

UL/cUL SYSTEM NO. W-L-3413

# CABLE BUNDLE THROUGH GYPSUM WALL ASSEMBLY

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

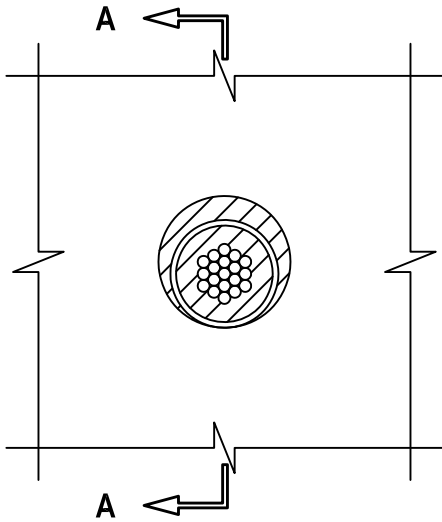
T-RATING = 0-HR. OR 3/4-HR.

L-RATING AT AMBIENT = 15 CFM / SQ FT

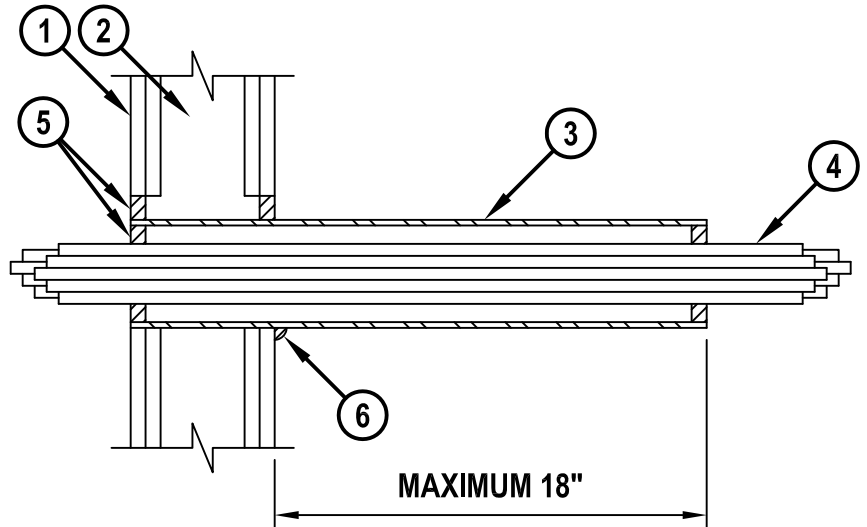
L-RATING AT 400° F = 8 CFM / SQ FT

WL3413b.010816

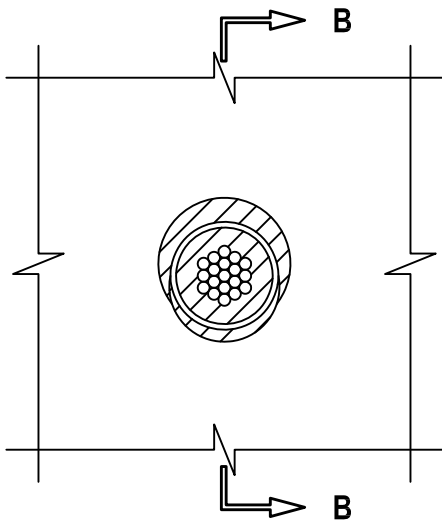
**FRONT VIEW**



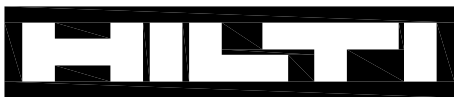
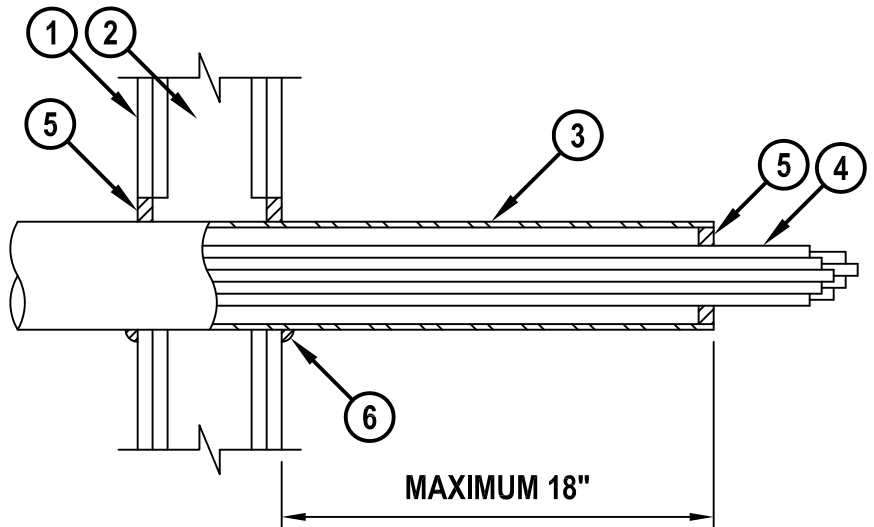
**SECTION A-A**



**FRONT VIEW**



**SECTION B-B**



**Hilti Firestop Systems**

HILTI, Inc.  
Plano, Texas USA (800) 879-8000

Sheet 1 of 2

Scale 1/8" = 1"

Date Jan. 08, 2016

Drawing No.

