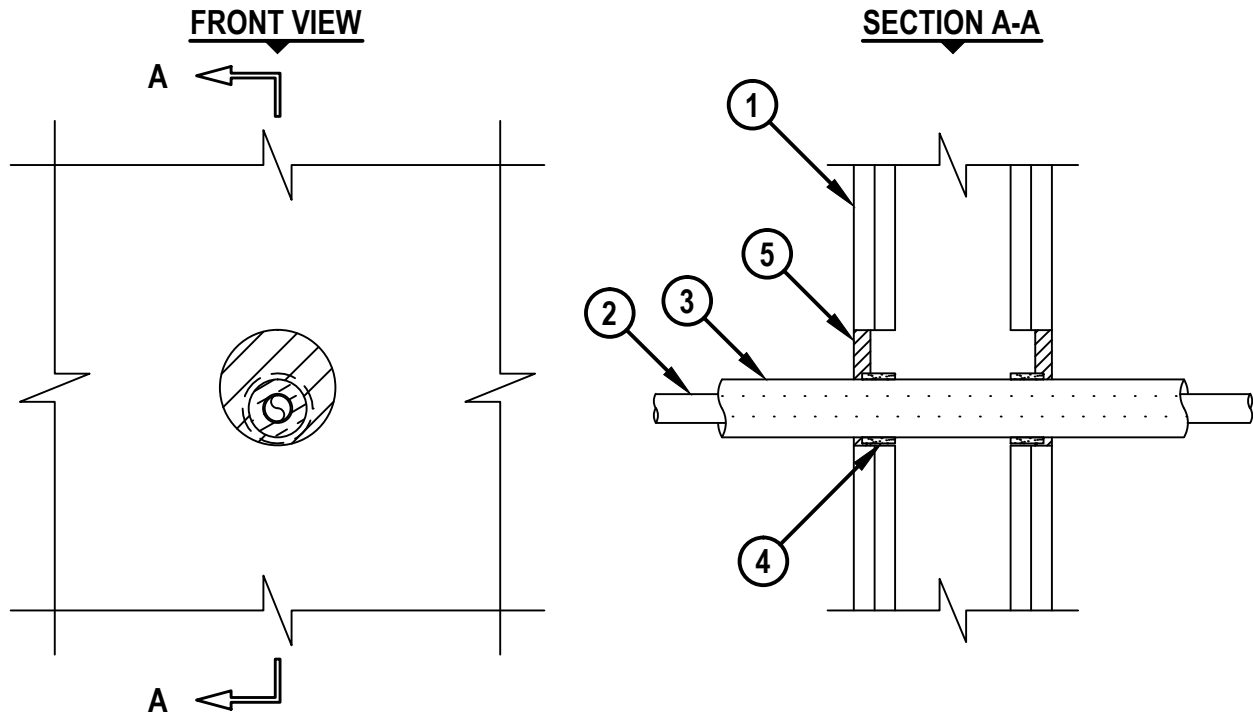


INSULATED METAL PIPE THROUGH GYPSUM WALL ASSEMBLY

F-RATING = 1-HR. OR 2-HR.
T-RATING = 0-HR. OR 1/2-HR.

WJ5193a.013018



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. MAXIMUM 7/8" NOMINAL DIAMETER STREAMLINE® ACR-TYPE L COPPER TUBING.
3. NOMINAL 1/2" THICK STREAMLINE DURAGUARD™ POLYETHYLENE TUBING INSULATION.
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 BE INSERTED INTO ANNULAR SPACE AND RECESSED 1/4" FROM WALL SURFACES.
5. MINIMUM 1/2" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT FLUSH WITH BOTH SURFACES OF WALL. FS-ONE MAX TO BE NOMINAL 1/4" DEPTH AT AREA WHERE WRAP STRIP IS INSTALLED.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 3-1/2".
2. ANNULAR SPACE = MINIMUM 1/4", MAXIMUM 1-1/2".

 Hilti Firestop Systems	HILTI, Inc. Plano, Texas USA (800) 879-8000	Sheet 1 of 1	Drawing No. WL 5345a
		Scale 1 1/64" = 1"	
		Date Jan, 30, 2018	
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