UL/cUL SYSTEM NO. W-L-5381

INSULATED METAL PIPE THROUGH GYPSUM WALL ASSEMBLY

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

FRONT VIEW

3
4

5
5

- 1. GYPSUM WALL ASSEMBLY (UL/cUL CLASSIFIED U300, U400, OR V400 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 3-5/8" 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. PENETRATING ITEM TO BE ONE OF THE FOLLOWING:
 - A. MAXIMUM 4" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
 - B. MAXIMUM 4" NOMINAL DIAMETER CAST OR DUCTILE IRON PIPE.
- 3. MINIMUM THREE LAYERS HILTI CFP-ES ENDO-SHIELD WRAPPED AROUND THE PENETRANT WITH A MIN 2" OVERLAP AT OUTER LAYER. ALL SEAMS TO BE SEALED WITH FOIL-SCRIM-KRAFT OR FOIL TAPE. HILTI CFP-ES ENDO-SHIELD TO BE SECURED IN PLACE WITH 18 GA. STEEL TIE WIRE LOCATED WITHIN 1" OF WALL AND SPACED MAX 6" ON CENTER.
- 4. MINIMUM 5/8" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT.
- 5. MINIMUM 1/2" BEAD HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT APPLIED AT POINT OF CONTACT.

NOTES: 1. MAXIMUM DIAMETER OF OPENING = 9-1/2".

2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 1-5/8".



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Scale 9/64" = 1"

Date Nov. 18, 2021

WL 5381a

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