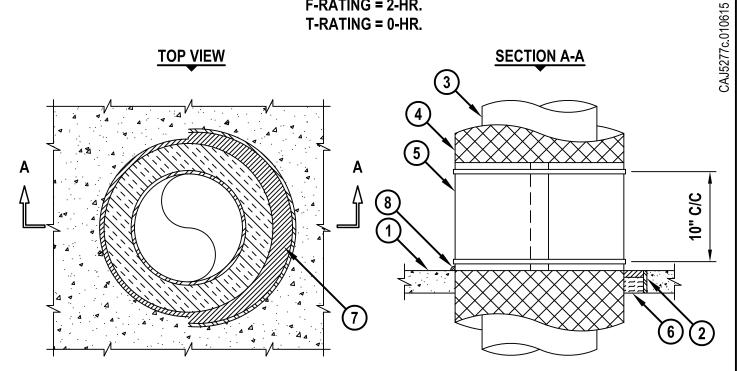
UL/cUL SYSTEM NO. C-AJ-5277

INSULATED METAL PIPE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL

F-RATING = 2-HR. T-RATING = 0-HR.



- 1. CONCRETE FLOOR OR WALL ASSEMBLY (2-HR. FIRE-RATING):
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR OR WALL (MINIMUM 2-1/2" THICK).
 - B. ANY UL/cul classified concrete block wall assembly.
- 2. [OPTIONAL] MAXIMUM 20" NOMINAL DIAMETER STEEL PIPE SLEEVE (SCHEDULE 40).
- 3. PENETRATING ITEM TO BE ONE OF THE FOLLOWING:
 - A. MAXIMUM 12" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
 - B. MAXIMUM 6" NOMINAL DIAMETER COPPER PIPE.
- 4. FOAMGLASS® PIPE INSULATION (1-1/2" OR 3" THICKNESS) MANUFACTURED BY PITTSBURGH CORNING CORP.
- 5. MINIMUM 12" LONG JACKET FORMED OF MINIMUM 0.010" THICKNESS STEEL OR ALUMINUM SHEET, SECURED IN PLACE WITH TWO STEEL BAND CLAMPS. ENDS OF JACKET TO OVERLAP BY A MINIMUM 2".
- 6. MINIMUM 1-1/2" THICKNESS MINERAL WOOL (MINIMUM 4 PCF DENSITY) TIGHTLY PACKED AND RECESSED TO ACCOMMODATE SEALANT.
- 7. MINIMUM 1" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT.
- 8. 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 = 20-5/8".

- 2. ANNULAR SPACE WITHOUT STEEL PIPE SLEEVE= MINIMUM 0", MAXIMUM 1-7/8".
- 3. ANNULAR SPACE WITH STEEL PIPE SLEEVE = MINIMUM 1/2". MAXIMUM 1-7/8".
- 4. MINIMUM 1" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT AND SHEET METAL JACKET ARE REQUIRED ON BOTH SIDES OF A WALL ASSEMBLY.



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

| Sheet | 1 of 1 |
|-------|---------------|
| Scale | 3/32" = 1" |
| Date | Jan. 06, 2015 |

Drawing No. 5277c