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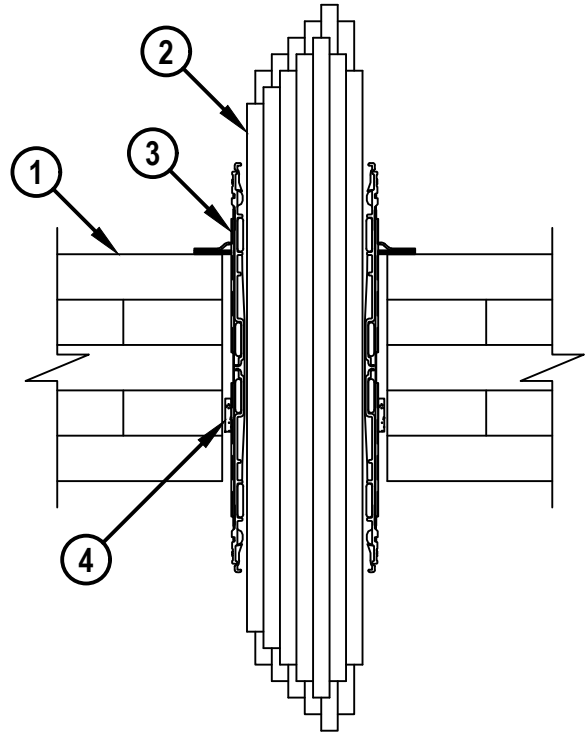
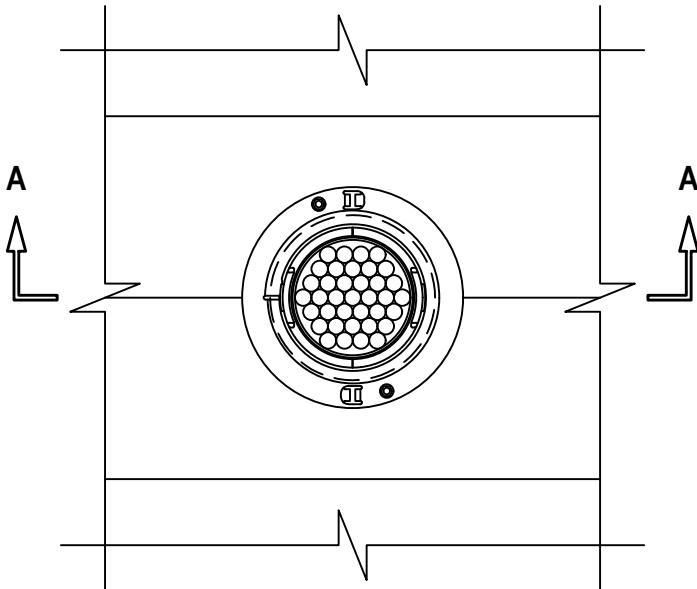
# CABLE BUNDLE THROUGH MASS TIMBER FLOOR ASSEMBLY

F-RATING = 2-HR.

T-RATING = 1/2-HR. OR 1-HR. (SEE NOTE NO. 5 BELOW)

TOP VIEW

SECTION A-A



FG3001a.050423



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

Sheet	1 of 2
Scale	1 1/64" = 1"
Date	May 04, 2023

Drawing No.  
**FG  
3001a**

*Saving Lives through Innovation and Education*

**CABLE BUNDLE THROUGH MASS TIMBER FLOOR ASSEMBLY**

F-RATING = 2-HR.

T-RATING = 1/2-HR. OR 1-HR. (SEE NOTE NO. 5 BELOW)

