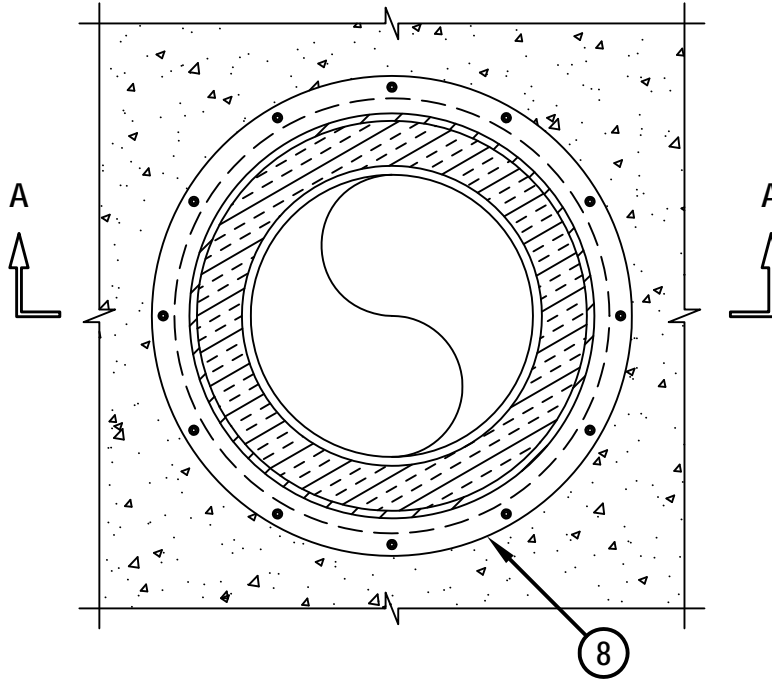


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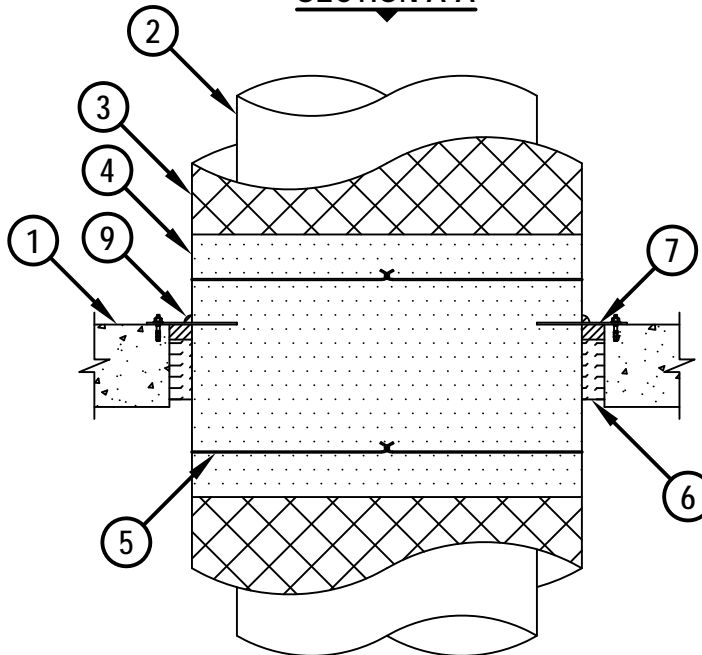
INSULATED METALLIC PIPE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL

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

TOP VIEW



SECTION A-A



CBJ5006g.010615



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Sheet	1 of 2
Scale	5/64" = 1"
Date	Jan. 06, 2015

Drawing No.
**CBJ
5006g**

Saving Lives through Innovation and Education

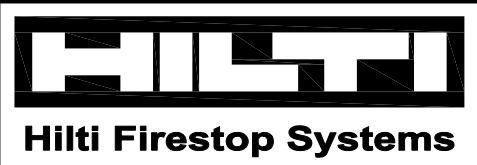
INSULATED METALLIC PIPE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL

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

CBJ5006g.010615

1. CONCRETE FLOOR OR WALL ASSEMBLY (4-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 5-1/2" THICK).
 - B. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 6" THICK).
 - C. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
2. MAXIMUM 20" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
3. MAXIMUM 3" THICKNESS GLASS-FIBER PIPE INSULATION (MINIMUM 3.5 PCF DENSITY).
4. MAXIMUM 3" THICKNESS MINERAL FIBER PIPE INSULATION (SEE NOTE NO. 3 BELOW).
5. STEEL TIE WIRE (NO. 18 SWG) LOCATED 3" BEYOND EACH SURFACE OF CONCRETE.
6. MINIMUM 4" THICKNESS MINERAL WOOL (MINIMUM 4 PCF DENSITY) TIGHTLY PACKED AND RECESSED TO ACCOMMODATE FIRESTOP SEALANT.
7. MINIMUM 1" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT.
8. TWO PIECE STEEL COVER PLATE (MINIMUM 18 GA.) FASTENED TO TOP OF FLOOR WITH 1/4" x 1-3/4" LONG STEEL EXPANSION BOLTS IN CONJUNCTION WITH 3/4" DIAMETER STEEL WASHERS (EX. HILTI KWIK-BOLT 3) LOCATED A MAXIMUM OF 1" FROM EACH SIDE OF SEAM AND A MAXIMUM OF 4" C/C. COVER PLATE TO PENETRATE PIPE INSULATION, FULLY CONTACTING PIPE (SEE NOTE NO. 4 BELOW).
9. MINIMUM 1/2" BEAD HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT AT INTERFACE OF INSULATION AND STEEL COVER PLATE.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 29".
 2. ANNULAR SPACE = MINIMUM 1", MAXIMUM 2-1/4".
 3. MINERAL FIBER PIPE INSULATION TO EXTEND 6" BEYOND FLOOR/WALL. SECURE WITH STEEL TIE WIRE, AS SHOWN. COVER WITH A UL/cUL CLASSIFIED ALL SERVICE JACKET AND PROPERLY JOIN IT WITH EXISTING INSULATION.
 4. INSIDE DIAMETER OF STEEL COVER PLATE SHOULD BE SAME AS STEEL PIPE OUTSIDE DIAMETER. OUTSIDE DIAMETER OF COVER PLATE TO BE SIZED TO OVERLAP PERIPHERY OF OPENING, MINIMUM 1-1/2".
 5. MINIMUM 1" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT IS REQUIRED ON EACH SIDE OF A WALL ASSEMBLY.



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Scale	-
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