

UL SYSTEM NO. W-J-2191

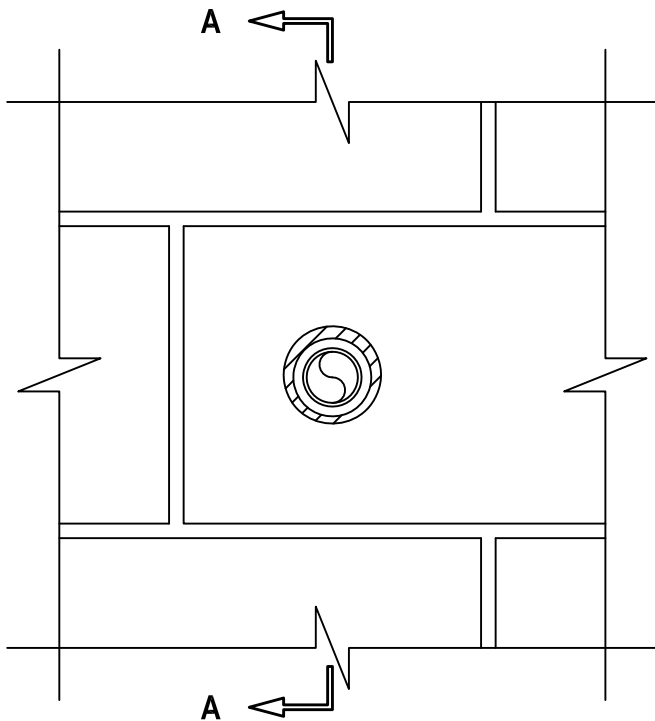
**ENT THROUGH CONCRETE OR BLOCK WALL ASSEMBLY**

F-RATING = 3-HR. OR 4-HR.

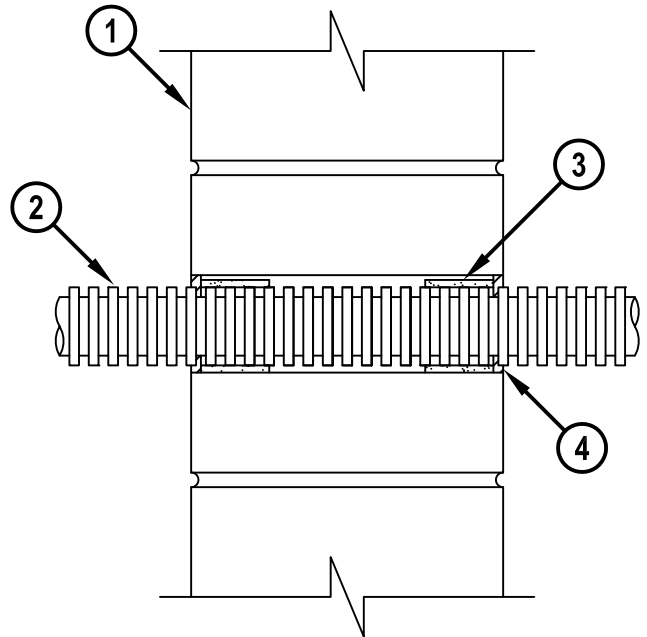
T-RATING = 3-HR. OR 4-HR.

WJ2191b.010915

**FRONT VIEW**



**SECTION A-A**



1. CONCRETE WALL ASSEMBLY (3-HR. OR 4-HR. FIRE-RATING) :
  - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 6-1/2" THICK OR 7-1/2" THICK FOR 3-HR. OR 4-HR. FIRE-RATING, RESPECTIVELY).
  - B. ANY UL CLASSIFIED CONCRETE BLOCK WALL.
2. MAXIMUM 2" NOMINAL DIAMETER ENT (FORMED FROM PVC).
3. HILTI CP 648E FIRESTOP WRAP STRIP (NOMINAL 3/16" x 1-3/4" WIDE) CONTINUOUSLY WRAPPED AROUND THE OUTER CIRCUMFERENCE OF THE PIPE, ONCE, AND HELD IN PLACE WITH ALUMINUM FOIL TAPE. WRAP STRIP RECESSED FROM EACH SURFACE OF WALL TO ACCOMMODATE FIRESTOP SEALANT.
4. MINIMUM 1/4" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 3".  
2. ANNULAR SPACE = MINIMUM 3/16", MAXIMUM 5/16".



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Sheet	1 of 1
Scale	13/64" = 1"
Date	Jan. 09, 2015

Drawing No.  
**WJ  
2191b**

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