



RFS Technologies, an Amphenol Company

2-HOUR FIRE CABINET INSTALLATION INSTRUCTIONS



Model 2HB-DS-CAB

ConQuest
FLAMEBAR

REV. 03 | June 2023



Installation Instructions for 2HB-DS-CAB

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INSTALLATION INSTRUCTIONS

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PRODUCT INFORMATION

UL 263 and ASTM E1725 Electrical Cabinet. Patent Pending V071422.

Flamebar® Cabinets are UL 263 Certified, meet NFPA 72 & NFPA 1221 when used with UL 2196 certified RFS DragonSkin™ Fire Resistive Coaxial Cable and Standard RFS Components.



SHIPPING COMPONENTS

- Electrical cabinet
 - Body
 - Lid
 - #10 TEKS Screws
- 4 pcs 3/8" diameter corner bolts
- Black 3M tape (3M fire barrier expantrol flexible intumescent strip) (E-FIS)
- Installation Instructions



SUPPLIED BY CUSTOMER

- Cables, connectors, splitters, tappers, terminal blocks, panels, and electrical devices.
- STI SpecSeal Tube Putty (Model #SSP100) for cable penetration firestop.
- Hanging rods, angles, channels etc.
- Tools and Equipment
 - A drill
 - 9/16 socket with ratchet
 - 1/4 socket and hex shank socket adapter
 - Torque wrench
 - Lift for raising the box if possible or two persons to lift optional

PPE RECOMMENDATIONS

- Safety Glasses
- Safety Shoes
- Gloves



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OVERVIEW OF INSTALLATION STEPS

The fire rated cabinet has pre-set sleeves for cables.

Do not drill or create new openings through cabinet.

Do not penetrate cabinet sides, top or bottom with fasteners.

1. Layout and permanent position of cabinet.
2. Hang box (see vertical and horizontal hanging section)
3. Install cable through sleeved openings.
4. Wrap 3M tape around cable 6" in length.
5. Final connection of cable inside cabinet.
6. Putty interior sleeves.
7. Close lid.
8. Install 4 corner bolts.
9. Install sheet metal screws 3" on center on lid to cabinet flange.
10. Putty exterior sleeves.

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LAYOUT AND PERMANENT POSITION OF THE CABINET

The Flamebar cabinet is not a pull box.

- The listed cabinet may be installed in any location or orientation within building without any additional fire protection.
- The cabinet must be mounted to a 2-hour rated assembly with 2-hour anchors.
- If a pull box is needed, it must be inserted on either side of the Flamebar cabinet.
- **See Figure A**



FIGURE A

FIELD INSTALLATION OF THE CABINET

The box will have 2 @ 2 x 2 x 3/16 angles welded to the bottom flange of the box for mounting purpose. (See Figure B)



FIGURE B



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Mount Cabinet to 2-hour structure following the **Details A - I (see pages 11-19)**:

- 2-hour structural slab (underside), # D, E, F, and G
- 2-hour wall or column, # A, B and C
- 2-hour floor, # H and I

INSERT CABLE INTO CABINET

- **The Flamebar fire rated cabinet has 3 sleeved penetrations for cables. Do not drill or create new openings through cabinet.**
- **Do not penetrate cabinet sides, top or bottom with fasteners.**
- If a sleeve is not utilized, the opening must be fire-stopped with the STI putty the full depth of the 2" diameter conduit sleeve on both interior and exterior sides.
- The Dragonskin cable must be prepared per the connector's instructions before inserting the cable into the cabinet, the connector will not fit through the pipe.
- Insert cable(s) through the sleeve and opening(s) provided and pull the cable sufficiently into the box to connectorized the cable
- Install the connector per the connector's instructions
- WRAP CABLE WITH 3M TAPE
- Wrap cable with the 3M tape (**Figure D**), maximum length (6in) to cover the cable as it penetrates the walls of the cabinet. (**Figure E**)
- Set cable in cabinet with wrapped portion within the cabinet body. (**Figure F**)

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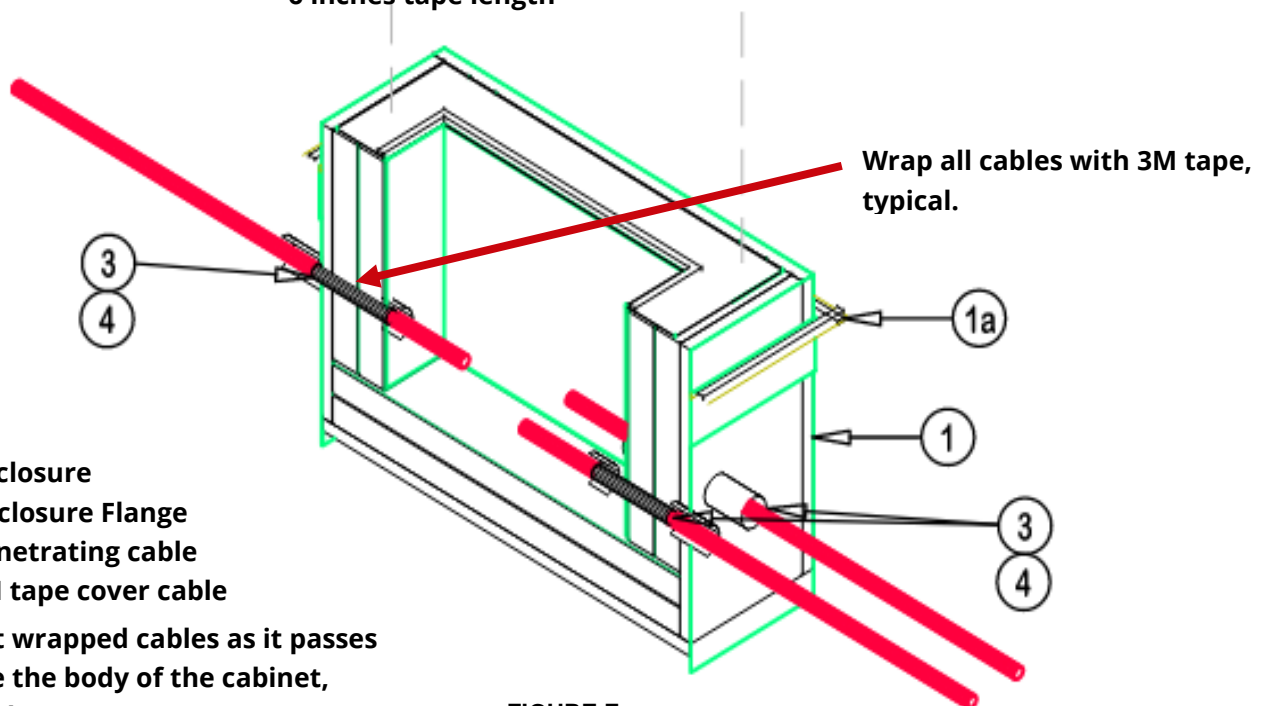
FIGURE D



