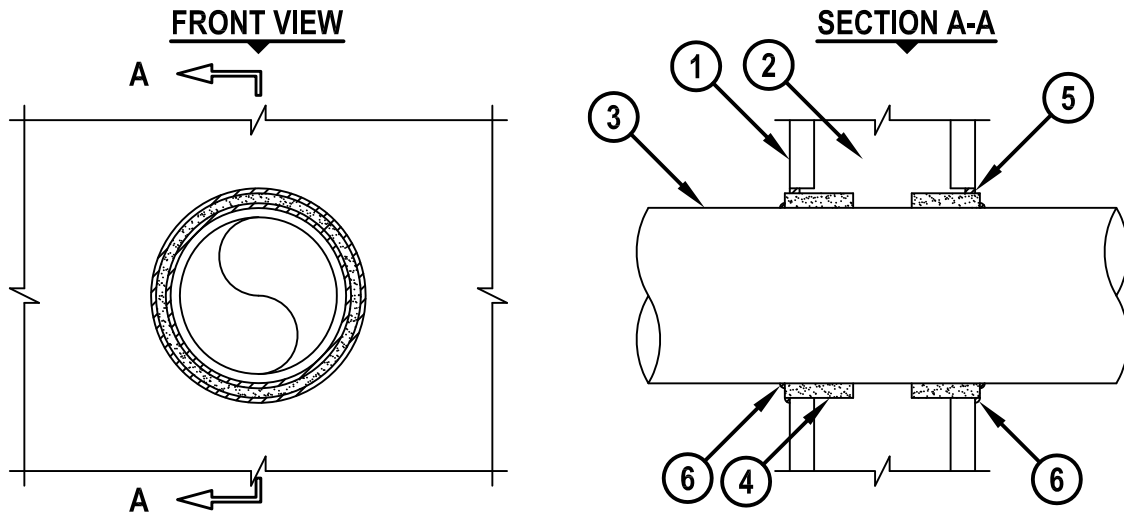


PLASTIC PIPE THROUGH GYPSUM WALL ASSEMBLY

F-RATING = 1-HR. FT, FH AND FTH-RATINGS = 0-HR.

NOTE : TESTED WITH A 50 Pa PRESSURE DIFFERENTIAL



cUL WL2031h.011715

1. GYPSUM WALL ASSEMBLY (UL/cUL CLASSIFIED U300 OR U400 SERIES) (1-HR. FIRE-RATING).
2. [NOT SHOWN] WOOD STUDS TO CONSIST OF NOMINAL 2" x 4" LUMBER. STEEL STUDS TO BE MINIMUM 3-1/2" WIDE.
3. PENETRATING ITEM TO BE ONE OF THE FOLLOWING :
 - A. MAXIMUM 4" NOMINAL DIAMETER PVC PLASTIC PIPE (CELLULAR OR SOLID CORE).
 - B. MAXIMUM 4" NOMINAL DIAMETER ABS PLASTIC PIPE (CELLULAR OR SOLID CORE).
 - C. MAXIMUM 4" NOMINAL DIAMETER CPVC PLASTIC PIPE (SDR 11 OR SDR 13.5) (CLOSED PIPING SYSTEM).
 - D. MAXIMUM 4" NOMINAL DIAMETER FRPP PLASTIC PIPE.
 - E. MAXIMUM 4" NOMINAL DIAMETER AQUARISE CPVC PLASTIC PIPE (SDR 11), MANUFACTURED BY IPEX, INC. (CLOSED PIPING SYSTEM).
 - F. MAXIMUM 4" NOMINAL DIAMETER RIGID NONMETALLIC CONDUIT (SCH 40 PVC).
4. HILTI CP 648S FIRESTOP WRAP STRIP WRAPPED CONTINUOUSLY AROUND CIRCUMFERENCE OF PIPE AND SECURED IN PLACE WITH INTEGRATED FASTENING TAPE, SUCH THAT THE WRAP STRIP PROTRUDES 1/8" FROM WALL SURFACE.
5. MINIMUM 1/4" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT.
6. MINIMUM 1/8" BEAD HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT AT WRAP STRIP/GYPSUM WALL INTERFACE AND WRAP STRIP/PIPE INTERFACE.

NOMINAL PIPE DIAMETER	TYPE OF PIPE	PRODUCT DESCRIPTION	MAXIMUM DIAMETER OF OPENING	ANNULAR SPACE	
				MINIMUM	MAXIMUM
1-1/2"	ALL	CP 648S - 1.5"	2-3/8"	3/16"	5/16"
2"	ALL	CP 648S - 2"	3"	3/16"	5/16"
3"	ALL	CP 648S - 3"	4"	3/16"	5/16"
4"	ALL	CP 648S - 4"	5-3/8"	3/8"	1/2"

NOTE : CLOSED OR VENTED PIPING SYSTEM (PVC, ABS, FRPP = SCH 40; CPVC = SDR 11 OR 13.5).



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

Sheet	1 of 1
Scale	13/64" = 1"
Date	Jan. 17, 2015

Drawing No.
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