

CABLE BUNDLE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL ASSEMBLY

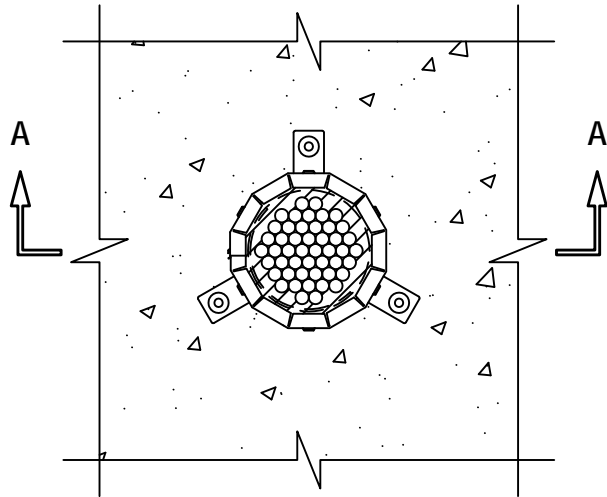
F-RATING = 2-HR.

T-RATING = 1/4-HR. OR 3/4-HR.

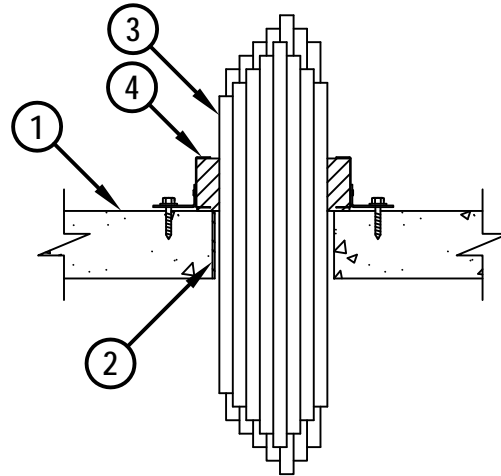
L-RATING = (SEE TABLE BELOW)

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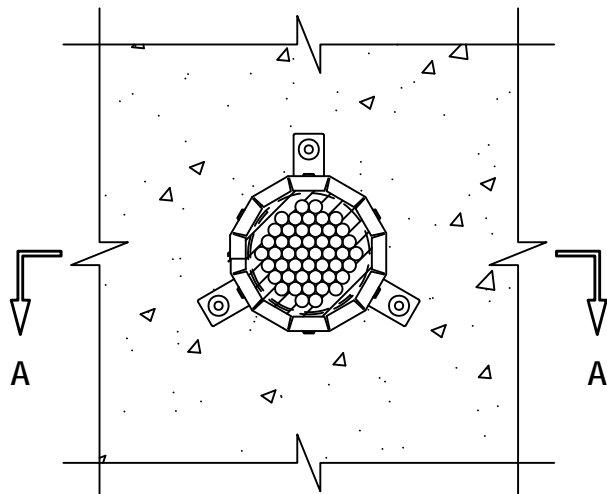
TOP VIEW



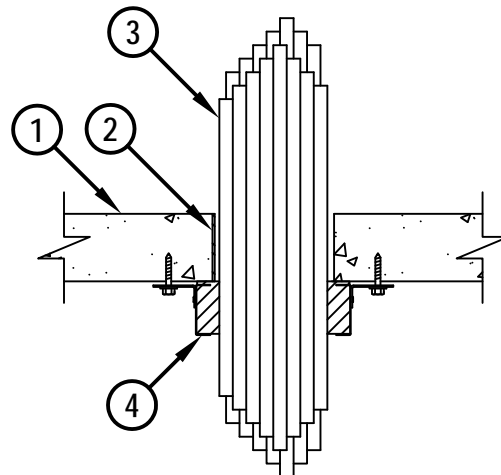
SECTION A-A



BOTTOM VIEW



SECTION A-A



1. CONCRETE FLOOR OR WALL ASSEMBLY (2-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR OR WALL (MINIMUM 2-1/2" THICK).
 - B. ANY UL/cUL CLASSIFIED PRECAST (HOLLOW-CORE) CONCRETE FLOOR (MINIMUM 6" THICK).
 - C. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
2. [OPTIONAL] MAXIMUM 4" NOMINAL DIAMETER STEEL PIPE SLEEVE (SCHEDULE 5 OR HEAVIER), SHEET METAL SLEEVE (MIN. 28 GA.), OR PVC PIPE SLEEVE (SCHEDULE 40) CAST OR GROUTED INTO ASSEMBLY, FLUSH WITH FLOOR OR WALL SURFACES.