FIGURE E

6 inches tape length

Wrap 3M Tape around cable 6" in length. Area of 3M tape shall overlap where cable penetrates cabinet walls. For example, the cabinet steel walls are 5.25" thick and the tape will overlap 0.375 inches on each side.



- 1 Enclosure
- 1a Enclosure Flange
- 3 Penetrating cable
- 4 3M tape cover cable

Insert wrapped cables as it passes inside the body of the cabinet, typical.

FIGURE F

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FINAL STEPS PRIOR TO LID CLOSURE

- Make final connections to splitter, connector, or device inside cabinet. **(Figure G)**
- Install STI SpecSeal putty inside annular space between the cable and 2" diameter conduit sleeve on the inner penetration. **(Figure H)**

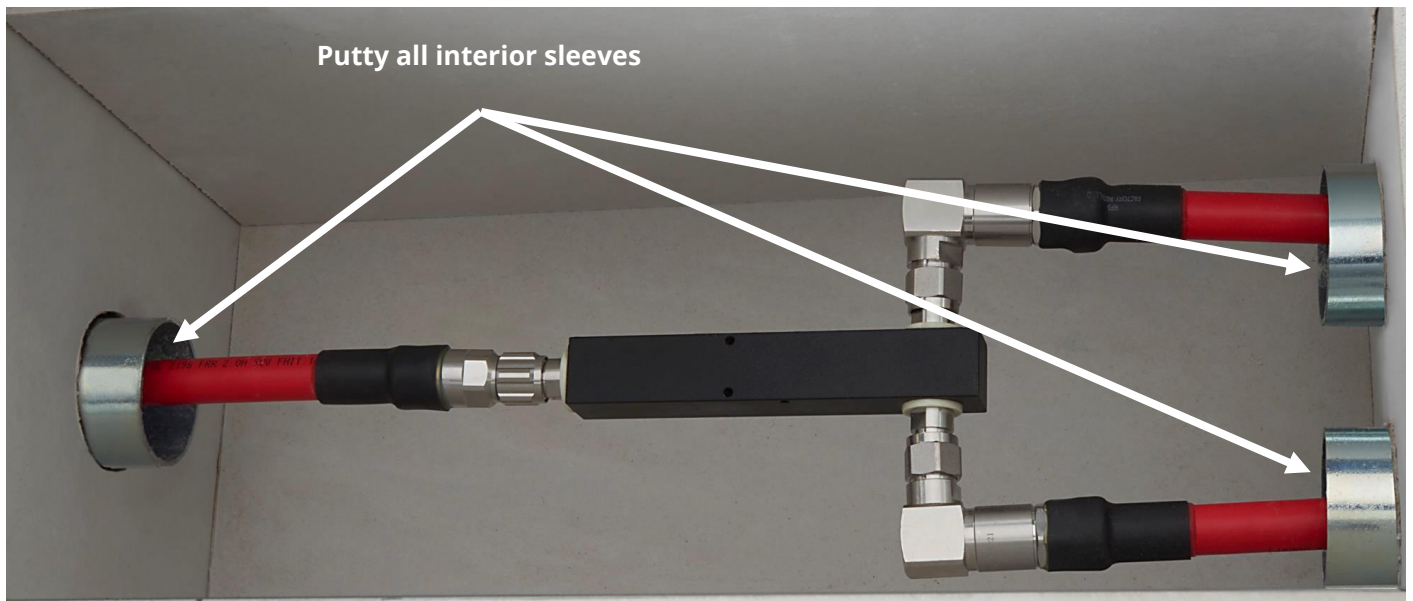


FIGURE G – Final Connections



Prior to closing lid:
Interior sleeve fire stop
Install compressed putty around cable,
 $\frac{3}{4}$ " minimum depth.

After lid is closed:
Exterior sleeve fire stop
Install compressed putty around cable,
1.5" minimum depth.

FIGURE H – Sleeve Firestop



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FINAL CONNECTIONS

- Set lid in place for final closure.
- Lower lid until flanges touch.
- Factory installed Flamebar gasket will be continuous at flange. (Fig. I)
- Tighten 4 corner 3/8" bolts with wrench until tight. (Fig. J). The required torque is 25-ft .lb
- Screw sheet metal screws around perimeter of flange 3" on center. (Fig. K).
- Install STI SpecSeal Putty in annular space between cable and 2" conduit sleeves on exterior of cabinet. (Fig. H).
- Installation complete.

