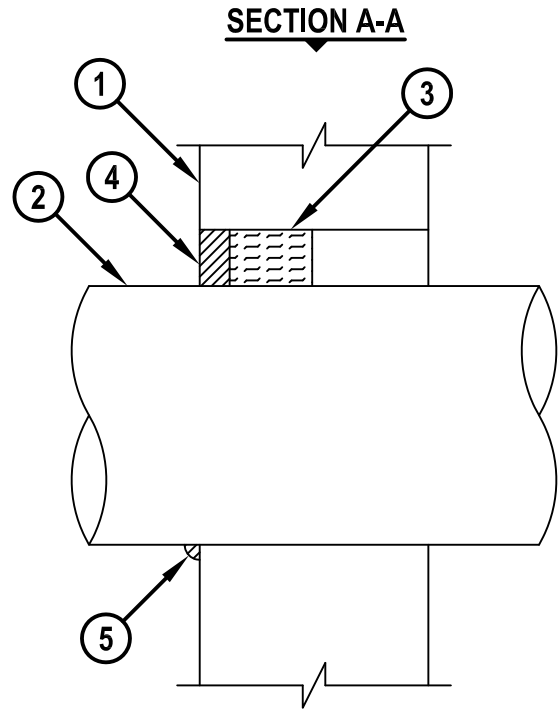
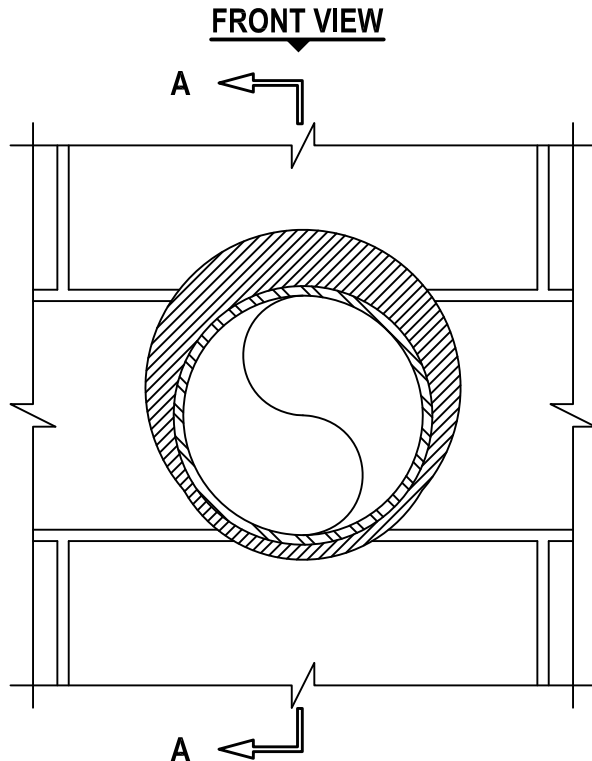


METAL PIPE THROUGH CONCRETE OR CONCRETE BLOCK SHAFT WALL ASSEMBLY

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

T-RATING = 0-HR.

WJ1089d.010815



1. CONCRETE WALL ASSEMBLY (1-HR. OR 2-HR. FIRE-RATING) (2-HR. SHOWN) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 3-3/4" THICK).
 - B. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING :
 - A. MAXIMUM 8" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
 - B. MAXIMUM 8" NOMINAL DIAMETER CAST IRON PIPE.
 - C. MAXIMUM 4" NOMINAL DIAMETER COPPER PIPE.
 - D. MAXIMUM 6" NOMINAL DIAMETER STEEL CONDUIT.
 - E. MAXIMUM 4" NOMINAL DIAMETER EMT.
 - F. MAXIMUM 2" NOMINAL DIAMETER FLEXIBLE STEEL CONDUIT.
3. MINIMUM 1-5/8" OR 2-1/4" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED AND RECESSED ON ONE SIDE OF WALL, FOR 1-HR. OR 2-HR. FIRE-RATED WALLS, RESPECTIVELY.
4. MINIMUM 1-1/2" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT.
5. MINIMUM 1/2" BEAD HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT APPLIED AT POINT OF CONTACT.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 10-1/2".
 2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 1-7/8".
 3. THIS FIRESTOP SYSTEM WAS DESIGNED AND TESTED FOR APPLICATIONS IN WHICH THERE IS LIMITED OR NO ACCESS AVAILABLE ON ONE SIDE OF THE WALL.



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

Sheet	1 of 1
Scale	5/32" = 1"
Date	Jan. 08, 2015

Drawing No.
WJ
1089d