

DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION FACILITIES DEVELOPMENT DIVISION

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APPLICATION FOR HCAI PREAPPROVAL OF	OFFICE USE ONLY			
MANUFACTURER'S CERTIFICATION (OPM)	APPLICATION #: OPM-0653			
HCAI Preapproval of Manufacturer's Certification (OPM)				
Type: X New Renewal/Update				
Manufacturer Information				
Manufacturer: Aspect Imagining, LTD				
Manufacturer's Technical Representative: Wendy Slatery				
Mailing Address: 3200 West End Avenue, Suite 500, Nashville, TN 37203				
Telephone: (866) 609-1554 Email: wslatery@aspectimag	ging.com			
ALD FOR THE STATE OF THE STATE				
Product Information	Z			
Product Name: Aspect Imaging - Embrace System OPM-0653				
Product Type: MRI Scanner and Electrical Cabinet	1111			
Product Model Number: Scanner - 71005500; Electrical Cabinet - 71004936	0			
General Description: Scanner - Embrace, Neonatal MRI Main Assembly with Covers Conf.D; Electrical Cabinet - Cabinet, electrical neonatal				
Applicant Information	<u> </u>			
Applicant Company Name: Aspect Imaging, LTD	7			
Contact Person: Wendy Slatery				
Mailing Address: 3200 West End Avenue, Suite 500, Nashville, TN 37203				

"Access to Safe, Quality Healthcare Environments that Meet California's Diverse and Dynamic Needs"





Telephone: (866) 609-1554

Title: Chief Commercial Officer

Email: wslatery@aspectimaging.com



DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION FACILITIES DEVELOPMENT DIVISION

Registered Design Professonal Preparing Engineering Recommendations				
Company Name: KPFF				
Name: Luis Toranzo California License Number: S6014				
Mailing Address: 700 South Flower Street, Suite 2100, Los Angeles, CA 90017				
Telephone: (213) 310-8501 Email: Luis.Toranzo@kpff.com				
HCAI Special Seismic Certification Preapproval (OSP)				
Special Seismic Certification is preapproved under OSP OSP Number:				
an CODE a				
Certification Method				
Testing in accordance with: ICC-ES AC156 FM 1950-16				
Other(s) (Please Specify):				
*Use of criteria other than those adopted by the California Building Standards Code, 2019 (CBSC 2019) for component supports and attachments are not permitted. For distribution system, interior partition wall, and suspended ceiling seismic bracings, test criteria other than those adopted in the CBSC 2019 may be used when approved by HCAI prior to testing.				
X Analysis				
Experience Data DATE: 04/06/2022				
Combination of Testing, Analysis, and/or Experience Data (Please Specify):				
HCAI Approval				
Date: 4/6/2022				
Name: Mohammad Aliaari Title: Senior Structural Engineer				
Condition of Approval (if applicable):				

"Access to Safe, Quality Healthcare Environments that Meet California's Diverse and Dynamic Needs"







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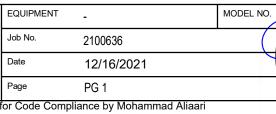
NOTES:

THESE DRAWINGS ARE PREPARED FOR ASPECT IMAGING, NASHVILLE, TEXAS.

DATE: 04/06/2022

- THE CONTRACTOR AND INSPECTOR OF RECORD SHALL OBTAIN A COPY 2. OF THIS PRE-APPROVAL FROM THE DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION (HCAI) PRE-APPROVAL PROGRAMS WEBSITE.
- THIS PRE-APPROVAL COVERS THE SUPPORTS AND ATTACHMENTS OF 3. THE SCANNING UNIT & ELEC CAB TO THE SUPPORTING STRUCTURE.
- THIS PRE-APPROVAL MAY BE USED AT ANY GEOGRAPHICAL LOCATION IN THE STATE OF CALIFORNIA WHERE SDS IS LESS THAN OR EQUAL TO 2.00, AS NOTED IN THE DESIGN CRITERIA ON PG 2.





Approval Date

OPM-0653

GENERAL NOTES:

- 1. THIS HCAI PREAPPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE CBC 2019. THE DEMAND (DESIGN FORCES) FOR USE WITH THIS OPM MUST BE BASED ON THE CBC 2019.
- IT IS THE RESPONSIBLILITY OF THE STRUCTURAL ENGINEER OF RECORD (SEOR) FOR A SITE SPECIFIC PROJECT TO VERIFY:
 - A. THE ADEQUACY OF THE NEW OR EXISTING STRUCTURE TO RESIST THE FORCES AND WEIGHT SPECIFIED FOR EACH COMPONENT IN ADDITION TO ALL OTHER LOADS. PROVIDE AND DESIGN SUPPLEMENTARY MEMBERS AS REQUIRED.
 - B. THAT THE INSTALLATION IS IN CONFORMANCE WITH THE CBC 2019 AND WITH THE DETAILS SHOWN IN THIS PREAPPROVAL.
 - C. THAT THE ACTUAL COMPONENT'S WEIGHT, CENTER OF GRAVITY (CG) LOCATION, ATTACHMENT LOCATIONS, ATTACHMENT DETAILS, AND THE MATERIAL AND GAGE OF THE COMPONENT WHERE ATTACHMENTS ARE MADE, AGREE WITH THE INFORMATION SHOWN ON THE PRE-APPROVAL DOCUMENTS.