Installation Instructions for 2HB-DS-CAB



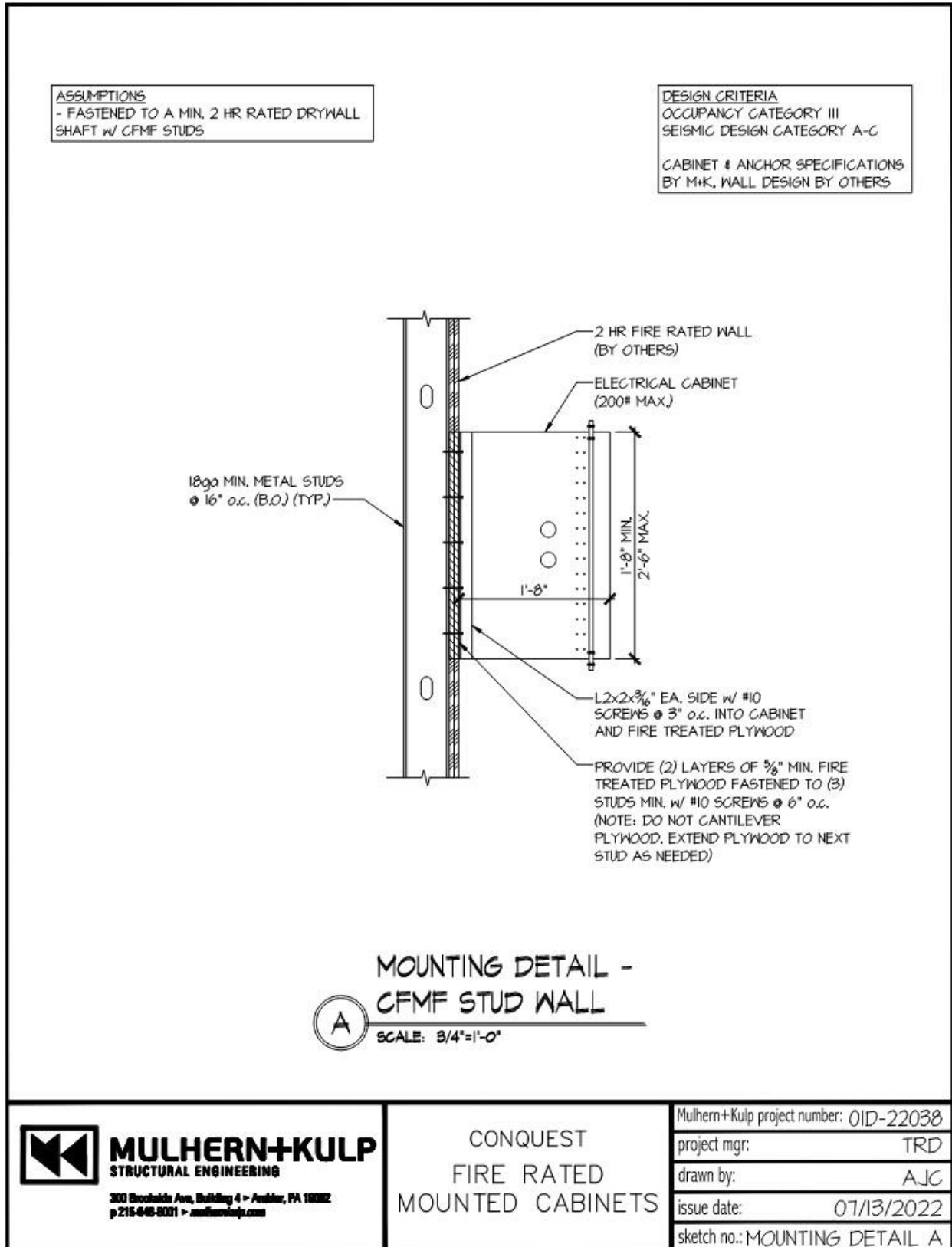
FIGURE J – Corner bolts wrench tight 25 ft.lb



FIGURE K – #10 sheet metal screws 3" o.c.