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1. CROSS-LAMINATED TIMBER (CLT) PANEL, MINIMUM 6-7/8 IN. THICK, 5 PLY CROSS, LABELED CLT 175-5S, 220-7S, 244-7S GRADE E1 IN ACCORDANCE WITH ANSI/APA PRG 320 AS REQUIRED BY CHAPTER 6 OF INTERNATIONAL BUILDING CODE (IBC) FOR TYPE IVA, IVB OR IVC CONSTRUCTION. THE REQUIRED HOURLY RATING OF THE CLT FLOOR SHALL BE DETERMINED IN ACCORDANCE WITH CHAPTER 16 OF THE NATIONAL DESIGN SPECIFICATION (NDS). ADDITIONAL INFORMATION REGARDING THE USE OF CLT AS PERMITTED IN THE IBC IS LOCATED IN THE UL XHEZ GUIDE INFORMATION.
2. CABLE BUNDLE TO BE A COMBINATION OF ANY OF THE FOLLOWING :
  - A. MAXIMUM 100 PAIR NO. 24 AWG TELEPHONE CABLE WITH PVC JACKET.
  - B. MAXIMUM 7/C NO. 12 AWG COPPER CONDUCTOR CONTROL CABLE WITH PVC OR XLPE JACKET AND INSULATION.
  - C. MAXIMUM 4/0 AWG TYPE RHH GROUND CABLE.
  - D. MAXIMUM 4 PAIR NO. 22 AWG CAT 5 or CAT 6 COMPUTER CABLE.
  - E. MAXIMUM RG 6/U COAXIAL CABLE.
  - F. MAXIMUM 3/8" DIAMETER FIBER-OPTIC CABLE (48 FIBER) WITH PVC OR PE JACKET AND INSULATION.
  - G. MAXIMUM 20/C NO. 22 AWG SHIELDED PRINTER CABLE WITH PVC JACKET.
  - H. MAXIMUM 2/C NO. 18 AWG POWER OR NON-POWER LIMITED FIRE ALARM CABLE WITH OR WITHOUT METAL JACKET (MANUFACTURED BY AFC CABLE SYSTEMS, INC.).
  - I. MAXIMUM 1/4" DIAMETER S-VIDEO CABLE CONSISTING OF TWO MAXIMUM 24 AWG 75 OHM COAX OR TWISTED PAIR CABLE WITH PE INSULATION AND PVC JACKET.
  - J. MAXIMUM 3/C NO. 12 AWG METAL-CLAD CABLE.
3. HILTI CP 653 (BA) SPEED SLEEVE [2" OR 4"] OR HILTI CFS-SL GA L SPEED SLEEVE [4"] SLID INTO FLOOR. DEVICE FLANGES SPUN CLOCKWISE ONTO DEVICE THREADS OVER TWO SMOKE GASKETS, BUTTING TIGHTLY TO TOP OF FLOOR. SPEED SLEEVE TO EXTEND MAXIMUM 1" BELOW BOTTOM SURFACE OF FLOOR AND EXTEND A MINIMUM OF 2" ABOVE THE TOP OF THE FLOOR ASSEMBLY. DEVICE SECURED TO TOP OF FLOOR THROUGH PRE-MADE HOLES IN DEVICE FLANGES WITH TWO 1" LONG WOOD SCREWS. (SEE NOTES NO. 3 AND 4 BELOW).
4. HILTI CP 648E WRAP STRIP (NOMINAL 3/16" THICK x1" WIDE) CONTINUOUSLY WRAPPED AROUND THE OUTER CIRCUMFERENCE OF THE SPEED SLEEVE, COVERING ONE TIME, WITH ENDS BUTTED AND HELD IN PLACE WITH (MASKING OR ALUMINUM) TAPE. WRAP STRIP TO BE INSERTED INTO ANNULAR SPACE AND RECESSED 1-1/2" FROM BOTTOM SURFACE OF FLOOR.

**NOTES :**

1. MAXIMUM DIAMETER OF OPENING = 5".
2. CABLES MAY REPRESENT 0% TO 100% VISUAL FILL OF DEVICE.
3. HILTI CFS-SL GA L SPEED SLEEVE SHALL ONLY BE USED IN FLOORS 8" THICK OR GREATER.
4. WHEN FIRESTOP DEVICE IS BLANK, A MINIMUM OF FOUR 1" LONG WOOD SCREWS SHALL BE USED TO SECURE DEVICE TO TOP OF FLOOR ASSEMBLY.
5. WHEN ITEMS 2I OR 2J ARE USED T-RATING IS LIMITED TO 1/2-HOUR.



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