**WL  
3413b**

*Saving Lives through Innovation and Education*

**CABLE BUNDLE THROUGH GYPSUM WALL ASSEMBLY**

F-RATING = 1-HR. OR 2-HR.  
 T-RATING = 0-HR. OR 3/4-HR.  
 L-RATING AT AMBIENT = 15 CFM / SQ FT  
 L-RATING AT 400° F = 8 CFM / SQ FT

WL3413b.010816

1. GYPSUM WALL ASSEMBLY (UL/cUL CLASSIFIED U400 OR V400) (1-HR. OR 2-HR. FIRE-RATING) (2-HR. SHOWN).
2. [NOT SHOWN] STEEL STUDS TO BE MINIMUM 3-1/2" WIDE.
3. [OPTIONAL] MAXIMUM 4" NOMINAL DIAMETER EMT, STEEL PIPE (SCHEDULE 5 OR HEAVIER) OR 28 GA. GALVANIZED STEEL SLEEVE (SEE NOTE NO. 6 BELOW).
4. CABLE BUNDLE TO CONSIST OF ANY COMBINATION OF THE FOLLOWING (SEE NOTE NO. 5 BELOW) :
  - A. MAXIMUM 7/C NO. 12 AWG POWER CABLE WITH PVC JACKET.
  - B. MAXIMUM 25 PAIR NO. 24 AWG TELEPHONE CABLE WITH PVC JACKET.
  - C. MAXIMUM 1/2" DIAMETER RG/U COAXIAL CABLE WITH PVC JACKET.
  - D. MAXIMUM 3/C NO. 8 AWG METAL-CLAD CABLE.
  - E. MAXIMUM 3/C (+GROUND) NO. 8 AWG COPPER CONDUCTOR CABLE (ROMEX).
  - F. MAXIMUM 5/8 DIAMETER FIBER-OPTIC CABLE WITH PVC JACKET.
  - G. MAXIMUM 3/4" DIAMETER COPPER GROUND CABLE WITH OR WITHOUT PVC JACKET.
  - H. MAXIMUM 1-1/4" DIAMETER SINGLE OR MULTIPLE CONDUCTOR TYPE MI CABLE (SEE NOTE NO. 4 BELOW).
  - I. ANY CABLES, METAL-CLAD CABLES, OR ARMORED CABLES CURRENTLY LISTED UNDER THE THROUGH PENETRATING PRODUCTS CATEGORY.
  - J. MAXIMUM 4/C (+GRND) NO. 300 KCMIL ALUMINUM SER CABLE.
  - K. MAXIMUM 4 PAIR NO. 22 AWG CAT 5 OR CAT 6 CABLE.
  - L. MAXIMUM RG 6/U COAXIAL CABLE WITH FLUORINATED ETHYLENE JACKET.
5. MINIMUM 5/8" DEPTH HILTI CFS-S SIL GG FIRESTOP SILICONE SEALANT.
6. MINIMUM 1/2" BEAD HILTI CFS-S SIL GG FIRESTOP SILICONE SEALANT APPLIED AT WALL/SLEEVE INTERFACE WHEN STEEL SLEEVE EXTENDS BEYOND ONE OR BOTH SIDES OF WALL.

**NOTES :**

1. MAXIMUM DIAMETER OF OPENING WITH SLEEVE = 5-1/2".
2. MAXIMUM DIAMETER OF OPENING WITHOUT SLEEVE = 4".
3. ANNULAR SPACE = MINIMUM 0", MAXIMUM 1".
4. A MINIMUM 1/8" SEPARATION SHOULD BE MAINTAINED BETWEEN MI CABLES AND ANY OTHER TYPES OF CABLE.
5. CABLES TO FILL MAXIMUM 45% OF CROSS-SECTIONAL AREA OF OPENING.
6. WHEN SCHEDULE 5 STEEL PIPE OR EMT IS USED, OPEN ENDED SLEEVE MAY EXTEND UP TO 18" BEYOND WALL SURFACE. AS AN OPTION, SCHEDULE 5 STEEL PIPE OR EMT SLEEVE MAY EXTEND CONTINUOUSLY BEYOND ONE WALL SURFACE.



HILTI, Inc.  
 Plano, Texas USA (800) 879-8000

Sheet	2 of 2
Scale	-
Date	Jan. 08, 2016

Drawing No.  
**WL  
 3413b**