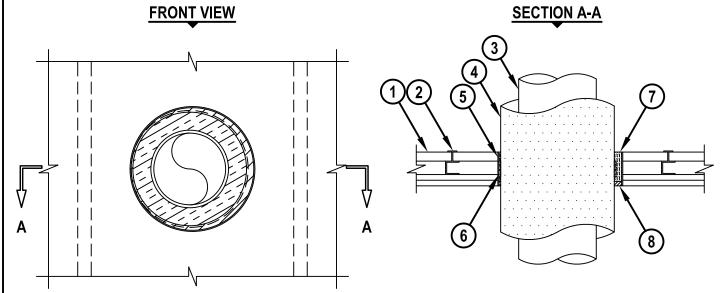
## **cUL SYSTEM NO. W-L-5010**



## INSULATED METAL PIPE THROUGH GYPSUM SHAFT WALL ASSEMBLY

F-RATING = 1-HR. OR 2-HR. FT-RATING = 0-HR. OR 1-HR.

FH AND FTH-RATINGS = 0-HR.



- 1. GYPSUM SHAFT WALL ASSEMBLY (UL/cUL CLASSIFIED U400 OR V400 SERIES) (1-HR. OR 2-HR. FIRE-RATING) (2-HR. SHOWN).
- 2. "C-H" OR "C-T" SHAPED STEEL STUDS (MINIMUM 1-1/2" WIDE x 2-1/2" DEEP, MIN. 25 GA.) SPACED MAXIMUM 24" C/C.
- 3. PENETRATING ITEM TO BE ONE OF THE FOLLOWING:
  - A. MAXIMUM 8" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
  - B. MAXIMUM 8" NOMINAL DIAMETER CAST OR DUCTILE IRON PIPE.
  - C. MAXIMUM 2" NOMINAL DIAMETER COPPER PIPE OR TUBING.
- 4. MAXIMUM 2" THICK GLASS-FIBER PIPE INSULATION.
- 5. MAXIMUM 14" DIAMETER SHEET METAL SLEEVE (MIN. 28 GA.) HAVING MINIMUM 1" OVERLAP ALONG LONGITUDINAL SEAM.
- 6. HILTI CP 648E WRAP STRIP (NOMINAL 3/16" THICK x 1-3/4" WIDE) CONTINUOUSLY WRAPPED AROUND THE OUTER CIRCUMFERENCE OF THE PIPE. COVERING ONE TIME. WITH ENDS BUTTED AND HELD IN PLACE WITH TAPE. WRAP STRIP RECESSED SUCH THAT LEADING EDGE OF WRAP STRIP IS FLUSH WITH INNER SURFACE OF GYPSUM BOARD LINER PANEL.
- 7. MINIMUM 2-3/4" OR 3-1/4" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED AND RECESSED ON ONE SIDE OF WALL FOR FIRESTOP SEALANT.
- 8. MINIMUM 1/2" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT.
  - NOTES: 1. MAXIMUM DIAMETER OF OPENING = 14".
    - 2. ANNULAR SPACE = MINIMUM 3/16", MAXIMUM 13/16".
    - 3. THIS FIRESTOP SYSTEM WAS DESIGNED AND TESTED FOR APPLICATIONS IN WHICH THERE IS LIMITED OR NO ACCESS AVAILABLE ON ONE SIDE OF THE WALL.



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Sheet	1 of 1
Scale	3/32" = 1"
Date	Jan. 17. 2015

Drawing No. WL5010c