

UL SYSTEM NO. W-L-2411 PLASTIC PIPE WITH COUPLING THROUGH GYPSUM WALL ASSEMBLY

F-RATING = 1-HR. OR 2-HR. T-RATING = 0-HR. OR 1-1/2-HR.

- 1. GYPSUM WALL ASSEMBLY (UL/cUL CLASSIFIED U300, U400 OR V400 SERIES) (1-HR. OR 2-HR. FIRE-RATING) (2-HR. SHOWN) TO INCLUDE THE FOLLOWING CONSTRUCTION FEATURES :
- WL2411e.101017 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. 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 (CLOSED PIPING SYSTEM ONLY).
 - D. MAXIMUM 4" NOMINAL DIAMETER FRPP PLASTIC PIPE.
- 3. [OPTIONAL] PIPE COUPLING TO BE SAME SIZE AND TYPE OF PIPE (SEE NOTE NO. 4 BELOW).
- 4. MINIMUM 1/4" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT REQUIRED WHEN COUPLING IS RECESSED INTO OPENING.
- 5. HILTI CP 648E WRAP STRIP (SIZE SHOWN IN TABLE BELOW) CONTINUOUSLY WRAPPED AROUND THE OUTER CIRCUMFERENCE OF THE PIPE, COVERING TWO TIMES, AND HELD IN PLACE WITH TAPE.
- 6. HILTI RETAINING COLLAR (SIZED TO MATCH WRAP STRIP) WRAPPED OVER WRAP STRIPS, **OVERLAPPING MINIMUM 1".**
- 7. NOMINAL 1/2" WIDE STAINLESS STEEL HOSE CLAMP(S) FASTENED AT MID-HEIGHT OF RETAINING COLLAR.
- 8. FASTEN EVERY OTHER TAB OF RETAINING COLLAR TO GYPSUM WALL WITH 1-1/2" LONG STEEL DRYWALL OR LAMINATE SCREWS AND 3/4" STEEL WASHERS.

PIPE SIZE	FIRESTOP PRODUCT	
2" OR SMALLER	CP 648E W25/1"	
GREATER THAN 2"	CP 648E W45/1-3/4"	

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 5".

- 2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 1/2".
- 3. CLOSED OR VENTED PIPING SYSTEMS (PVC, ABS, FRPP = SCHEDULE 40; CPVC = SDR 13.5).
- 4. PIPE COUPLING MAY BE INSTALLED FLUSH WITH EITHER SIDE OF WALL OR RECESSED SUCH THAT THE COUPLING EXTENDS 1/4" BEYOND THE RETAINING COLLAR ON EITHER SIDE OF THE WALL.

5. AS AN ALTERNATE TO UTILIZING CP 648E WRAP STRIPS WITH RETAINING COLLAR, HILTI CP 643N FIRESTOP COLLAR MAY BE USED WHEN COUPLING IS NOT INSTALLED. EVERY FASTENING HOOK OF FIRESTOP COLLAR TO BE ATTACHED TO GYPSUM WALL WITH 1-1/2" LONG STEEL DRYWALL OR LAMINATE SCREWS WITH 3/4" STEEL WASHERS.

Saving Lives through Innovation and Education					
Hilti Firestop Systems		Date	Oct. 10, 2017	2411e	
	HILTI, Inc. Plano, Texas USA (800) 879-8000	Scale	-	WL	
		Sheet	2 of 2	Drawing No.	
		Sheet	2 of 2	Drowing No.	