

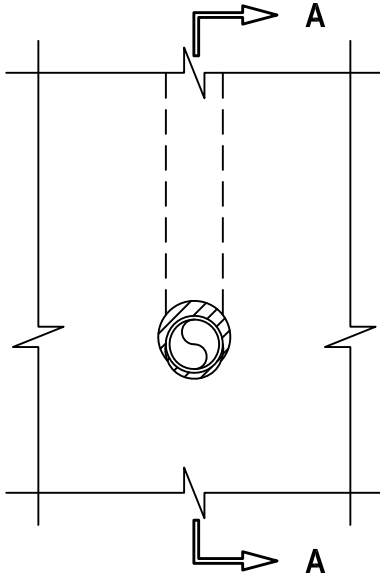
METAL PIPE THROUGH GYPSUM WALL ASSEMBLY

F-RATING = 1-HR.

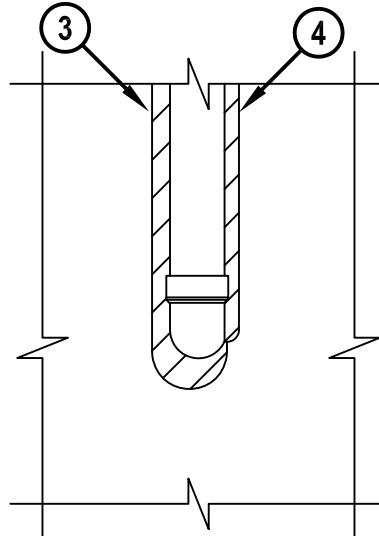
T-RATING = 0-HR.

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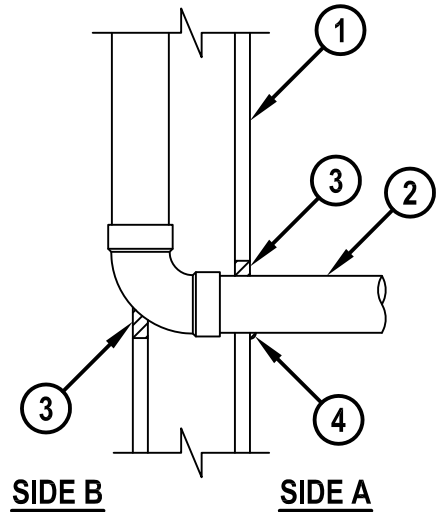
**FRONT VIEW
(SIDE A)**



**REAR VIEW
(SIDE B)**



CROSS-SECTIONAL VIEW



1. GYPSUM WALL ASSEMBLY (UL/cUL CLASSIFIED U300, U400 OR V400 SERIES) (1-HR. FIRE-RATING) 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 2" NOMINAL DIAMETER STEEL PIPE (SCH 10 OR HEAVIER).
 - B. MAXIMUM 2" NOMINAL DIAMETER CAST OR DUCTILE IRON PIPE.
 - C. MAXIMUM 2" NOMINAL DIAMETER STEEL CONDUIT OR EMT.
3. MINIMUM 5/8" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT FLUSH WITH BOTH SURFACES OF WALL.
4. MINIMUM 1/4" BEAD HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT APPLIED AT POINT OF CONTACT.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 3".
 2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 3/4".
 3. ON ONE SIDE OF THE WALL, THE PIPE IS ALLOWED TO PENETRATE THE MEMBRANE CONTINUOUSLY IN A PLANE PARALLEL WITH THE WALL AND STUDS.



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

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| Sheet | 1 of 1 |
| Scale | 1/8" = 1" |
| Date | Jan. 24, 2015 |

Drawing No.

**WL
1412c**