

UL/cUL SYSTEM NO. W-L-3320  
**CABLE BUNDLE THROUGH GYPSUM WALL ASSEMBLY**

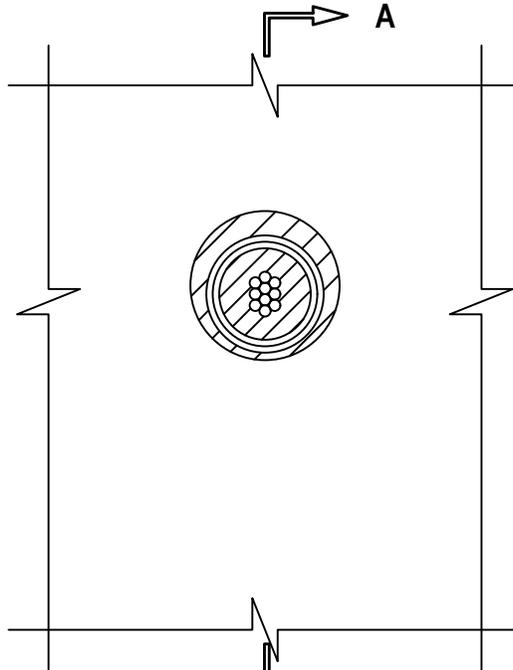
F-RATING = 1-HR. OR 2-HR.

T-RATING = 0-HR.

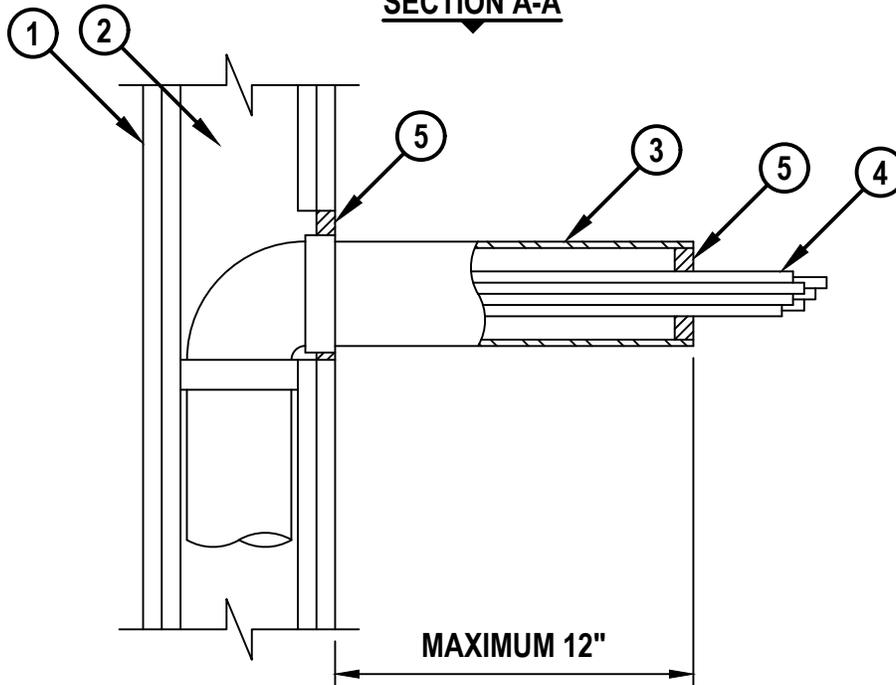
L-RATING AT AMBIENT = LESS THAN 1 CFM / SQ FT

L-RATING AT 400°F = LESS THAN 1 CFM / SQ FT

**FRONT VIEW**



**SECTION A-A**



WL3320f.120522



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

Sheet	1 of 2
Scale	5/32" = 1"
Date	Dec. 05, 2022

Drawing No.

**WL  
3320f**

*Saving Lives through Innovation and Education*

**CABLE BUNDLE THROUGH GYPSUM WALL ASSEMBLY**

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

T-RATING = 0-HR.

L-RATING AT AMBIENT = LESS THAN 1 CFM / SQ FT

L-RATING AT 400°F = LESS THAN 1 CFM / SQ FT

WL3320f.120522

1. GYPSUM WALL ASSEMBLY (UL/cUL CLASSIFIED U300, U400, OR V400 SERIES) (1-HR. OR 2-HR. FIRE-RATING) (2-HR. SHOWN).
2. [NOT SHOWN] WOOD STUDS TO CONSIST OF NOMINAL 2" x 4" LUMBER. STEEL STUDS TO BE MINIMUM 3-1/2" WIDE.
3. MAXIMUM 3" NOMINAL DIAMETER EMT, STEEL CONDUIT, OR STEEL PIPE SLEEVE (SCHEDULE 5 OR HEAVIER). SLEEVE TO BE RIGIDLY SUPPORTED ON PENETRATED SIDE OF WALL.
4. CABLE BUNDLE TO CONSIST OF ANY COMBINATION OF THE FOLLOWING :
  - 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. RG/U COAXIAL CABLE WITH PVC JACKET.
  - D. MAXIMUM 3/C NO. 8 AWG METAL CLAD CABLE.
  - E. MAXIMUM 3/C (+GRND) NO. 8 AWG METAL CLAD CABLE.
  - 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. 3 BELOW).
5. MINIMUM 5/8" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT, HILTI CP 606 FLEXIBLE FIRESTOP SEALANT, HILTI CP 601S ELASTOMERIC FIRESTOP SEALANT, HILTI CFS-S SIL GG FIRESTOP SILICONE SEALANT, OR HILTI CP 618 FIRESTOP PUTTY STICK.

FIRESTOP MATERIAL	MAX DIAMETER OF OPENING	MIN ANNULAR SPACE	MAX ANNULAR SPACE
FS-ONE MAX	6"	0"	2"
CFS-S-SIL GG CP 601S CP 606 CP 618	5"	0"	1"

- NOTES :**
1. ANNULAR SPACE INSIDE SLEEVE= MINIMUM 0".
  2. [NOT SHOWN] WHEN ANNULAR SPACE IS 0", APPLY MINIMUM 1/2" BEAD HILTI SEALANT OR PUTTY AT POINT OF CONTACT.
  3. A MINIMUM 1/8" SEPARATION SHOULD BE MAINTAINED BETWEEN MI CABLES AND ANY OTHER TYPE OF CABLE.
  4. CABLES TO FILL MINIMUM 0% TO MAXIMUM 45% CROSS-SECTIONAL AREA OF SLEEVE.
  5. SLEEVE MAY EXTEND UP TO 12" BEYOND WALL SURFACE.
  6. [OPTIONAL - NOT SHOWN] MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED AND RECESSED TO ACCOMMODATE FIRESTOP SEALANT OR PUTTY MAY BE USED AS BACKING MATERIAL.



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Scale	-
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