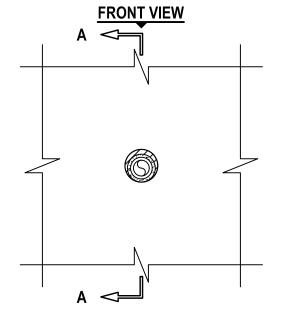
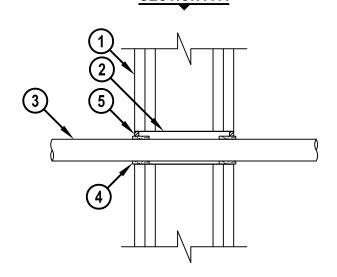
## **UL SYSTEM NO. W-L-2602**

## PLASTIC PIPE THROUGH GYPSUM WALL ASSEMBLY

F-RATING = 1-HR. OR 2-HR.
T-RATING = 0-HR. OR 1 3/4-HR.
L-RATING AT AMBIENT = 1.2 CFM / SQ FT
L-RATING AT 400°F = LESS THAN 1 CFM / SQ FT

IR. / SQ FT :FM / SQ FT SECTION A-A





- 1. GYPSUM WALL ASSEMBLY (UL CLASSIFIED U300, U400, V400, OR W400 SERIES) (1-HR. OR 2-HR. FIRE-RATING) (2-HR. SHOWN) TO INCLUDE THE FOLLOWING CONSTRUCTION FEATURES :
  - A. [NOT SHOWN] WOOD STUDS TO CONSIST OF NOMINAL 2" x 4" LUMBER (SPACED MAXIMUM 16" OC). STEEL STUDS TO BE MINIMUM 3-1/2" WIDE (SPACED MAXIMUM 24" OC).
  - B. NOMINAL 5/8" THICK GYPSUM WALLBOARD. TYPE, NUMBER OF LAYERS, AND SHEET ORIENTATION AS SPECIFIED IN THE INDIVIDUAL UL DESIGN.
- 2. SHEET METAL SLEEVE (MIN. 30 GA.) HAVING A MINIMUM 1" LAP ALONG THE LONGITUDINAL SEAM. LENGTH OF SLEEVE TO BE SAME AS WALL.
- 3. MAXIMUM 1" NOMINAL DIAMETER PP PLASTIC PIPE (SCHEDULE 80) (CLOSED PIPING SYSTEM).
- 4. HILTI CP 648E WRAP STRIP (NOMINAL 3/16" THICK x 1" WIDE) CONTINUOUSLY WRAPPED AROUND THE OUTER CIRCUMFERENCE OF THE PIPE, COVERING ONE TIME, WITH ENDS BUTTED AND HELD IN PLACE WITH TAPE. WRAP STRIP TO EXTEND 1/8" BEYOND THE WALL SURFACE OF EACH SIDE OF WALL.
- 5. MINIMUM 1/4" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT.

NOTES: 1. DIAMETER OF OPENING TO BE 3/4" LARGER THAN OUTSIDE DIAMETER OF PENETRANT.

- 2. ANNULAR SPACE = MINIMUM 3/16", MAXIMUM 1/2".
- 3. FOR L-RATING, SEALANT TO EXTEND TO PERIPHERY OF WALL AND COVER THE INTERFACE OF SLEEVE TO WALL.



HILTI, Inc. Tulsa, Oklahoma USA (800) 879-8000 Sheet 1 of 1

Scale 11/64" = 1"

Date Apr. 07, 2015

WL 2602a

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