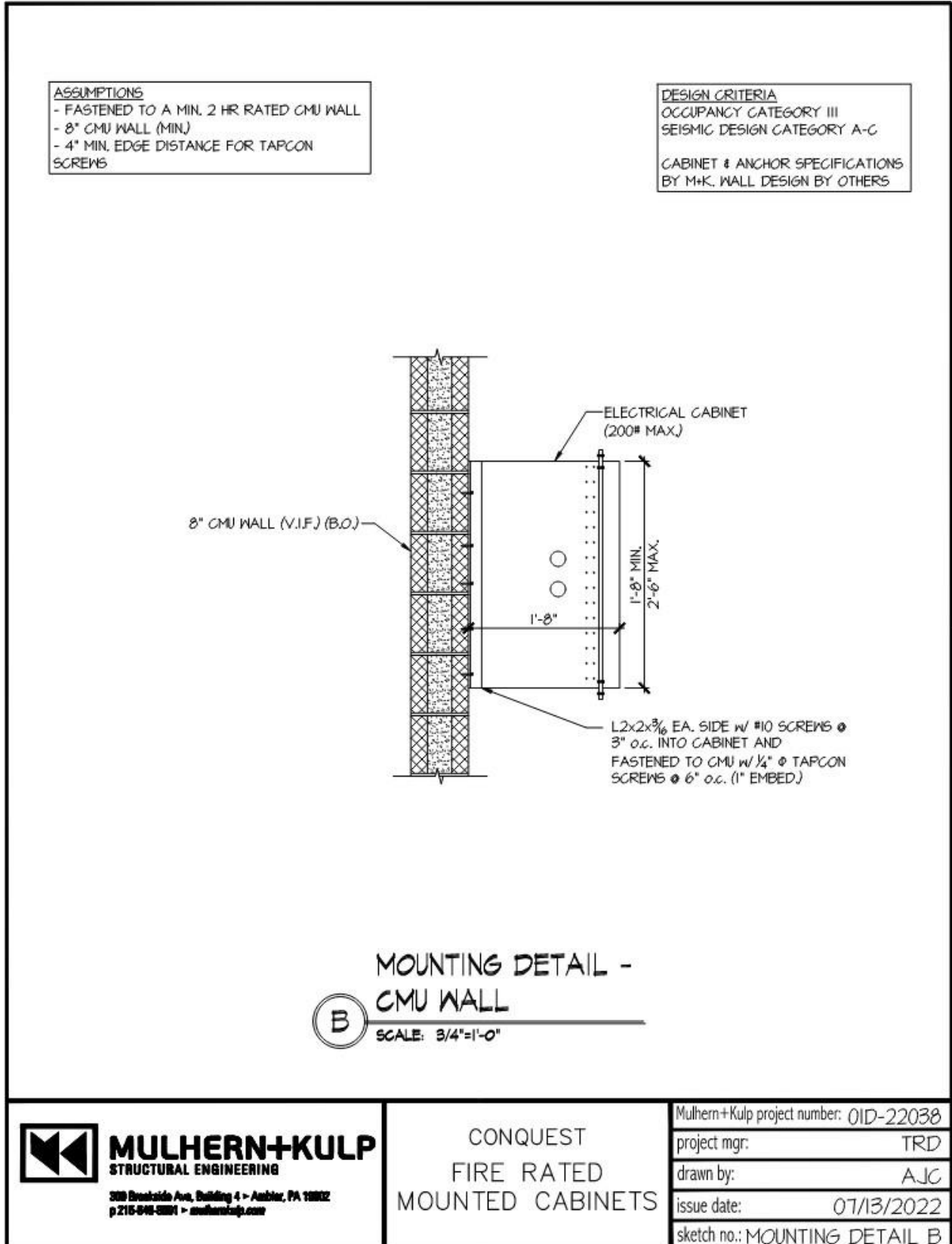
Installation Instructions for 2HB-DS-CAB

MOUNTING TO DRYWALL PARTITION, DETAIL A



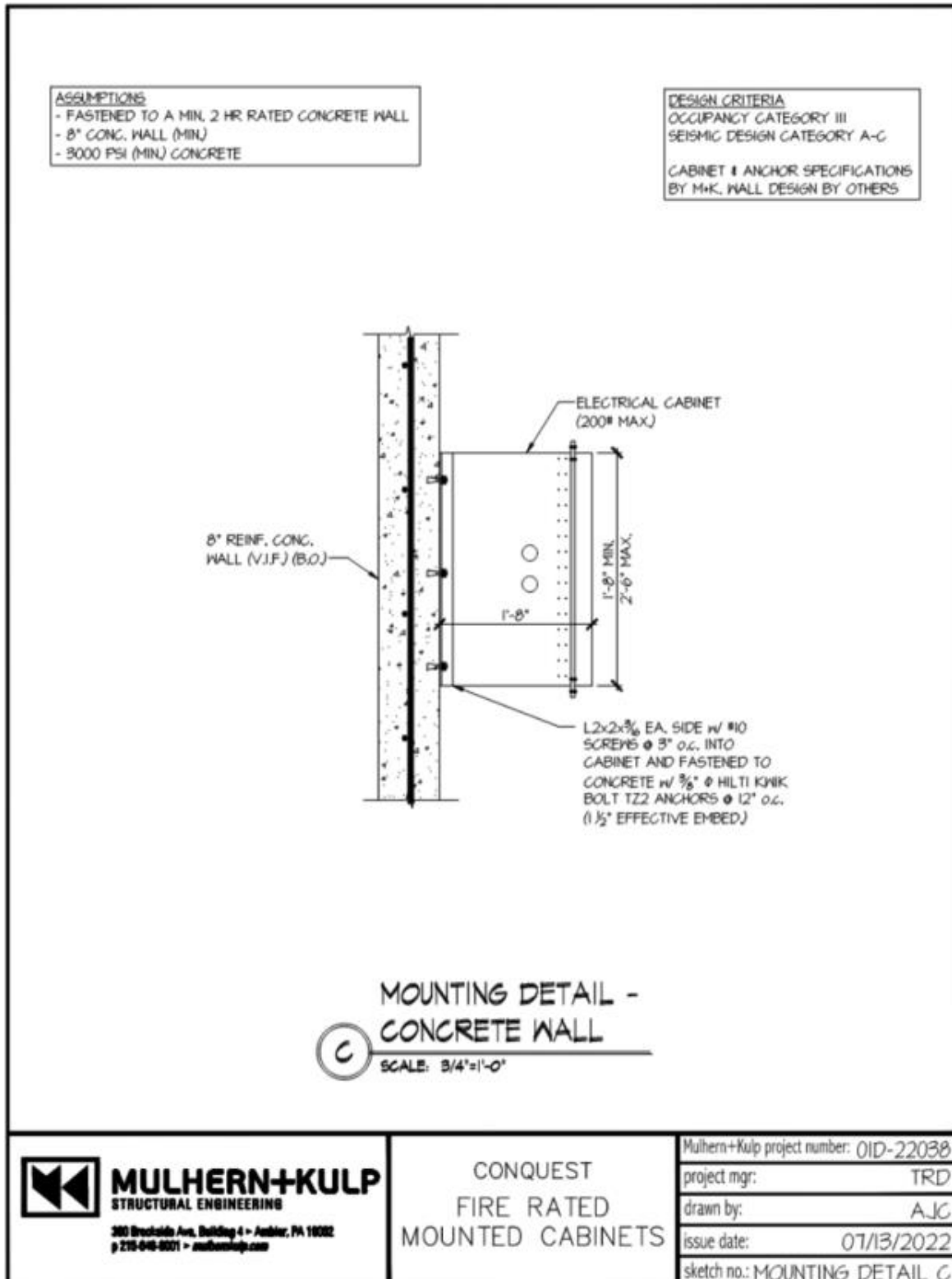
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MOUNTING TO CMU WALL, DETAIL B



