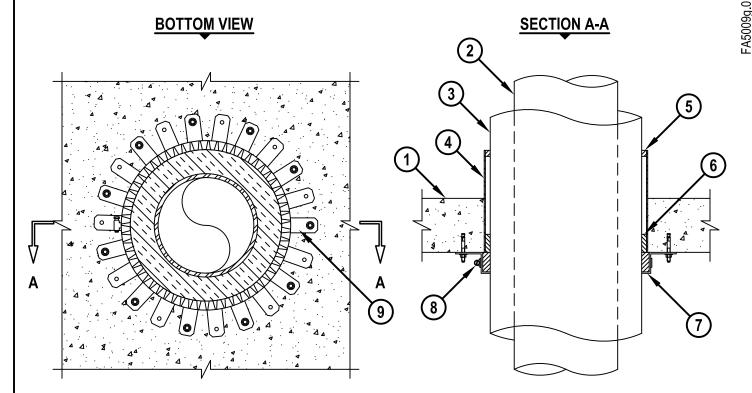
## **UL/cUL SYSTEM NO. F-A-5009**

## INSULATED METAL PIPE THROUGH CONCRETE FLOOR ASSEMBLY

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



- 1. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR ASSEMBLY (MINIMUM 4-1/2" THICK) (2-HR. FIRE-RATING).
- 2. MAXIMUM 10" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
- 3. MAXIMUM 2" THICKNESS GLASS-FIBER PIPE INSULATION.
- 4. STEEL SHEET METAL SLEEVE (MIN. 24 GA.) EXTENDING MAXIMUM 4" ABOVE CONCRETE FLOOR ASSEMBLY.
- 5. MINIMUM 1/2" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT FLUSH WITH TOP OF STEEL SLEEVE.
- 6. MINIMUM 1-1/2" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT.
- 7. HILTI RETAINING COLLAR COMPLETELY FILLED WITH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT.
- 8. NOMINAL 1/2" WIDE STAINLESS STEEL HOSE CLAMP FASTENED AT MID-HEIGHT OF RETAINING COLLAR.
- 9. HILTI 1/4" KWIK-BOLT II ANCHORS WITH WASHERS TO ATTACH EVERY OTHER TAB OF RETAINING COLLAR TO CONCRETE FLOOR ASSEMBLY.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 15".

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



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Sheet	1 of 1
Scale	1/8" = 1"
Date	Jan. 15, 2015

FA 5009g