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

Sheet	1 of 2
Scale	1 1/64" = 1"
Date	Jan. 06, 2015

Drawing No.
**CAJ
3320d**

CABLE BUNDLE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL ASSEMBLY

F-RATING = 2-HR.
 T-RATING = 1/4-HR. OR 3/4-HR.
 L-RATING = (SEE TABLE BELOW)

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3. 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 AND XLPE JACKET AND INSULATION.
 - C. MAXIMUM 4/0 AWG TYPE RHH GROUND CABLE.
 - D. MAXIMUM 4 PAIR NO. 22 AWG CAT 5 OR 6 COMPUTER CABLE.
 - E. MAXIMUM RG 6/U COAXIAL CABLE.
 - F. MAXIMUM 1/2" DIAMETER FIBER-OPTIC CABLE (24 FIBER) WITH PVC OR PE JACKET AND INSULATION.
 - G. MAXIMUM 3/C NO. 12 AWG MC CABLE.
4. HILTI CFS-CC 4" FIRESTOP CABLE COLLAR CENTERED OVER OPENING AND MOUNTED TO TOP OR BOTTOM SURFACE OF FLOOR, OR TO BOTH SIDES OF WALL. PLUG WITHIN COLLAR TO BE CUT TO FIT TIGHTLY AROUND THE CABLE BUNDLE. EACH FASTENING HOOK SECURED TO TOP OR BOTTOM OF FLOOR, OR BOTH SIDES OF WALL, WITH 1/4" x 1-1/4" LONG STEEL EXPANSION BOLTS, MIN. 0.145" x 1-1/4" POWDER ACTUATED FASTENERS WITH MIN. 9/16" DIAMETER STEEL WASHER, 1/4" x 1-1/4" HILTI KWIK-CON II+ CONCRETE SCREW ANCHOR, 1/4" x 1-3/4" DIAMETER HILTI KWIK-BOLT 3 STEEL EXPANSION ANCHOR, OR HILTI X-DNI 27 P8 S15 POWDER ACTUATED FASTENER WITH INTEGRATED WASHER.

OPENING	CFM (PER DEVICE)		CFM / SQ FT OPENING	
	AMBIENT	400F	AMBIENT	400F
BLANK OPENING ONLY IN WALLS ONLY (NO CABLES)	LESS THAN 1	LESS THAN 1	LESS THAN 1	4
MAX. 100% FILL CAT 5 AND/OR CAT 6 CABLES	LESS THAN 1	1.2	LESS THAN 1	13

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 4".
 2. CABLES MAY REPRESENT 0% TO 100% VISUAL FILL OF OPENING.
 3. FOR HOLLOW-CORE FLOORS, FIRESTOP CABLE COLLAR IS REQUIRED ON THE BOTTOM OF FLOOR.
 4. FOR BLANK OPENINGS WITH FIRESTOP CABLE COLLAR INSTALLED ON TOP OF FLOOR, THE MINIMUM FLOOR THICKNESS SHALL BE 4-1/2".
 5. FIRESTOP CABLE COLLARS ARE REQUIRED ON BOTH SIDES OF A WALL.
 6. WHEN PVC SLEEVE IS USED, CABLES TO FILL MAXIMUM 45% OF CROSS-SECTIONAL AREA OF SLEEVE.
 7. [OPTIONAL] HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT OR HILTI CP 618 FIRESTOP PUTTY STICK MAY BE APPLIED TO FILL INTERSTICES BETWEEN AND AROUND THE CABLE BUNDLE.



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