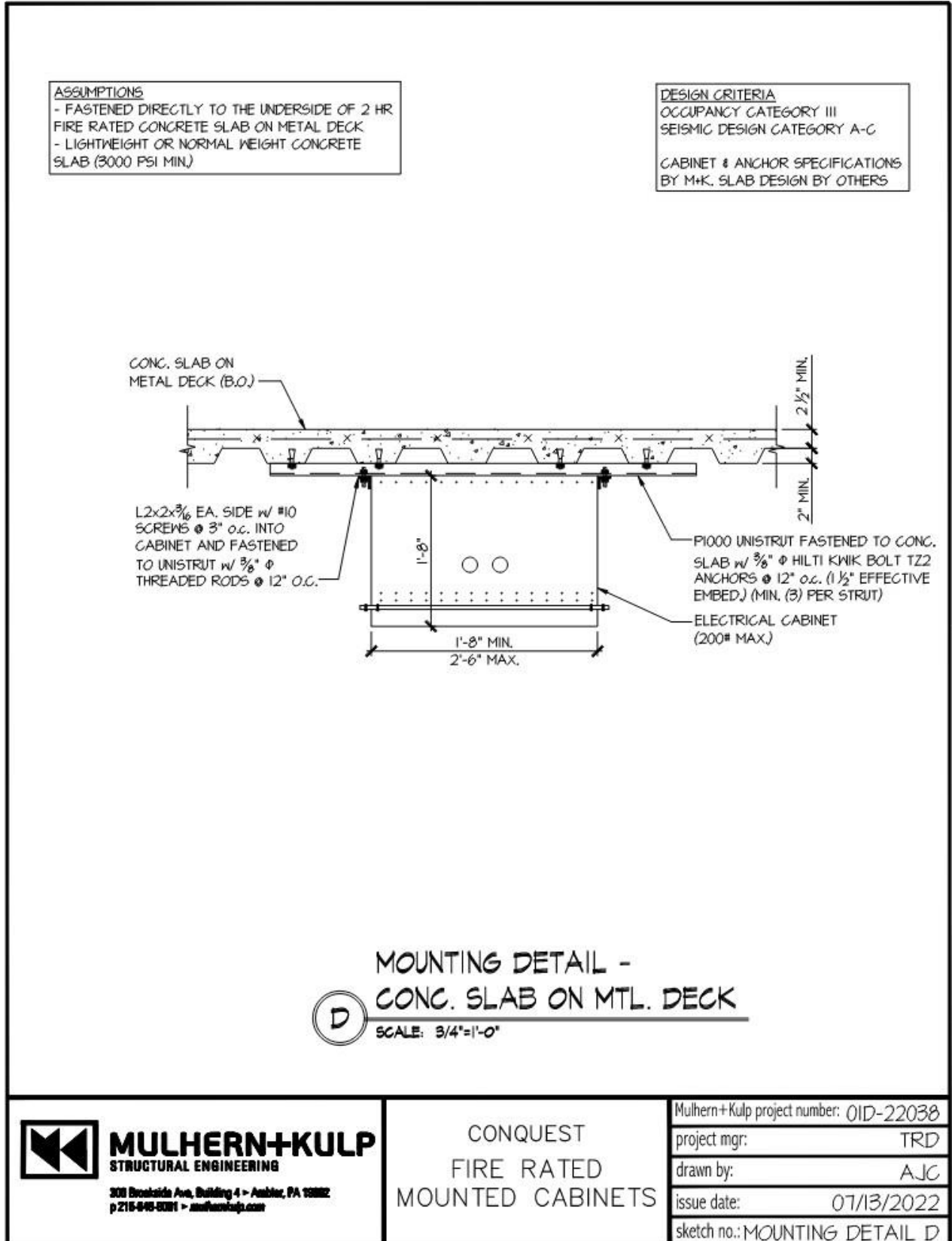
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MOUNTING TO CONCRETE WALL, DETAIL C



