UL SYSTEM NO. W-L-1497

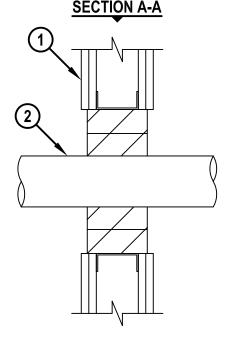
ALUMINUM PIPE THROUGH GYPSUM WALL ASSEMBLY

F-RATING = 1-HR. OR 2-HR.
T-RATING = 1/4-HR.
L-RATING AT AMBIENT = 5 CFM / SQ FT
L-RATING AT 400°F = 2 CFM / SQ FT

FRONT VIEW

A

3



- 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). OPENING TO BE FRAMED OUT WITH STUD MATERIAL.
 - B. NOMINAL 5/8" THICK GYPSUM WALLBOARD. TYPE, NUMBER OF LAYERS, AND SHEET ORIENTATION AS SPECIFIED IN THE INDIVIDUAL UL DESIGN.
- 2. MAXIMUM 4" NOMINAL DIAMETER ALUMINUM TUBE (MIN. 0.125" THICK) (CLOSED PIPING SYSTEM ONLY).
- 3. HILTI CFS-BL FIRESTOP BLOCK (2" THICK x 8" WIDE x 5" DEEP, REFERENCE : FRONT VIEW) FIRMLY PACKED AND CENTERED WITHIN OPENING (SEE NOTE NO. 5 BELOW).

NOTES: 1. MAXIMUM SIZE OF OPENING = 12" x 12".

- 2. ANNULAR SPACE = MINIMUM 3".
- 3. APPLY HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT, HILTI CP 618 FIRESTOP PUTTY STICK, HILTI CP 620 FIRE FOAM, OR HILTI CP 660 FIRESTOP FOAM INTO ANY VOID THAT MAY EXIST (AROUND PENETRANTS, OR BETWEEN FIRESTOP BLOCKS) TO MAXIMUM EXTENT POSSIBLE.
- 4. L-RATINGS APPLIES ONLY WHEN FS-ONE MAX IS USED.
- 5. FOR WALLS CONSTRUCTED OF STEEL STUDS LARGER THAN 3-5/8", FIRE BLOCKS SHOULD BE INSTALLED 8" DEEP. FIRE BLOCKS MAY BE RECESSED MAXIMUM 1/2" FROM SURFACE OF WALL.



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Scale 1/8" = 1"

Date Nov. 18, 2016

WL 1497d

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