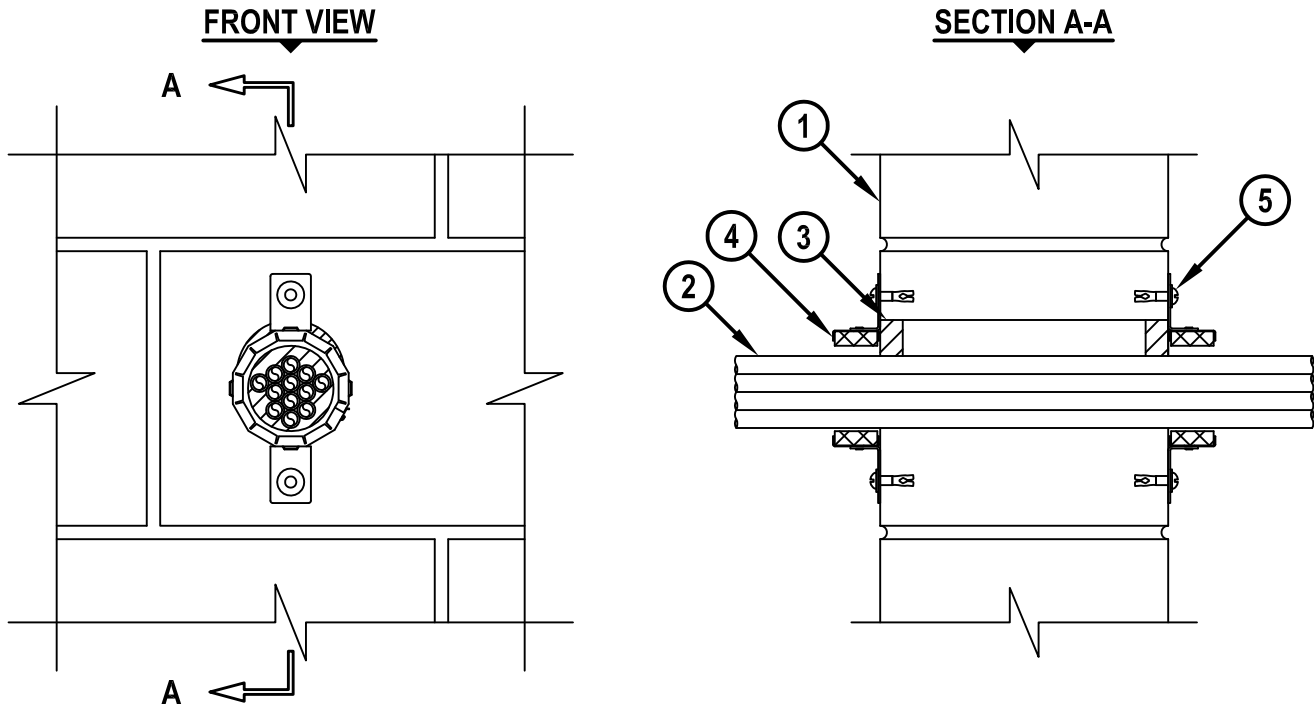


UL SYSTEM NO. W-J-2238

**MULTIPLE PLASTIC PIPE THROUGH CONCRETE WALL OR
CONCRETE BLOCK WALL ASSEMBLY**

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

WJ2238a.051811



1. CONCRETE FLOOR ASSEMBLY (2-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 6" THICK).
 - B. ANY UL CLASSIFIED CONCRETE BLOCK WALL.
2. ONE OR MORE MAXIMUM 1/2" DIAMETER DURA-LINE MICRO DUCT (MINIMUM 0.057" WALL THICKNESS) MANUFACTURED BY A-D TECHNOLOGIES (CLOSED PIPING SYSTEM) (MAX. QTY. = 12, TIGHTLY BUNDLED).
3. MINIMUM 5/8" DEPTH HILTI CP 618 FIRESTOP PUTTY STICK.
4. HILTI CP 643N/2" FIRESTOP COLLAR WITH FASTENING HOOKS.
5. ATTACH EACH FASTENING HOOK TO WALL ASSEMBLY WITH MINIMUM 3/16" DIAMETER BY MINIMUM 1-1/4" LONG STEEL ANCHORS WITH MINIMUM 3/4" DIAMETER STEEL WASHERS.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 3".
2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 1".
3. [NOT SHOWN] MINIMUM 1/2" BEAD HILTI CP 618 FIRESTOP PUTTY STICK APPLIED AT POINT OF CONTACT, PRIOR TO INSTALLATION OF FIRESTOP COLLAR.



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

Sheet	1 of 1
Scale	3/16" = 1"
Date	May 18, 2011

Drawing No.

**WJ
2238a**

Saving Lives through Innovation and Education