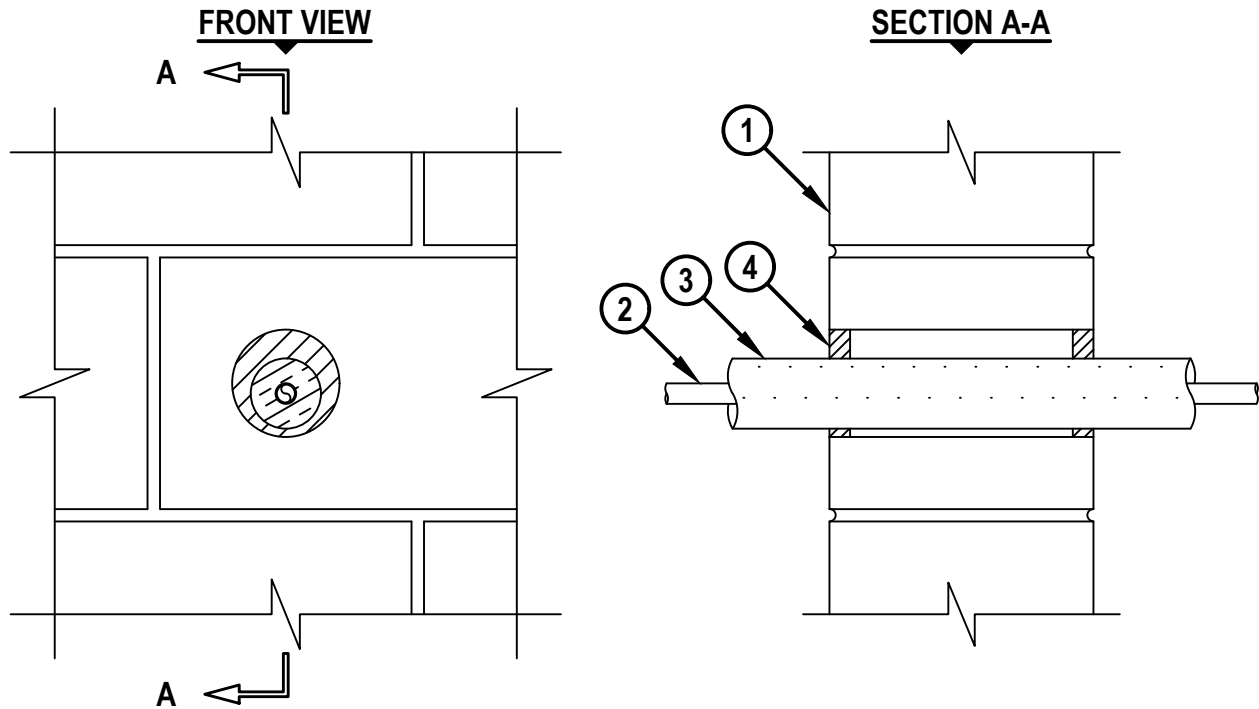


UL SYSTEM NO. W-J-5190
**INSULATED PLASTIC PIPE THROUGH CONCRETE WALL
OR CONCRETE BLOCK WALL ASSEMBLY**

F-RATING = 2-HR.
T-RATING = 2-HR.

WJ5190a.091117



1. CONCRETE WALL ASSEMBLY (1-HR. OR 2-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 6" THICK).
 - B. ANY UL CLASSIFIED CONCRETE BLOCK WALL.
2. MAXIMUM 1/2" NOMINAL DIAMETER PEX TUBING (SDR 9) (CLOSED PIPING SYSTEM ONLY).
3. NOMINAL 3/4" THICK AB/PVC PIPE INSULATION.
4. MINIMUM 5/8" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 3-1/4".
2. ANNULAR SPACE = MINIMUM 1/4", MAXIMUM 7/8".



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

Sheet	1 of 1
Scale	11/64" = 1"
Date	Sep. 11, 2017

Drawing No.
**WJ
5190a**