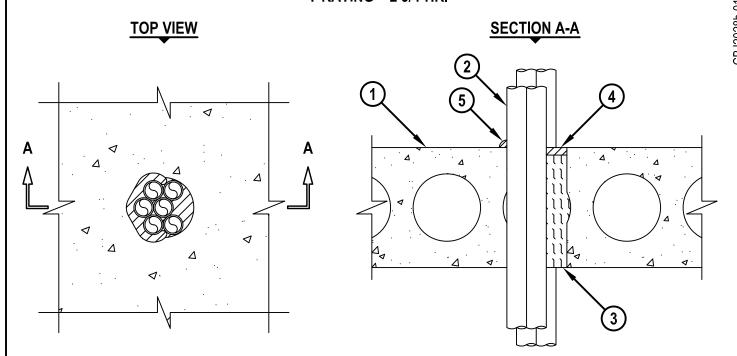
UL SYSTEM NO. C-BJ-2028

MULTIPLE NONMETALLIC PIPES THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL

F-RATING = 3-HR. T-RATING = 2 3/4-HR.



- 1. CONCRETE FLOOR OR WALL ASSEMBLY (3-HR. FIRE-RATING):
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 8" THICK).
 - B. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 8-1/2" THICK).
 - C. ANY UL CLASSIFIED PRECAST (HOLLOW-CORE) CONCRETE FLOOR (MINIMUM 8" THICK).
 - D. ANY UL CLASSIFIED CONCRETE BLOCK WALL.
- 2. PENETRATING ITEMS (MAX. QTY. = 6) TO BE ANY COMBINATION OF THE FOLLOWING (CLOSED PIPING SYSTEM ONLY):
 - A. MAXIMUM 1" NOMINAL DIAMETER PVC PLASTIC PIPE (CELLULAR OR SOLID CORE).
 - B. MAXIMUM 1" NOMINAL DIAMETER RIGID NONMETALLIC CONDUIT (RNC) PVC CONDUIT.
 - C. MAXIMUM 1" NOMINAL DIAMETER ENT.
 - D. MAXIMUM 1" NOMINAL DIAMETER PEX TUBING.
- 3. MINIMUM 7-1/2" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED, AND RECESSED TO ACCOMMODATE SEALANT.
- 4. MINIMUM 1/2" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT FLUSH WITH TOP SURFACE OF FLOOR.
- 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 = 4".

- 2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 1-1/2".
- 3. CLOSED PIPING SYSTEM ONLY (PVC AND RNC = SCH 40; CPVC = SDR 13.5; PEX = SDR 9).
- 4. MINIMUM 1/2" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT IS REQUIRED ON BOTH SIDES OF A WALL.



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

| Sheet | 1 of 1 |
|-------|---------------|
| Scale | 5/32" = 1" |
| Date | Jan. 06, 2015 |

CBJ 2028b