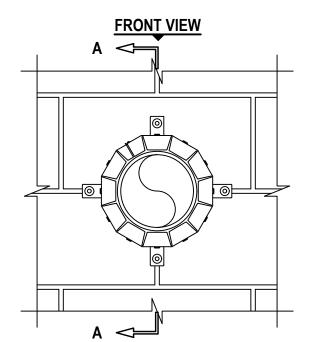
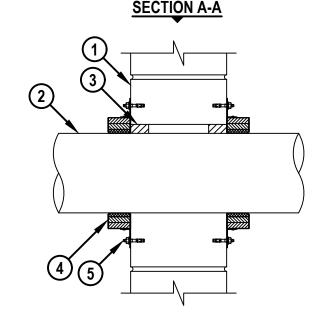
UL SYSTEM NO. W-J-2091

PLASTIC PIPE THORUGH CONCRETE WALL OR BLOCK WALL ASSEMBLY

F-RATING = 4-HR. T-RATING = 2-HR. OR 4-HR.





- 1. CONCRETE WALL ASSEMBLY (4-HR. FIRE-RATING):
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 8-1/2" THICK).
 - **B. ANY UL CLASSIFIED CONCRETE BLOCK WALL.**
- 2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING (SEE NOTE NO. 2 BELOW):
 - A. MAXIMUM 6" NOMINAL DIAMETER PVC PLASTIC PIPE (CELLULAR OR SOLID CORE).
 - B. MAXIMUM 6" NOMINAL DIAMETER CPVC PLASTIC PIPE (CLOSED PIPING SYSTEM ONLY).
- 3. MINIMUM 1-1/2" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT.
- 4. HILTI CP 643N FIRESTOP COLLAR WITH FASTENING HOOKS (SEE TABLE BELOW).
- 5. EACH FASTENING HOOK SECURED TO WALL ASSEMBLY WITH 1/4" x 1-3/4" LONG STEEL EXPANSION BOLTS IN CONJUNCTION WITH 3/4" DIAMETER STEEL WASHERS (EX. HILTI KWIK-BOLT 3).

NOMINAL PIPE DIAMETER	PRODUCT DESCRIPTION	ANNULAR SPACE		T-RATING
		MINIMUM	MAXIMUM	I-RATING
1-1/2"	CP 643 50/1.5" N	0"	1/2"	4
2"	CP 643 63/2" N	0"	1/2"	4
3"	CP 643 90/3" N	0"	1/2"	4
4"	CP 643 110/4" N	0"	1/2"	4
6"	CP 643 160/6" N	0"	3/4"	2

NOTES: 1. MAXIMUM DIAMETER OF OPENING = 7-3/8".

2. CLOSED OR VENTED PIPING SYSTEM (PVC = SCHEDULE 40; CPVC = SDR 13.5).



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Sheet	1 of 1
Scale	1/8" = 1"
Date	Apr. 29, 2024

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