

UL/cUL SYSTEM NO. W-L-3224

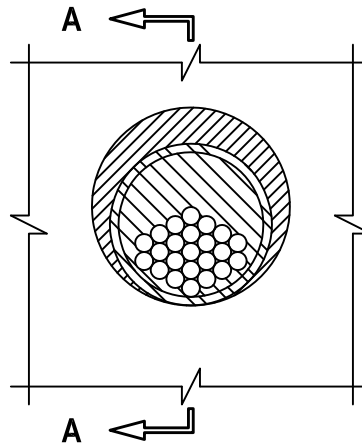
# CABLE BUNDLE THROUGH GYPSUM WALL ASSEMBLY

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

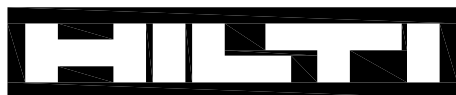
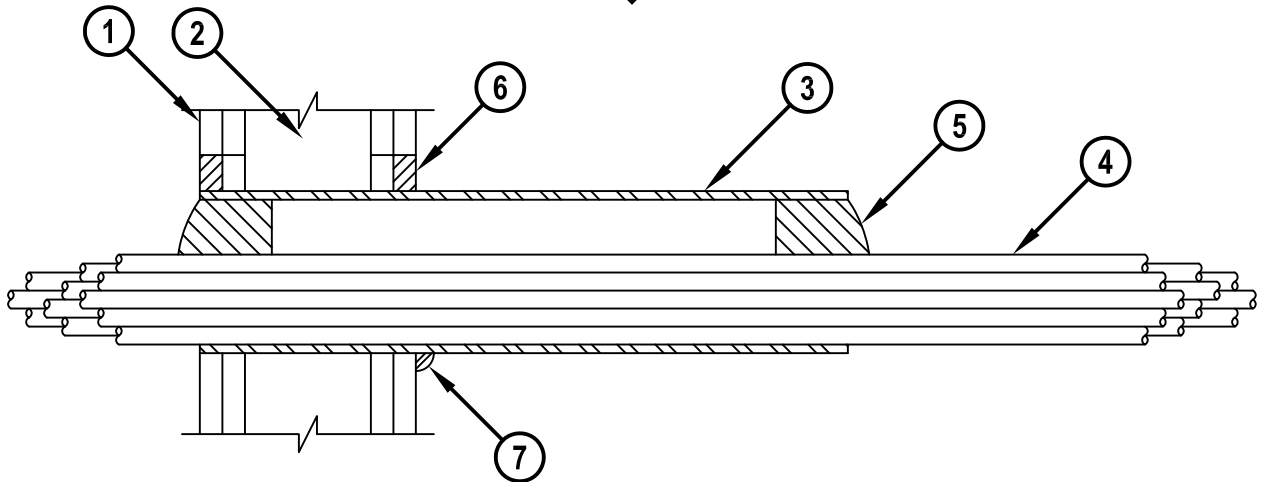
T-RATING = 0-HR.

WL3224d.011615

## FRONT VIEW



## SECTION A-A



**Hilti Firestop Systems**

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

Sheet	1 of 2
Scale	3/16" = 1"
Date	Jan. 16, 2015

Drawing No.

**WL  
3224d**

*Saving Lives through Innovation and Education*

**CABLE BUNDLE THROUGH GYPSUM WALL ASSEMBLY**

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

T-RATING = 0-HR.

WL3224d.011615

1. GYPSUM WALL ASSEMBLY (UL/cUL CLASSIFIED U300, U400, OR V400 SERIES) (1-HR. OR 2-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. [OPTIONAL] NOMINAL 2" OR 4" DIAMETER STEEL PIPE SLEEVE (SCHEDULE 5 OR HEAVIER), STEEL CONDUIT, OR EMT SLEEVE. SLEEVE MAY EXTEND UP TO 12" BEYOND WALL SURFACE IN ANY COMBINATION.
4. CABLE BUNDLE TO BE A COMBINATION OF ANY OF THE FOLLOWING :
  - A. MAXIMUM 300 PAIR NO. 24 AWG TELEPHONE CABLE WITH PVC JACKET.
  - B. MAXIMUM 750 KCMIL POWER CABLE WITH PVC JACKET.
  - C. MAXIMUM 7/C NO. 12 AWG POWER CABLE WITH PVC JACKET.
  - D. MAXIMUM 1/2" DIAMETER FIBER-OPTIC CABLE (MAXIMUM 24 FIBER).
  - E. MAXIMUM 3/C NO. 12 AWG METAL-CLAD CABLE WITH PVC JACKET.
  - F. MAXIMUM 1" DIAMETER METAL-CLAD TEK CABLE WITH PVC JACKET.
  - G. MAXIMUM 2/0 ALUMINUM SER CABLE.
  - H. RG 59 COAXIAL CABLE WITH PVC JACKET.
5. HILTI CFS-PL FIRESTOP PLUG OR HILTI CP 658T FIRESTOP PLUG CUT TO FIT AROUND THE CABLE BUNDLE AND INSTALLED TIGHTLY WITHIN SLEEVE SUCH THAT THE OUTER CIRCUMFERENCE OF THE DOME SHAPED PLUG IS FLUSH WITH BOTH SURFACES OF THE WALL OR SLEEVE.
6. MINIMUM 5/8" DEPTH HILTI CP 618 FIRESTOP PUTTY STICK OR FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT TO BE APPLIED WHEN ANNULAR SPACE EXISTS.
7. MINIMUM 1/2" BEAD HILTI CP 618 FIRESTOP PUTTY STICK OR FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT APPLIED AT SLEEVE/WALL INTERFACE WHEN SLEEVE EXTENDS PAST WALL.

**NOTES :** 1. WHEN SLEEVE IS USED : MAXIMUM DIAMETER OF OPENING = 5-1/2", ANNULAR SPACE = MINIMUM 0", MAXIMUM 3" INSIDE SLEEVE, AND MINIMUM 0", MAXIMUM 1" OUTSIDE SLEEVE.  
 2. WHEN SLEEVE IS NOT USED, DIAMETER OF OPENING = NOMINAL 2" OR 4", ANNULAR SPACE = MINIMUM 0", MAXIMUM 3".  
 3. CABLES TO FILL MAXIMUM 60% OF CROSS-SECTIONAL AREA OF OPENING/SLEEVE.  
 4. [OPTIONAL] HILTI CP 618 FIRESTOP PUTTY STICK OR HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT MAY BE FORCED INTO INTERSTICES OF CABLES.



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Sheet 2 of 2

Scale -

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