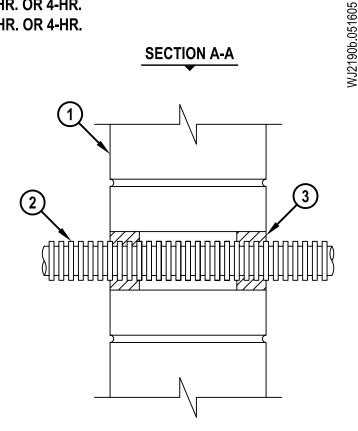
**UL SYSTEM NO. W-J-2190** 

## ENT THROUGH 3-HR. OR 4-HR. CONCRETE OR BLOCK WALL ASSEMBLY

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

**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. MINIMUM 1-1/2" DEPTH HILTI CP 618 FIRESTOP PUTTY STICK.

NOTES: 1. MAXIMUM DIAMETER OF OPENING = 3-1/2".

2. ANNULAR SPACE = MINIMUM 1/4", MAXIMUM 3/4"



HILTI, Inc. Tulsa, Oklahoma USA (918) 252-6000

Sheet	1 of 1
Scale	13/64" = 1"
Date	MAY 16, 2005

Drawing No. WJ 2190b

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