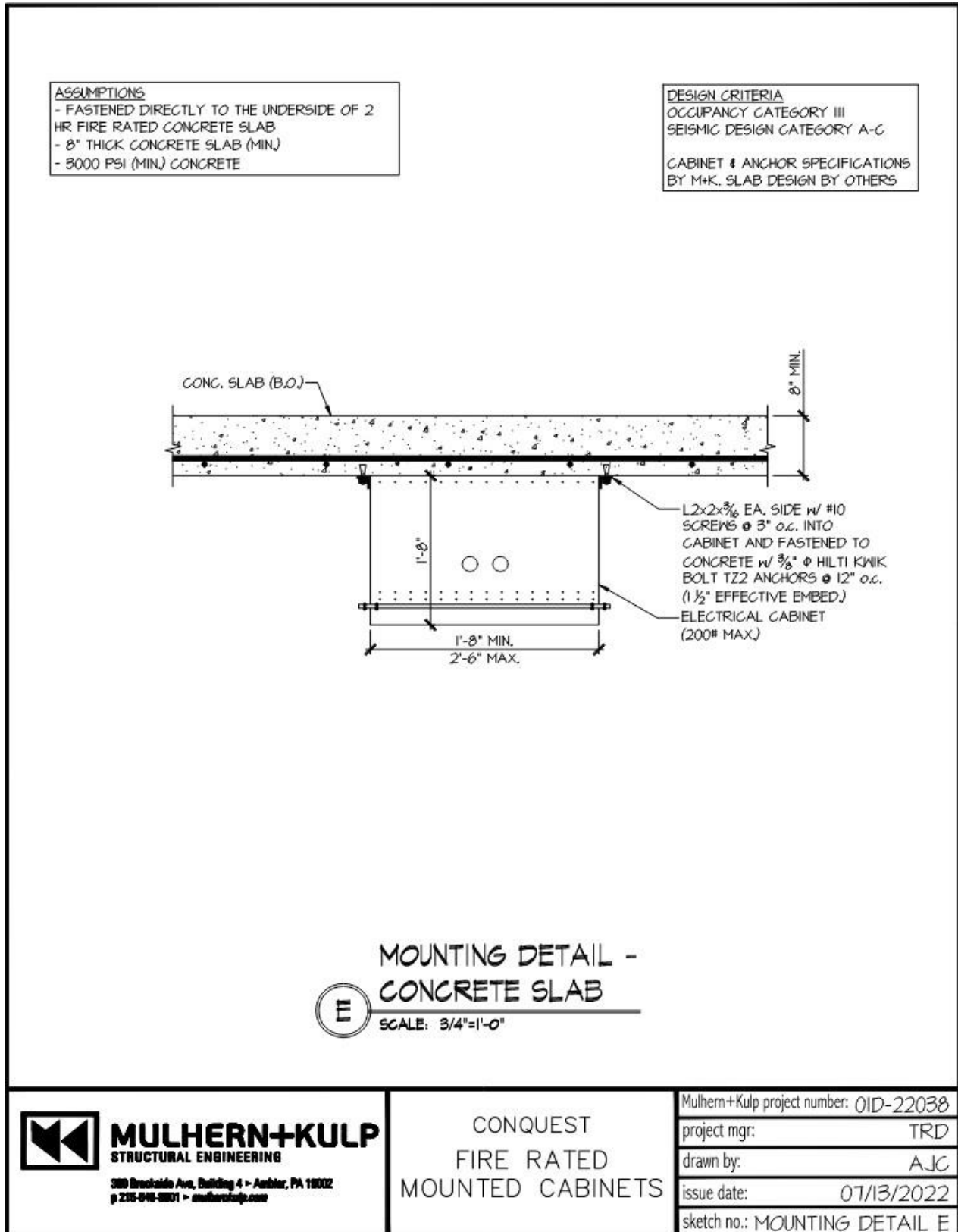
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MOUNTING TO DECK, DETAIL D



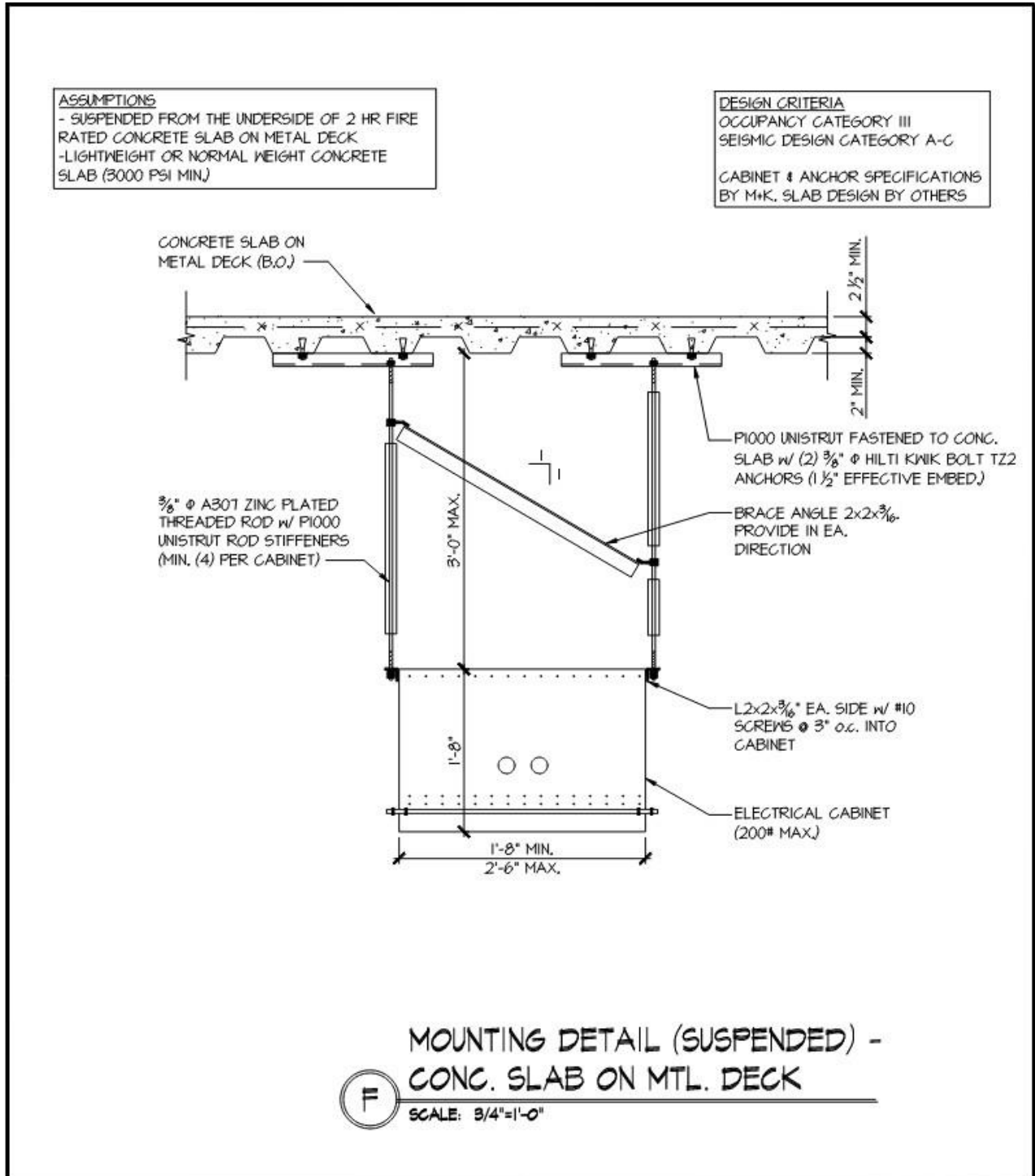
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MOUNTING TO DECK, DETAIL E



