELOW FLOOR.
 4. MINERAL FIBER PIPE INSULATION TO BE MANUFACTURED BY IIG, MINWOOL LLC.
 IN ADDITION TO STEEL TIE WIRES, INSULATION MAY BE WRAPPED WITH A UL APPROVED ALL SERVICE JACKET.



Hilti Firestop Systems

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Sheet **2 of 2**

Scale **-**

Date **Jan. 27, 2016**

Drawing No.

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