

# INSULATED METAL PIPE THROUGH GYPSUM WALL ASSEMBLY

F-RATING = 1-HR. OR 2-HR.

FT-RATING = 0-HR., 1-HR., OR 2-HR. (SEE ITEM 1)

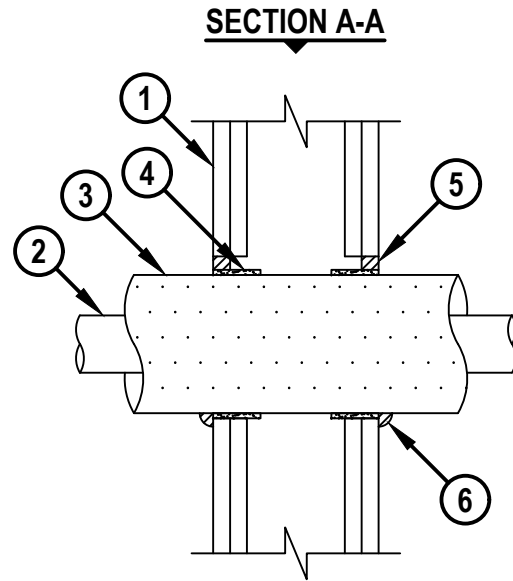
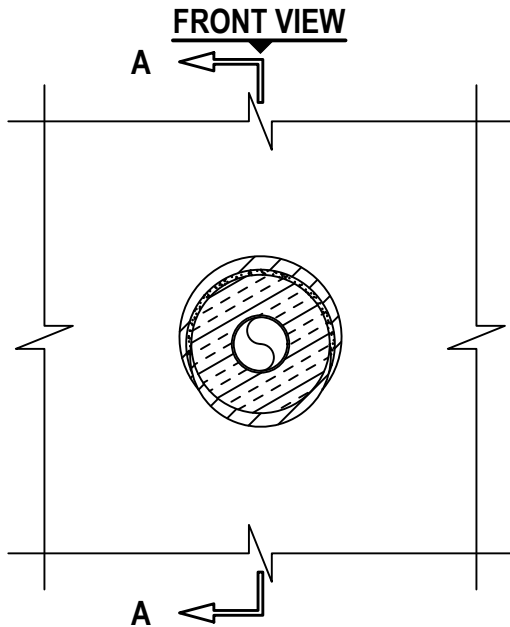
FH-RATING = 0-HR.

FTH-RATING = 0-HR.

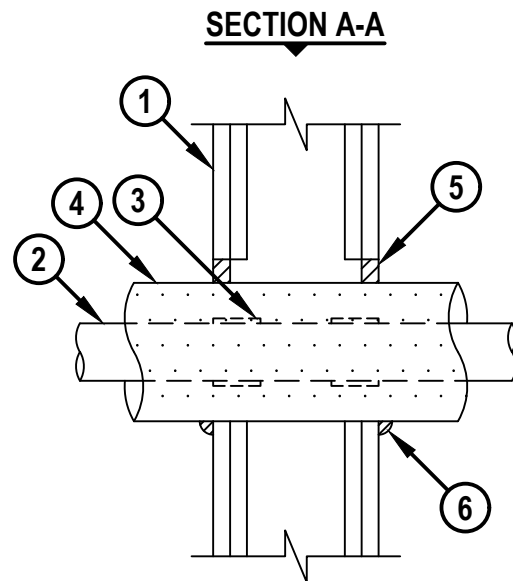
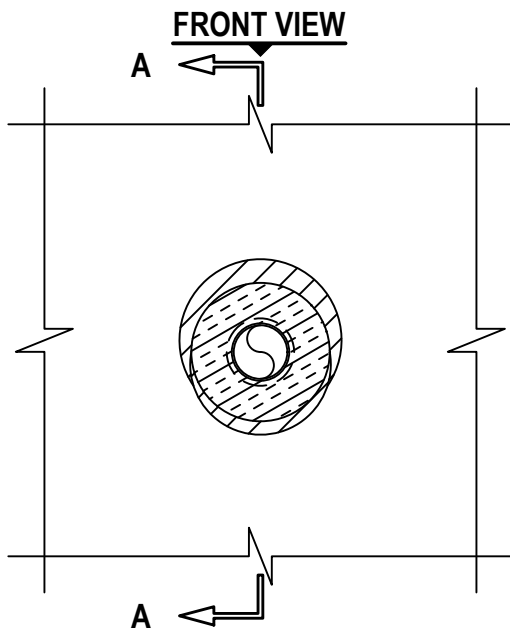
L-RATING AT AMBIENT = LESS THAN 5.1 L/S/M<sup>2</sup> (FOR CONFIG B)

L-RATING AT 400°F = LESS THAN 5.1 L/S/M<sup>2</sup> (FOR CONFIG B)

cUL WL5382a.111422



**CONFIGURATION A**



**CONFIGURATION B**



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Sheet	1 of 3
Scale	9/64" = 1"
Date	Nov. 14, 2022

Drawing No.  
**cUL**  
**WL5382a**

**INSULATED METAL PIPE THROUGH GYPSUM WALL ASSEMBLY**

F-RATING = 1-HR. OR 2-HR.

