

UL/cUL SYSTEM NO. W-J-2397

PLASTIC PIPE THROUGH CONCRETE WALL ASSEMBLY

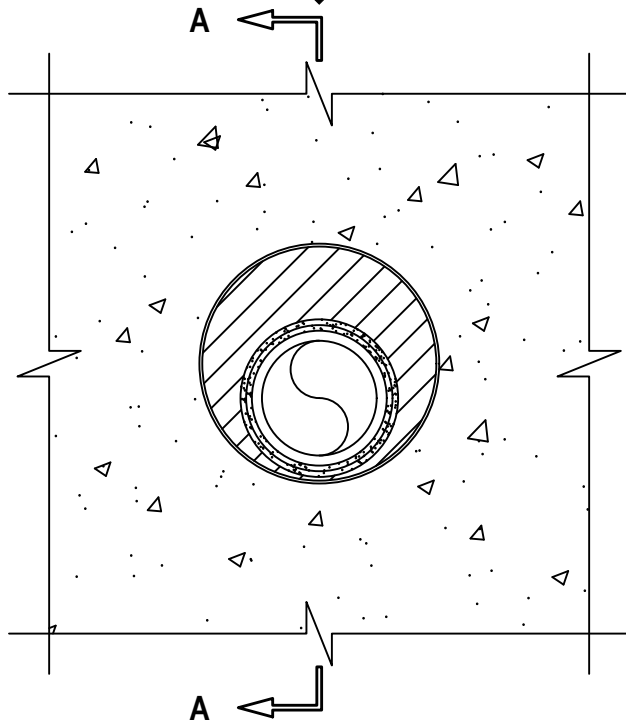
F-RATING = 1-HR. OR 2-HR.

T-RATING = 0-HR., 1/4-HR., 1-HR., OR 2-HR. (SEE NOTE BELOW)

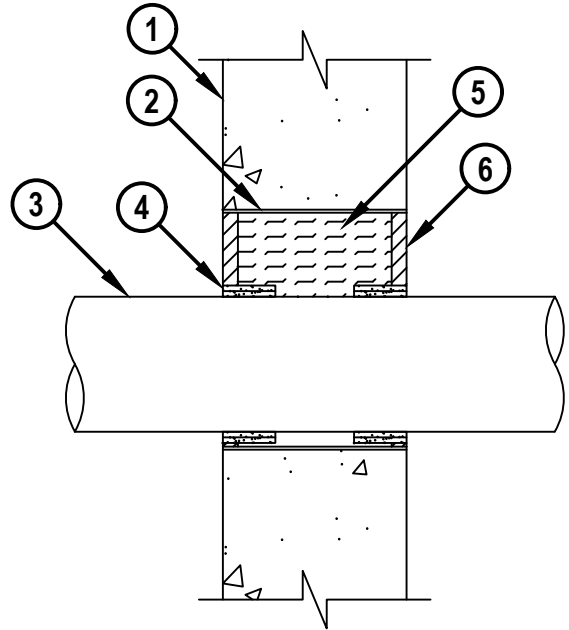
NOTE : TESTED WITH A 2.5 Pa PRESSURE DIFFERENTIAL

WJ2397b.062223

FRONT VIEW



SECTION A-A



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

Sheet	1 of 2
Scale	5/32" = 1"
Date	June 22, 2023

Drawing No.
WJ
2397b

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1. CONCRETE WALL ASSEMBLY (1-HR. OR 2-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 4-7/8" THICK OR MINIMUM 6-7/8" THICK FOR 1 OR 2 HOUR RATINGS, RESPECTIVELY).
 - B. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
2. STEEL SHEET METAL PIPE SLEEVE (MAXIMUM 8" DIAMETER, 30 GAUGE THICKNESS WITH 1" OVERLAP ALONG THE LONGITUDINAL SEAM) INSTALLED FLUSH WITH BOTH SIDES OF THE WALL ASSEMBLY.
3. PENETRATING ITEM TO BE ONE OF THE FOLLOWING NONMETALLIC PIPES :
 - A. MAXIMUM 4" NOMINAL DIAMETER PVC PLASTIC PIPE (SCHEDULE 40 OR 80) (CLOSED OR VENTED PIPING SYSTEM).
 - B. MAXIMUM 4" NOMINAL DIAMETER CPVC PLASTIC PIPE (SCHEDULE 40 OR 80) (CLOSED OR VENTED PIPING SYSTEM).
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 TWO TIMES, WITH ENDS HELD IN PLACE WITH (MASKING OR ALUMINUM) TAPE. LAYERS OF WRAP STRIP TO BE FLUSH WITH WALL SURFACE ON EACH SIDE.
5. MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED TO FILL SLEEVED OPENING AND RECESSED 1/2" FROM BOTH SIDES OF WALL TO ACCOMMODATE SEALANT.
6. MINIMUM 1/2" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 8".
2. ANNULAR SPACE = MINIMUM 1/2", MAXIMUM 3".
3. WHEN PVC IS USED, T-RATING IS 1 OR 2 HOURS FOR 1 OR 2 HOUR RATED ASSEMBLIES;
WHEN CPVC IS USED, T-RATINGS ARE 0 AND 1/4 HOUR FOR 1 OR 2 HOUR RATED
ASSEMBLIES, RESPECTIVELY.



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