

cUL SYSTEM NO. C-AJ-2055

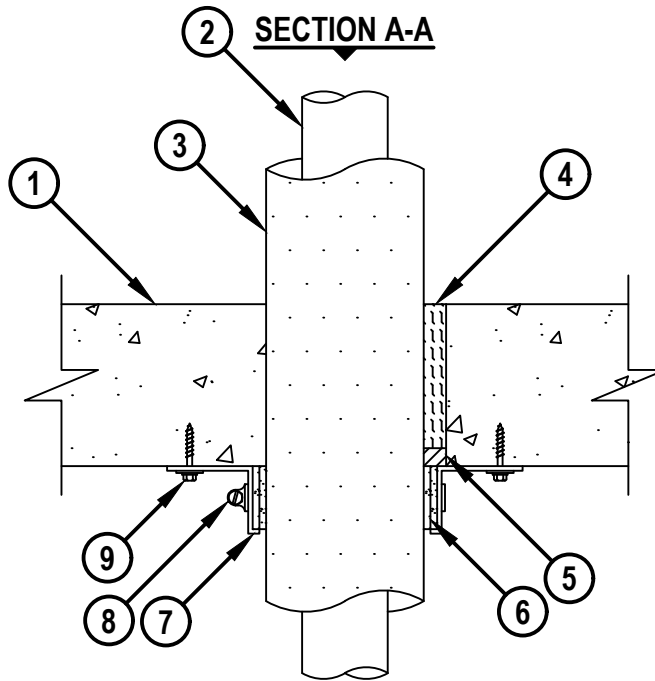
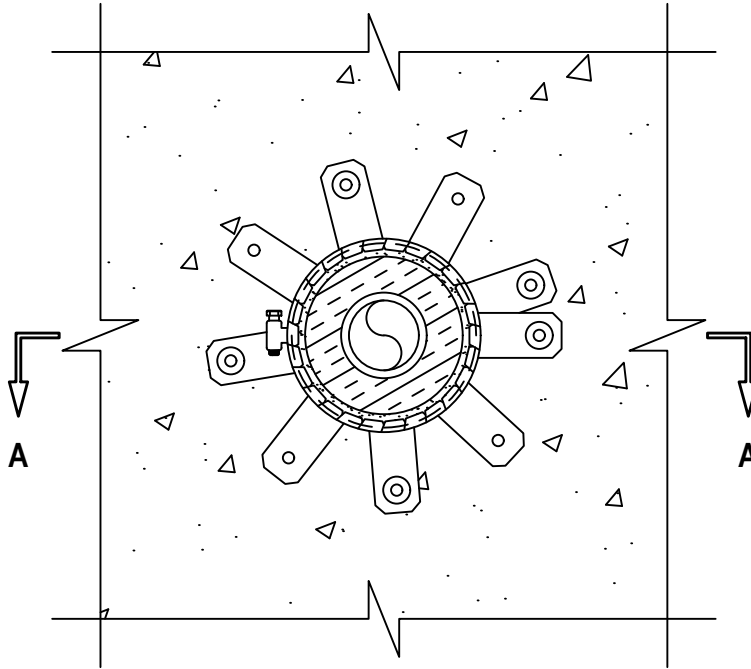


INSULATED PLASTIC PIPE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL ASSEMBLY

F AND FT-RATINGS = 2-HR.
FH AND FTH-RATINGS = 0-HR.

NOTE : TESTED WITH A 50 Pa PRESSURE DIFFERENTIAL

BOTTOM VIEW



cUL CAJ2055d.082421



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

Sheet	1 of 2
Scale	3/16" = 1"
Date	Aug. 24, 2021

Drawing No.
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1. CONCRETE FLOOR OR WALL ASSEMBLY (2-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 4-1/2" THICK).
 - B. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 5" THICK).
 - C. PRECAST (HOLLOW-CORE) CONCRETE FLOOR (MINIMUM 6" THICK).
 - D. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING :
 - A. MAXIMUM 2" (50 MM OD) NOMINAL DIAMETER POLYPROPYLENE (PP) PLASTIC PIPE (SCHEDULE 80) (CLOSED OR VENTED PIPING SYSTEM).
 - B. MAXIMUM 2" (51 MM) IPEX AQUARISE CHLORINATED POLYVINYL CHLORIDE (CPVC) PIPE (SDR 11) (CLOSED PIPING SYSTEM).
 - C. MAXIMUM 2" (63 MM OD) NOMINAL DIAMETER AQUATHERM GREENPIPE POLYPROPYLENE (PP-R) PLASTIC PIPE (SDR 7.4 OR 11) (CLOSED OR OPEN PIPING SYSTEM).
 - D. MAXIMUM 2" (63 MM OD) NOMINAL DIAMETER AQUATHERM BLUEPIPE POLYPROPYLENE (PP-RCT) PLASTIC PIPE (SDR 9 OR 11) (CLOSED OR OPEN PIPING SYSTEM).
 - E. MAXIMUM 2" (63 MM OD) NOMINAL DIAMETER NUPI AMERICAS NIRON POLYPROPYLENE (PP-RCT) PLASTIC PIPE (SDR 7.3, 9, OR 11) (CLOSED OR VENTED PIPING SYSTEM).
 - F. MAXIMUM 2" (63 MM OD) NOMINAL DIAMETER AQUATECHNIK NA FUSION-TECH POLYPROPYLENE (PP-RCT) PLASTIC PIPE (SDR 7.4 OR 11) (CLOSED OR OPEN PIPING SYSTEM).
 - G. MAXIMUM 2" (63 MM OD) NOMINAL DIAMETER UPONOR POLYPROPYLENE (PP) PLASTIC PIPE (SDR 9 OR 11) (CLOSED OR VENTED PIPING SYSTEM).
3. NOMINAL 1" THICK AB/PVC PIPE INSULATION.
4. MINIMUM 4" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED, RECESSED FROM BOTTOM OF FLOOR.
5. MINIMUM 1/2" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT.
6. HILTI CP 648E WRAP STRIP (NOMINAL 3/16" THICK x 1-3/4" WIDE) CONTINUOUSLY WRAPPED AROUND THE OUTER CIRCUMFERENCE OF THE PIPE, COVERING TWO TIMES, WITH ENDS BUTTED AND HELD IN PLACE WITH TAPE. WRAP STRIP TO BE BUTTED TIGHTLY AGAINST BOTTOM SURFACE OF FLOOR.
7. HILTI 1-3/4" RETAINING COLLAR WRAPPED OVER THE WRAP STRIPS, OVERLAPPING MINIMUM 1".
8. NOMINAL 1/2" WIDE STAINLESS STEEL HOSE CLAMP FASTENED AT MID-HEIGHT OF RETAINING COLLAR.
9. EVERY OTHER TAB OF RETAINING COLLAR SECURED TO BOTTOM OF FLOOR WITH 1/4" x 1-3/4" LONG STEEL EXPANSION BOLTS, 3/16" x 1-1/4" LONG STEEL CONCRETE SCREW ANCHORS OR 0.145 DIAMETER x 1-1/4" LONG POWDER ACTUATED FASTENERS IN CONJUNCTION WITH WITH 15mm DIAMETER STEEL WASHERS (EX. HILTI KWIK-BOLT 3, KWIK-CON OR DX PINS).

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 5".
 2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 5/8".
 3. HILTI CP 648E WRAP STRIP WITH RETAINING COLLAR, AND HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT ARE REQUIRED ON BOTH SIDES OF A WALL.



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