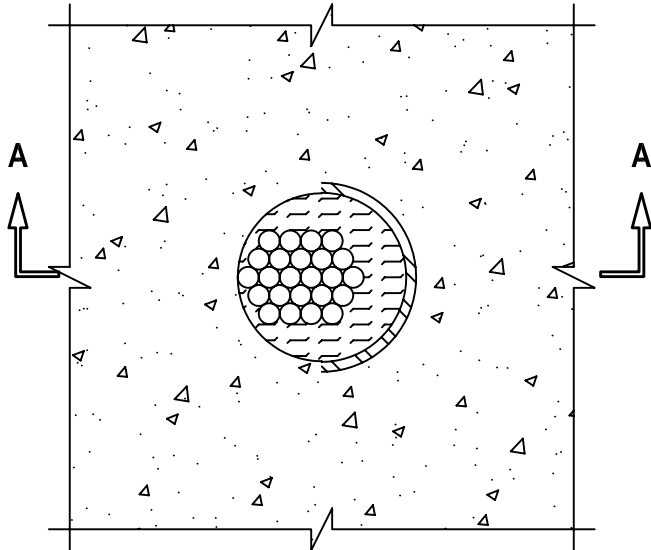


**CABLE BUNDLE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL**

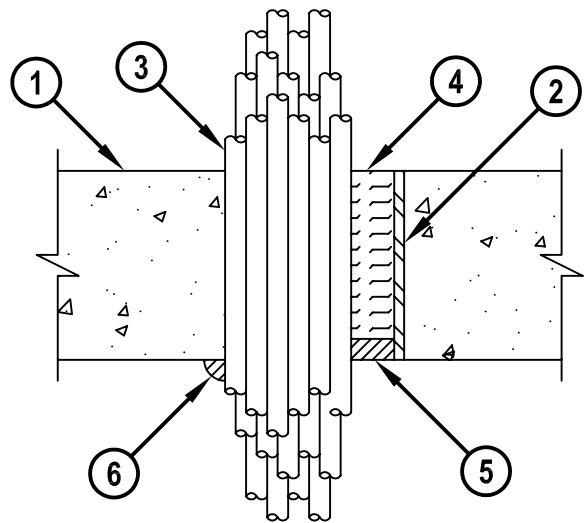
F-RATING = 3-HR.  
T-RATING = 0-HR.

CAJ3210a.111802

**TOP VIEW**



**SECTION A-A**



1. CONCRETE FLOOR OR WALL ASSEMBLY (3-HR. FIRE-RATING) :
  - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MIN. 4-1/2" THICK).
  - B. ANY UL/ULC CLASSIFIED CONCRETE BLOCK WALL.
2. OPTIONAL : MAXIMUM 4" NOMINAL DIAMETER STEEL PIPE SLEEVE (SCHEDULE 10 OR HEAVIER).
3. CABLE BUNDLE TO BE A COMBINATION OF ANY OF THE FOLLOWING :
  - A. MAXIMUM 300 PAIR NO. 24 AWG TELEPHONE CABLE WITH PVC JACKET.
  - B. MAXIMUM 750 KCMIL POWER CABLE WITH PVC JACKET.
  - C. MAXIMUM 7/C NO. 12 AWG POWER CABLE WITH PVC JACKET.
  - D. MAXIMUM 1/2" DIAMETER FIBER-OPTIC CABLE (24 FIBER).
  - E. MAXIMUM 3/C NO. 12 AWG METAL-CLAD CABLE.
  - F. MAXIMUM 1" DIAMETER METAL-CLAD TEK CABLE WITH PVC JACKET.
4. MINIMUM 4" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED.
5. MINIMUM 1/2" DEPTH HILTI CP 618 FIRESTOP PUTTY STICK FLUSH WITH BOTTOM OF FLOOR.
6. MINIMUM 1/2" BEAD HILTI CP 618 FIRESTOP PUTTY STICK.

**NOTES :** 1. MAXIMUM DIAMETER OF OPENING = 4".  
 2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 1".  
 3. CABLES TO FILL MAXIMUM 60% OF CROSS-SECTIONAL AREA OF OPENING.  
 4. MINIMUM 1/2" DEPTH HILTI CP 618 FLEXIBLE FIRESTOP PUTTY STICK IS REQUIRED ON BOTH SIDES OF A WALL ASSEMBLY.



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

Sheet	1 of 1
Scale	7/32" = 1"
Date	Nov. 18, 2002

Drawing No.

**CAJ  
3210a**