

PLASTIC/METAL PIPE TRANSITION THROUGH CONCRETE FLOOR

F-RATING = 2-HR.

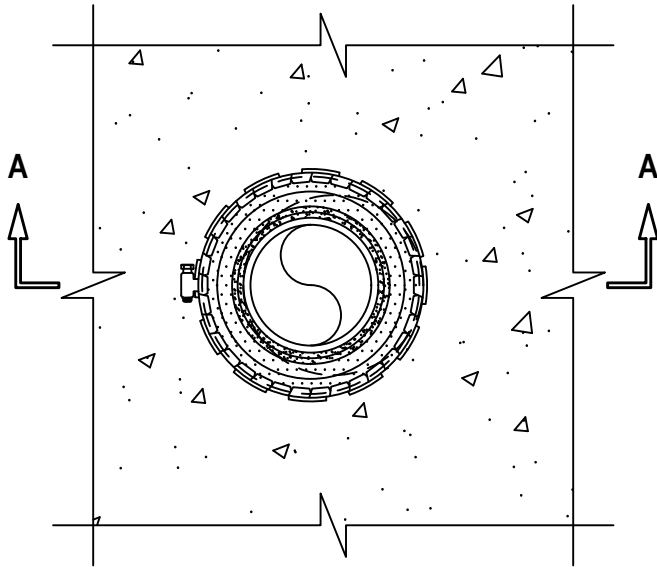
FT-RATING = 1/4-HR.

FH AND FTH-RATINGS = 0-HR.

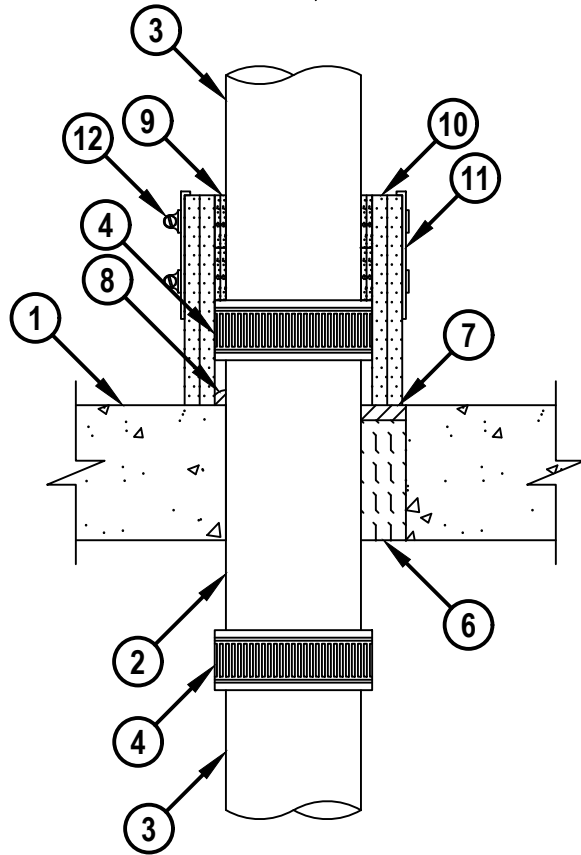
NOTE : TESTED WITH A 50 Pa PRESSURE DIFFERENTIAL

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TOP VIEW



SECTION A-A



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

A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 4-1/2" THICK).

B. PRECAST (HOLLOW-CORE) CONCRETE FLOOR (MINIMUM 6" THICK).

2. MAXIMUM 4" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER) OR CAST/DUCTILE IRON PIPE TO TERMINATE A MINIMUM 1-3/8" BELOW BOTTOM SURFACE OF FLOOR AND A MINIMUM 2-3/4" ABOVE TOP SURFACE OF FLOOR.

3. MAXIMUM 4" NOMINAL DIAMETER PVC PLASTIC PIPE (CELLULAR OR SOLID CORE) (CLOSED OR VENTED PIPING SYSTEM).



Hilti Firestop Systems

HILTI, Inc.
Plano, Texas USA (800) 879-8000

Sheet	1 of 2
Scale	5/32" = 1"
Date	Oct. 05, 2023

Drawing No.

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4. COMPRESSION TYPE COUPLING WITH ELASTOMERIC GASKET AND A STAINLESS STEEL JACKET WITH STAINLESS STEEL BAND CLAMPS USED TO SECURE METALLIC PIPE WITH NON-METALLIC PIPES.
5. [NOT SHOWN] METALLIC RISER CLAMPS SIZED TO FIT THE OUTER CIRCUMFERENCE OF THE METALLIC THROUGH PENETRANT AND INSTALLED FLUSH WITH TOP SURFACE OF THE FLOOR IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
6. MINIMUM 4" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED AND RECESSED TO ACCOMMODATE SEALANT (SEE NOTE 3 BELOW).
7. MINIMUM 1/2" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT.
8. MINIMUM 1/2" BEAD HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT APPLIED AT POINT OF CONTACT.
9. HILTI CP 648E WRAP STRIP (NOMINAL 3/16" THICK x 1-3/4" WIDE) CONTINUOUSLY WRAPPED AROUND THE OUTER CIRCUMFERENCE OF THE NON-METALLIC PIPE ABOVE THE FLOOR ASSEMBLY, COVERING TWO TIMES, WITH ENDS BUTTED AND HELD IN PLACE WITH TAPE. TWO STACKS OF TWO LAYERS OF WRAP STRIP TO BE BUTTED TO THE TOP OF THE COMPRESSION COUPLING ABOVE THE FLOOR ASSEMBLY.
10. TWO LAYERS OF HILTI CFP-ES ENDO-SHIELD TIGHTLY WRAPPED AROUND PENETRANT, WRAP STRIP AND COMPRESSION TYPE COUPLING WITH A 2" OVERLAP AT SEAM. ENDO-SHIELD TO BE TIGHTLY BUTTED TO THE TOP OF THE FLOOR ASSEMBLY AND EXTENDING ABOVE THE FLOOR ASSEMBLY TO BE FLUSH WITH THE TOP EDGE OF THE TOP STACK OF WRAP STRIPS (ITEM 9) INSTALLED AROUND THE NONMETALLIC PIPE. ENTIRE VERTICAL SEAM TO BE SEALED WITH FOIL-SCRIM-KRAFT OR FOIL TAPE.
11. HILTI 1-3/4" RETAINING COLLAR WRAPPED OVER THE WRAP STRIPS, OVERLAPPING MINIMUM 1". ANCHOR TABS SHOULD REMAIN UNBENT AND POSITIONED SUCH THAT THE ANCHOR TABS PROJECT DOWNWARDS.
12. NOMINAL 1/2" WIDE STAINLESS STEEL HOSE CLAMP(S) FASTENED AT MID-HEIGHT OF EACH STACK OF WRAP STRIPS (ITEM 9).

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 6".
 2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 1-1/2".
 3. WHEN HOLLOW-CORE FLOORS ARE USED, MINERAL WOOL MUST BE RECESSED TO ACCOMMODATE SEALANT AND ITEMS 6 AND 7 ARE TO BE INSTALLED ON TOP AND BOTTOM OF FLOOR ASSEMBLY.



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Scale	-
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