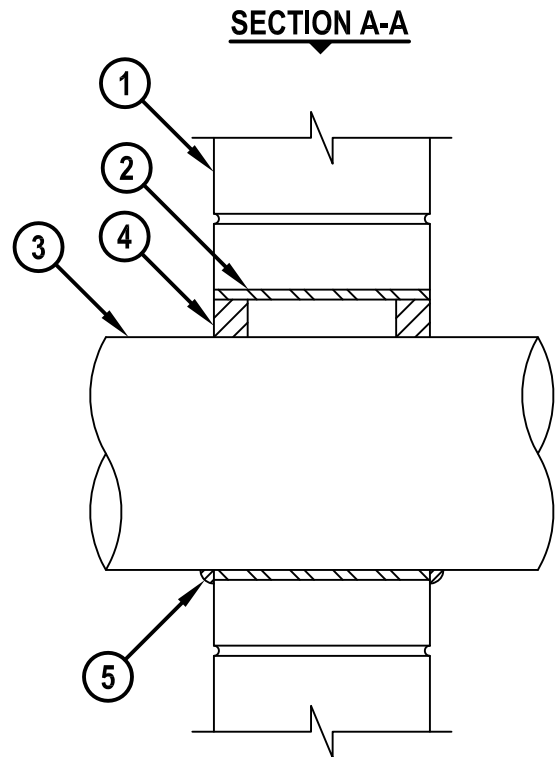
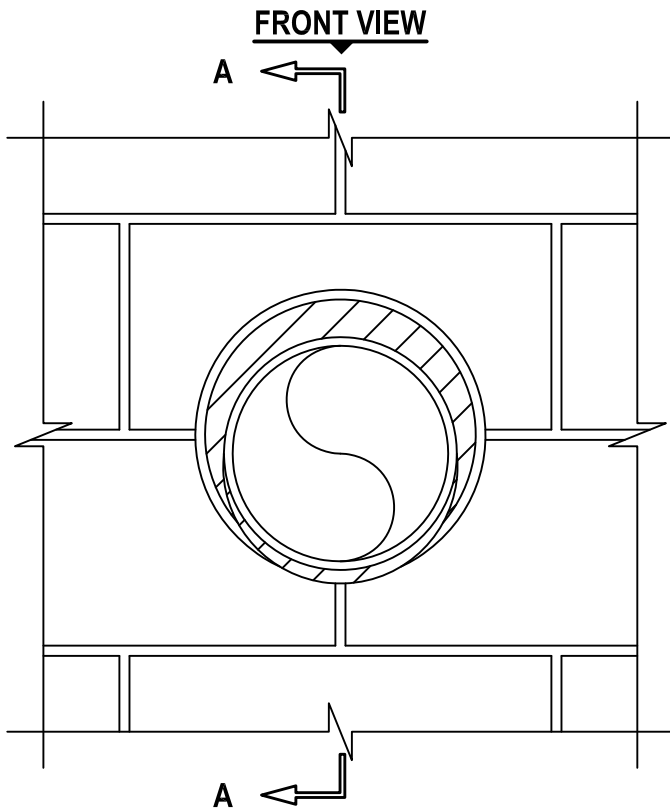


METAL PIPE THROUGH CONCRETE WALL OR CONCRETE BLOCK WALL

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

T-RATING = 0-HR.

WJ1210b.010815



1. CONCRETE WALL ASSEMBLY (1-HR. OR 2-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MIN. 3-3/4" THICK FOR 1-HR. FIRE-RATING).
 - B. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MIN. 5" THICK FOR 2-HR. FIRE-RATING).
 - C. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
2. [OPTIONAL] MAXIMUM 32" NOMINAL DIAMETER STEEL PIPE SLEEVE (SCH 40 OR HEAVIER).
3. PENETRATING ITEM TO BE ONE OF THE FOLLOWING :
 - A. MAXIMUM 30" NOMINAL DIAMETER STEEL PIPE (SCH 10 OR HEAVIER).
 - B. MAXIMUM 30" NOMINAL DIAMETER CAST OR DUCTILE IRON PIPE.
 - C. MAXIMUM 6" NOMINAL DIAMETER STEEL CONDUIT.
 - D. MAXIMUM 6" NOMINAL DIAMETER COPPER PIPE OR TUBING.
 - E. MAXIMUM 4" NOMINAL DIAMETER EMT.
4. HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT :
 - A. MINIMUM 5/8" DEPTH REQUIRED FOR 1-HR. FIRE-RATING.
 - B. MINIMUM 1-1/4" DEPTH REQUIRED FOR 2-HR. FIRE-RATING.
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 = 32".
2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 1-7/8".



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

Sheet	1 of 1
Scale	9/64" = 1"
Date	Jan. 08, 2015

Drawing No.
WJ
1210b