## **cUL SYSTEM NO. W-L-2078**



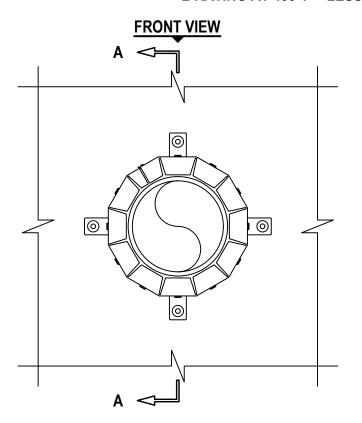
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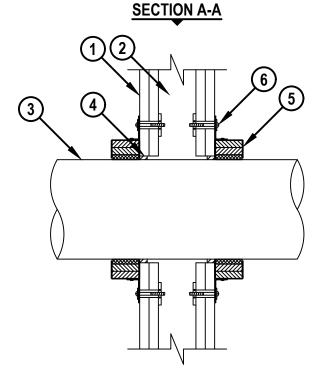
PLASTIC PIPE THROUGH GYPSUM WALL ASSEMBLY

F-RATING = 1-HR. OR 2-HR. FT-RATING = 0-HR., 1-HR, OR 2-HR. (SEE NOTE NO. 5 BELOW) FH-RATING = 1-HR. OR 2-HR.

FTH-RATING = 0-HR., 1-HR, OR 2-HR. (SEE NOTE NO. 5 BELOW) L-RATING AT AMBIENT = 3 CFM / SQ FT

L-RATING AT 400°F = LESS THAN 1 CFM / SQ FT







HILTI, Inc. Plano, Texas USA (800) 879-8000

Sheet	1 of 2	
Scale	5/32" = 1"	
Date	Aug. 17, 2022	

Drawing No. cUL WL2078a

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## PLASTIC PIPE THROUGH GYPSUM WALL ASSEMBLY

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

FT-RATING = 0-HR., 1-HR, OR 2-HR. (SEE NOTE NO. 5 BELOW)

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

FTH-RATING = 0-HR., 1-HR, OR 2-HR. (SEE NOTE NO. 5 BELOW)

L-RATING AT AMBIENT = 3 CFM / SQ FT

L-RATING AT 400°F = LESS THAN 1 CFM / SQ FT

- 1. GYPSUM WALL ASSEMBLY (UL CLASSIFIED U300, U400, OR V400 SERIES) (1-HR. OR 2-HR. FIRE-RATING) (2-HR. SHOWN).
- 2. [NOT SHOWN] WOOD STUDS TO CONSIST OF NOMINAL 2" x 4" LUMBER. STEEL STUDS TO BE MINIMUM 2-1/2" WIDE.
- 3. PENETRATING ITEM TO BE ONE OF THE FOLLOWING (ALSO SEE NOTE NO. 3 BELOW):
  - A. MAXIMUM 10" NOMINAL DIAMETER PVC PLASTIC PIPE (CELLULAR OR SOLID CORE).
  - B. MAXIMUM 6" NOMINAL DIAMETER ABS PLASTIC PIPE (CELLULAR OR SOLID CORE).
  - C. MAXIMUM 6" NOMINAL DIAMETER FRPP PLASTIC PIPE.
  - D. MAXIMUM 4" NOMINAL DIAMETER PVDF PLASTIC PIPE.
- 4. HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT:
  - A. [OPTIONAL] MINIMUM 1/4" DEPTH OF SEALANT INSTALLED ON PIPES NOMINAL 6" AND SMALLER.
  - B. MINIMUM 1/2" DEPTH OF SEALANT INSTALLED ON PIPES LARGER THAN NOMINAL 6".
- 5. HILTI CP 643N OR CP 644 FIRESTOP COLLAR WITH FASTENING HOOKS (SEE TABLE BELOW).
- 6. ATTACH EACH FASTENING HOOK TO WALL ASSEMBLY WITH HILTI 3/16" TOGGLER BOLTS AND WASHERS. FOR PIPES 4" OR SMALLER, COLLARS MAY BE FASTENED WITH NO. 10 x 1-1/2" LONG DRYWALL OR LAMINATE SCREWS WITH 3/4" STEEL WASHERS (SEE NOTE NO. 4 BELOW).

NOMINAL PIPE DIAMETER	PRODUCT DESCRIPITION	NO. OF FASTENING HOOKS	MAXIMUM HOLE SIZE
1-1/2"	CP 643 50/1.5" N	2	2-1/8"
2"	CP 643 63/2" N	2	2-5/8"
3"	CP 643 90/3" N	3	4"
4"	CP 643 110/4" N	3	5"
6"	CP 643 160/6" N	4	7"
8"	CP 644 200/8"	10	9-1/2"
10"	CP 644 250/10"	12	11-1/2"

NOTES: 1. ANNULAR SPACE = MINIMUM 0", MAXIMUM 1/2".

- 2. CLOSED OR VENTED PIPING SYSTEM (PVC, ABS, FRPP = SCHEDULE 40; PVDF = SDR 32.5).
- 3. L-RATINGS ONLY APPLY ON PIPES NOMINAL 6" AND SMALLER, WHEN HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT IS USED.
- 4. WHEN DRYWALL OR LAMINATE SCREW IS USED, FT AND FTH-RATINGS ARE 1-HR.
- 5. WHEN MAXIMUM 6" DIAMETER PIPE IS USED, FT AND FTH-RATINGS ARE EQUAL TO THE HOURLY FIRE-RATING OF THE WALL. WHEN NOMINAL 8" OR 10 DIAMETER PIPE IS USED. FT AND FTH-RATINGS ARE 0-HR.



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Drawing No. cUL WL2078a

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