FT-RATING = 0-HR., 1-HR., OR 2-HR. (SEE ITEM 1)

FH-RATING = 0-HR.

FTH-RATING = 0-HR.

L-RATING AT AMBIENT = LESS THAN 5.1 L/S/M<sup>2</sup> (FOR CONFIG B)

L-RATING AT 400°F = LESS THAN 5.1 L/S/M<sup>2</sup> (FOR CONFIG B)

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**FOR CONFIGURATION A**

1. GYPSUM WALL ASSEMBLY (UL CLASSIFIED U300, U400, V400, OR W400 SERIES) . THE F-RATING IS 1-HR. OR 2-HR. FOR 1-HR. AND 2-HR. ASSEMBLIES, RESPECTIVELY. THE FT-RATING IS 1-HR. OR 2-HR. FOR 1-HR. AND 2-HR. ASSEMBLIES, RESPECTIVELY.
  - A. [NOT SHOWN] WOOD STUDS TO CONSIST OF NOMINAL 2" x 4" LUMBER. STEEL STUDS TO BE MINIMUM 3-5/8" WIDE.
2. PENETRATING ITEM TO CONSIST OF ONE OF THE FOLLOWING :
  - A. MAXIMUM 2" NOMINAL DIAMETER COPPER PIPE OR TUBING.
3. MAXIMUM 1-1/2" THICK AB/PVC PIPE INSULATION.
4. HILTI CP 648E WRAP STRIP (NOMINAL 3/16" THICK x 1-3/4" WIDE) CONTINUOUSLY WRAPPED AROUND THE OUTER CIRCUMFERENCE OF THE PENETRATING ITEM, IN ACCORDANCE WITH THE TABLE BELOW, WITH ENDS BUTTED AND HELD IN PLACE WITH TAPE. END OF WRAP STRIP TO BE FLUSH WITH WALL SURFACE ON EACH SIDE OF THE WALL.

MAX PIPE DIAMETER	NUMBER OF WRAP STRIP LAYERS
2"	1

5. MINIMUM 5/8" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT. FS-ONE MAX NOT REQUIRED IN ANNULAR SPACE WHERE WRAP STRIP MATERIAL IS AT POINT OF CONTACT TO THE GYPSUM BOARD.
6. MINIMUM 1/2" BEAD HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT APPLIED AT POINT OF CONTACT.

**NOTES :** 1. MAXIMUM DIAMETER OF OPENING = 6".  
 2. ANNULAR SPACE = MINIMUM 3/16", MAXIMUM 5/8".

 <b>Hilti Firestop Systems</b>	HILTI, Inc. Plano, Texas USA (800) 879-8000	Sheet	2 of 3	Drawing No. <b>cUL</b> <b>WL5382a</b>
		Scale	-	
		Date	Nov. 14, 2022	
<b><i>Saving Lives through Innovation and Education</i></b>				

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FT-RATING = 0-HR., 1-HR., OR 2-HR. (SEE ITEM 1)

FH-RATING = 0-HR.

FTH-RATING = 0-HR.

L-RATING AT AMBIENT = LESS THAN 5.1 L/S/M<sup>2</sup> (FOR CONFIG B)

L-RATING AT 400°F = LESS THAN 5.1 L/S/M<sup>2</sup> (FOR CONFIG B)

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**FOR CONFIGURATION B**

1. GYPSUM WALL ASSEMBLY (UL CLASSIFIED U300, U400, V400, OR W400 SERIES) . THE F-RATING IS 1-HR. OR 2-HR. FOR 1-HR. AND 2-HR. ASSEMBLIES, RESPECTIVELY. THE FT-RATING IS 0-HR. OR 1-HR. FOR 1-HR. AND 2-HR. ASSEMBLIES, RESPECTIVELY.
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MAX PIPE DIAMETER	NUMBER OF WRAP STRIP LAYERS
2"	1

4. MAXIMUM 1-1/2" THICK AB/PVC PIPE INSULATION.
5. MINIMUM 5/8" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT.
6. MINIMUM 1/2" BEAD HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT APPLIED AT POINT OF CONTACT.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 6".  
 2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 1-1/4".



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