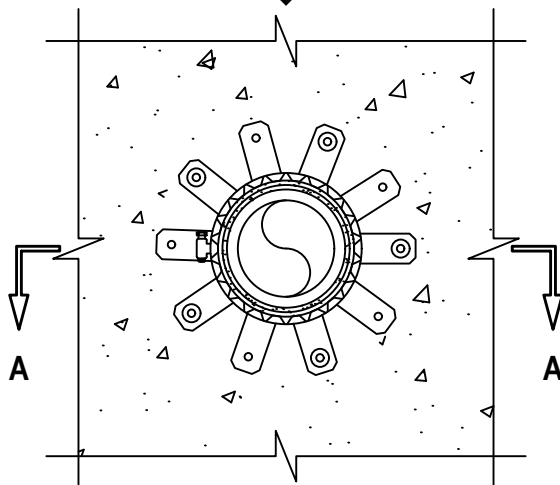


PLASTIC PIPE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL ASSEMBLY

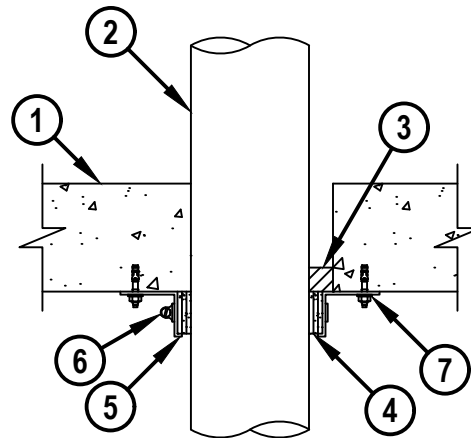
F AND FT-RATINGS = 2-HR.

FH AND FTH-RATINGS = 0-HR. OR 2-HR. (SEE NOTE NO. 4 BELOW)

BOTTOM VIEW



SECTION A-A



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 125mm FUSIOTHERM® OR GREENPIPE® (SDR 7.4 WITH FASER) PP PLASTIC PIPE MANUFACTURED BY AQUATHERM, INC. (CLOSED PIPING SYSTEM ONLY).
 - B. MAXIMUM 200mm FUSIOTHERM® OR GREENPIPE® (SDR 11) PP PLASTIC PIPE MANUFACTURED BY AQUATHERM, INC. (CLOSED PIPING SYSTEM ONLY).
3. MINIMUM 1" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT.
4. HILTI CP 648E WRAP STRIP (NOMINAL 3/16" THICK x 1-3/4" WIDE CONTINUOUSLY WRAPPED AROUND THE OUTER CIRCUMFERENCE OF THE PIPE, COVERING THREE (FOR MAXIMUM 125mm PIPES) OR FOUR (FOR MAXIMUM 200mm PIPES) TIMES, WITH ENDS BUTTED AND HELD IN PLACE WITH TAPE. WRAP STRIP TO BE BUTTED TIGHTLY AGAINST BOTTOM SURFACE OF FLOOR.
5. HILTI 1-3/4" RETAINING COLLAR WRAPPED OVER THE WRAP STRIPS, OVERLAPPING MINIMUM 1".
6. NOMINAL 1/2" WIDE STAINLESS STEEL HOSE CLAMP FASTENED AT MID-HEIGHT OF RETAINING COLLAR.
7. EVERY OTHER TAB OF RETAINING COLLAR SECURED TO BOTTOM OF FLOOR WITH 1/4" x 1-1/4" LONG STEEL EXPANSION BOLTS, 1-1/4" LONG STEEL CONCRETE SCREW ANCHORS, OR 0.145" DIAMETER x 1-1/4" LONG POWDER ACTUATED FASTENERS IN CONJUNCTION WITH 1/16" THICK STEEL WASHERS (EX. HILTI KWIK-BOLT 3, KWIK-CON, OR DX PINS).

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 9" (7" WHEN THROUGH HOLLOW-CORE FLOORS).
 2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 1".
 3. HILTI CP 648E WRAP STRIP WITH RETAINING COLLAR, AND HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT IS REQUIRED ON BOTH SIDES OF A WALL.
 4. WHEN ITEM 2B IS USED, FH AND FTH-RATINGS ARE 0-HR.

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HILTI, Inc.
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Sheet	1 of 1
Scale	1/8" = 1"
Date	Nov. 04, 2021

Drawing No.
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