Installation Instructions for 2HB-DS-CAB

MOUNTING TO DECK, DETAIL F



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Mulhern+Kulp project number: 01D-22038

project mgr: TRD

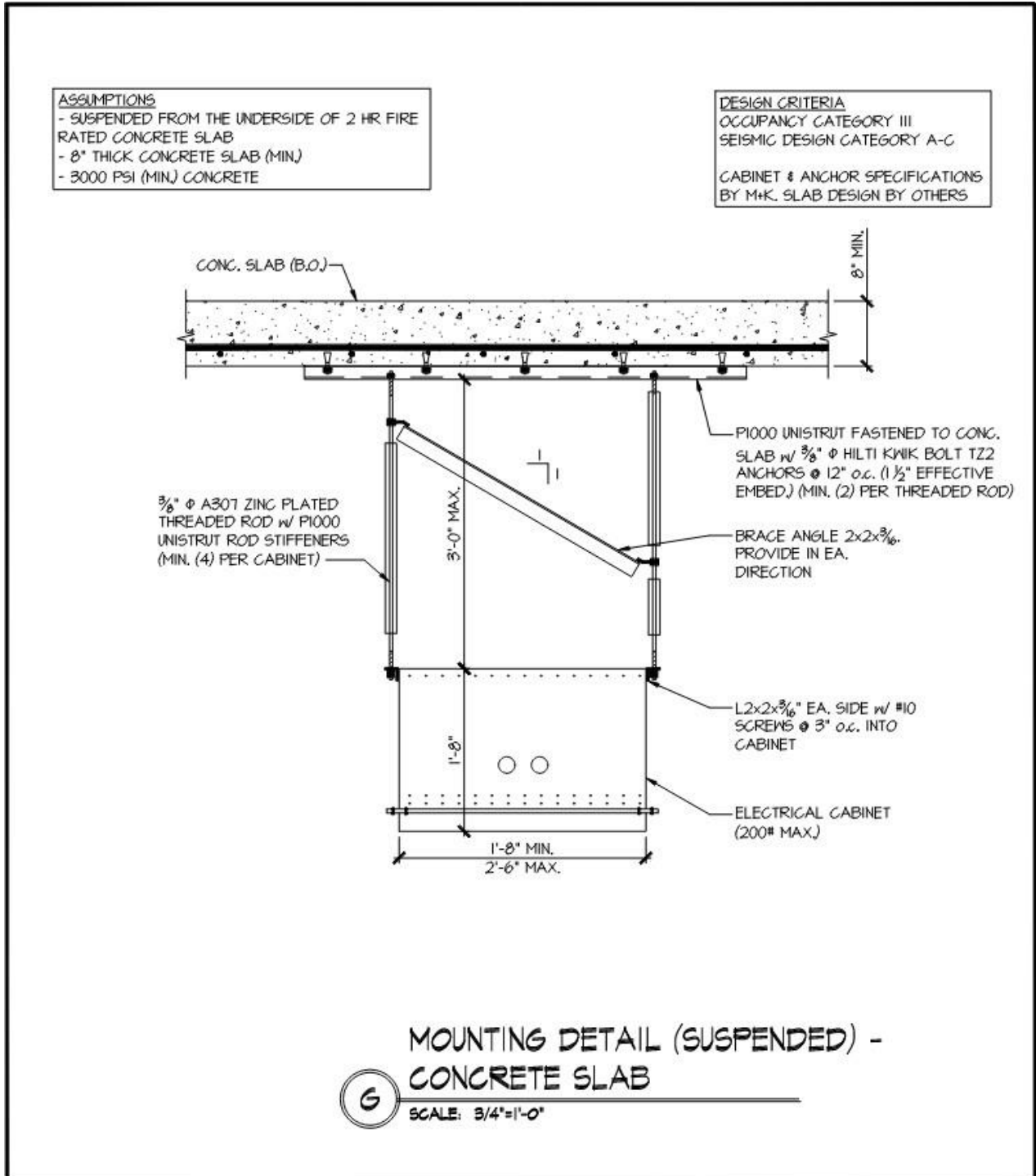
drawn by: AJC

issue date: 07/13/2022

sketch no.: MOUNTING DETAIL F

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MOUNTING TO DECK, DETAIL G

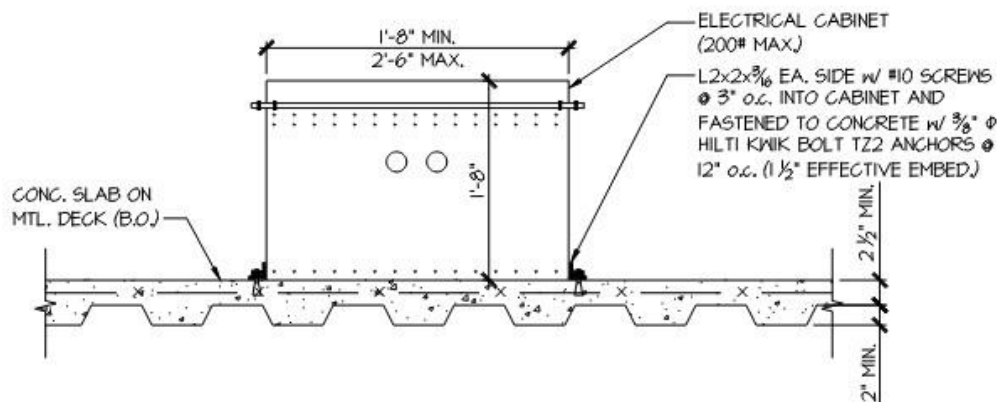


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MOUNTING TO FLOOR, DETAIL H

ASSUMPTIONS
 - CABINET MOUNTED 24" MAX. ABOVE THE FINISHED FLOOR w/ 2 HR FIRE RATING
 - LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE SLAB (3000 PSI MIN.)

