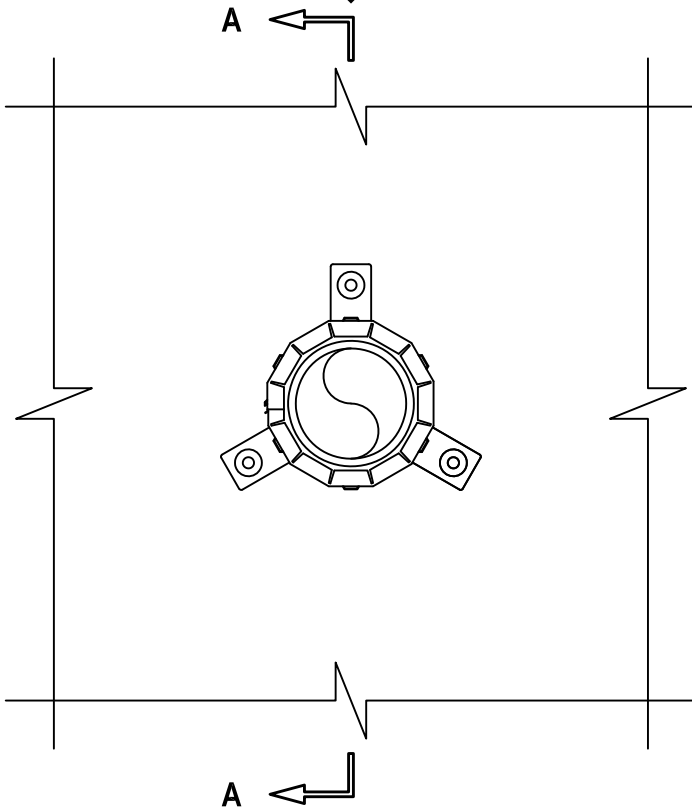


UL SYSTEM NO. W-L-2593  
**PLASTIC PIPE THROUGH GYPSUM WALL ASSEMBLY**

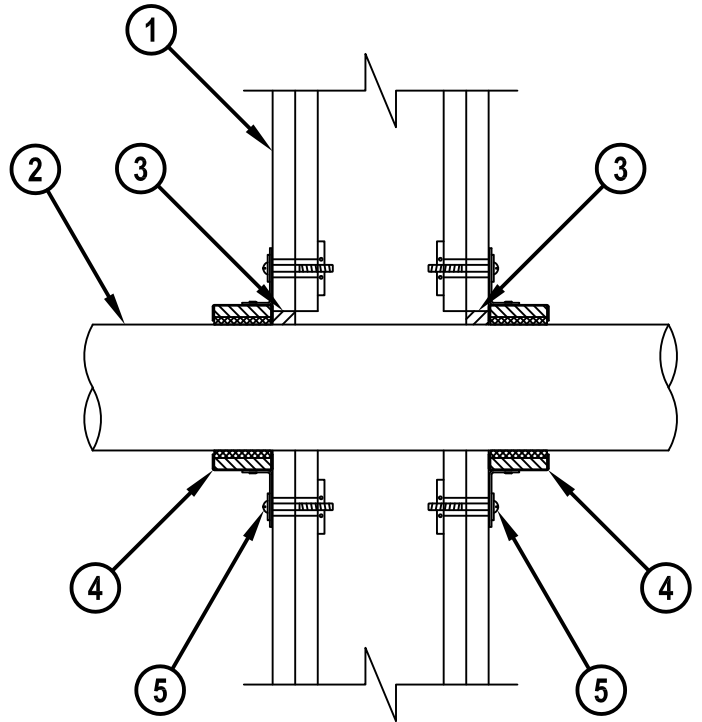
F-RATING = 1-HR. OR 2-HR.  
T-RATING = 1-HR. OR 2-HR.

WL2593c.040518

**FRONT VIEW**



**SECTION A-A**



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Sheet	1 of 2
Scale	3/16" = 1"
Date	Apr. 05, 2018

Drawing No.  
**WL  
2593c**

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UL SYSTEM NO. W-L-2593

**PLASTIC PIPE THROUGH GYPSUM WALL ASSEMBLY**

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

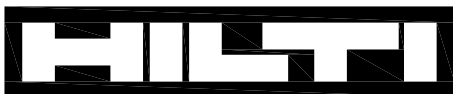
T-RATING = 1-HR. OR 2-HR.

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1. GYPSUM WALL ASSEMBLY (UL 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 3-1/2" 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 3" NOMINAL DIAMETER PEX TUBING (SDR 9) (UPONOR AQUAPEX OR WIRSBO HEPEX) (CLOSED PIPING SYSTEM).
3. MINIMUM 5/8" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT FLUSH WITH BOTH SURFACES OF WALL.
4. HILTI CP 643N FIRESTOP COLLAR WITH FASTENING HOOKS (SEE TABLE BELOW).
5. ATTACH EACH FASTENING HOOK TO WALL ASSEMBLY WITH HILTI 3/16" TOGGLER BOLTS AND WASHERS.

NOMINAL PIPE DIAMETER	PRODUCT DESCRIPTION	NO. OF FASTENING HOOKS
1-1/2"	CP 643 50/1.5" N	2
2"	CP 643 63/2" N	2
3"	CP 643 90/3" N	3

- NOTES :**
1. MAXIMUM DIAMETER OF OPENING = 3-1/2".
  2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 3/8".
  3. AS AN ALTERNATE TO HILTI CP 643N FIRESTOP COLLAR DESCRIBED ABOVE, THE FOLLOWING MAY BE INSTALLED :
    - A. HILTI CP 648E WRAP STRIP (NOMINAL 3/16" THICK x 1-3/4" WIDE) CONTINUOUSLY WRAPPED AROUND THE OUTER CIRCUMFERENCE OF THE PIPE, COVERING THREE TIMES, WITH ENDS BUTTED AND HELD IN PLACE WITH (MASKING OR ALUMINUM) TAPE.
    - B. HILTI 1-3/4" RETAINING COLLAR OVERLAPPING MINIMUM 1".
    - C. NOMINAL 1/2" WIDE STAINLESS STEEL HOSE CLAMP SECURED TO THE COLLAR AT ITS MID-HEIGHT.
    - D. EVERY OTHER TAB OF RETAINING COLLAR SECURED TO BOTH SIDES OF GYPSUM WALL WITH 1/4" DIAMETER STEEL TOGGLE BOLTS WITH 3/4" DIAMETER STEEL WASHERS.



**Hilti Firestop Systems**

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Sheet	2 of 2
Scale	-
Date	Apr. 05, 2018

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