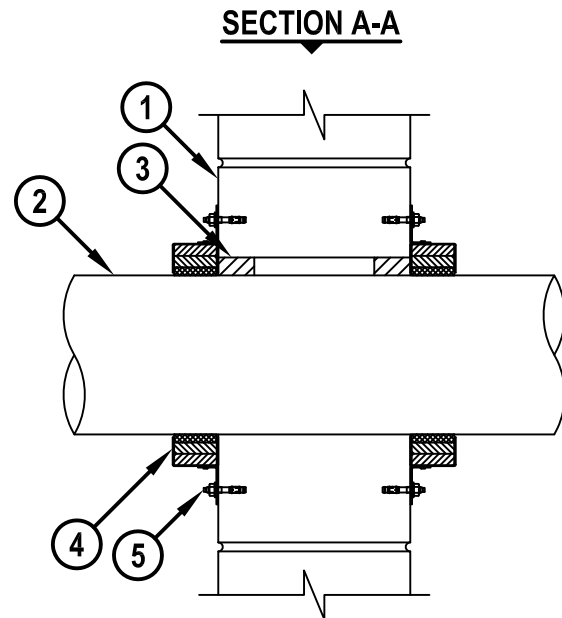
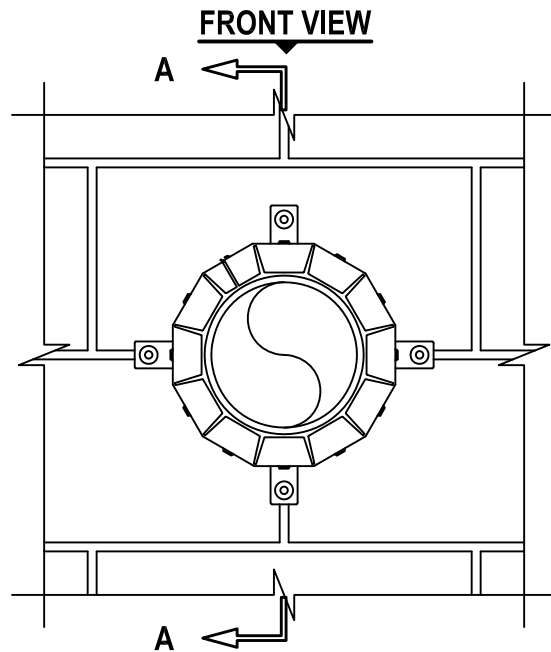


PLASTIC PIPE THOROUGH CONCRETE WALL OR BLOCK WALL ASSEMBLY

F-RATING = 4-HR.

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

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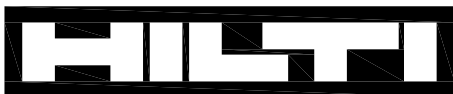


1. CONCRETE WALL ASSEMBLY (4-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 8-1/2" THICK).
 - B. ANY UL CLASSIFIED CONCRETE BLOCK WALL.
2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING (SEE NOTE NO. 2 BELOW) :
 - A. MAXIMUM 6" NOMINAL DIAMETER PVC PLASTIC PIPE (CELLULAR OR 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 BOTTOM OF FLOOR 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	
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).

**Hilti Firestop Systems**

HILTI, Inc.
Tulsa, Oklahoma USA (800) 879-8000

Sheet	1 of 1
Scale	1/8" = 1"
Date	Jan. 08, 2015

Drawing No.

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