DESIGN CRITERIA
 OCCUPANCY CATEGORY III
 SEISMIC DESIGN CATEGORY A-C
 CABINET & ANCHOR SPECIFICATIONS BY M+K. SLAB DESIGN BY OTHERS



**MOUNTING DETAIL (FLOOR) -
 CONC. SLAB ON MTL. DECK**
 H SCALE: 3/4"=1'-0"



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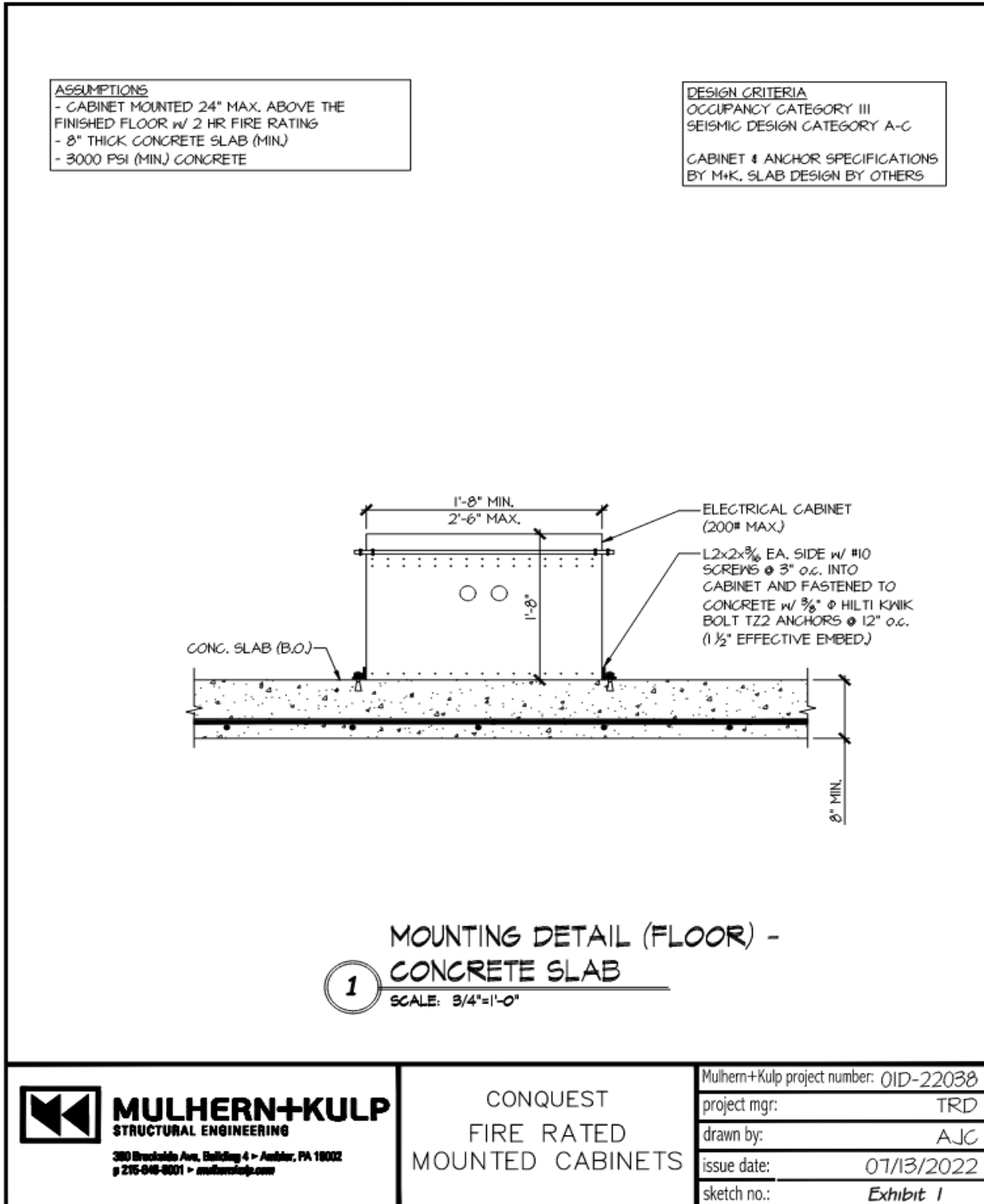
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Mulhern+Kulp project number:	01D-22038
project mgr:	TRD
drawn by:	AJC
issue date:	07/13/2022
sketch no.:	MOUNTING DETAIL H

Installation Instructions for 2HB-DS-CAB

MOUNTING TO FLOOR, DETAIL I



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