DESIGN CRITERIA

- EARTHQUAKE DESIGN DATA:
 - MAPPED ACCELERATION PARAMETERS PER 2019 CBC SECTION 1613A.3.1:

SEISMIC IMPORTANCE FACTOR (I_p) = 1.5

 S_{DS} = 2.00 MAX

- RISK CATEGORY = IV
- LATERAL SYSTEM DESCRIPTION COMPONENTS = NON STRUCTURAL
- SCANNING UNIT

RESPONSE MODIFICATION FACTOR $(R_p) = 1.5$

COMPONENT AMPLIFICATION FACTOR $(a_p) = 1.0$

OVERSTRENGTH FACTOR (Ω) = 2.0

HORIZONTAL SEISMIC DESIGN FACTOR (Fp) = 0.9Wp (AT SLAB-ON-GRADE)

(Fp) = 2.4Wp (AT ELEVATED SLABS)

ELECTRICAL CABINET

RESPONSE MODIFICATION FACTOR $(R_p) = 6.0$

COMPONENT AMPLIFICATION FACTOR (a_p) = 2.5

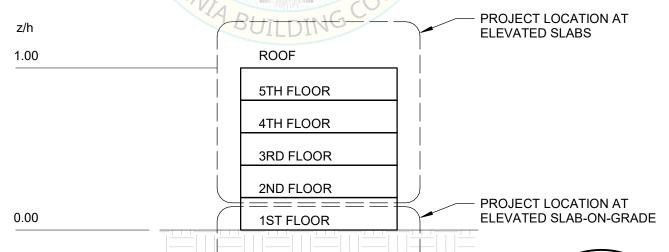
OVERSTRENGTH FACTOR (Ω) = 2.0

HORIZONTAL SEISMIC DESIGN FACTOR (Fp) = 0.9Wp (AT SLAB-ON-GRADE)

(Fp) = 1.5Wp (AT ELEVATED SLABS)

z/h = 1.0 AT ELEVATED SLABS,

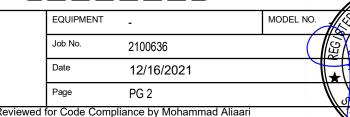
z/h = 0 AT SLABS-ON-GRADE





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COLD-FORMED STEEL (LIGHT GAGE METAL FRAMING)

- ALL LIGHT GAGE METAL FRAMING CONSTRUCTION SHALL BE IN ACCORDANCE WITH SECTION 2210A OF THE CODE AND AISI "SPECIFICATIONS FOR DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS".
- 2. ALL CALCULATED MEMBER PROPERTIES PER AISI SPECIFICATIONS ARE BASED ON THE FOLLOWING THICKNESS:

MINIMUM THICKNESS	IINIMUM THICKNESS REFERENCE GAGE	
43 MIL	18 GA	0.0451"
54 MIL	16 GA	0.0566"

3. ALL LIGHT GAGE METAL FRAMING SHALL BE GALVANIZED AND SHALL CONFORM WITH FOLLOWING THICKNESS:

GALVANIZED BACKING PLATES: 16 (54) GAGE (MILS)

OPM-0653

Mohammad Aliaari

ASTM A653 SQ, GR 50 (Fy = 50,000 PSI)

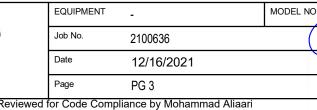
GALVANIZED END CLOSURES, BRIDGING AND ACCESSORIES 16 (54) GAGE (MILS)

ASTM A653 SQ, GR 50 (Fy = 50,000 PSI)

- 4. SCREW THREADS SHALL TAP INTO AND SHALL ENGAGE THE ENTIRE THICKNESS OF ALL PIECES BEING JOINED, AND NOT LESS THAN THREE COMPLETE THREADS SHALL PENETRATE BEYOND THE METAL JOINED. SELF-DRILLING SCREWS MAY BE USED PROVIDED THE DRILL POINT IS SIZED SO DRILLING IS COMPLETED BEFORE THE LEAD THREADS OF THE SCREW BEGIN ENGAGING METAL. WHERE THE DRAWINGS CALL FOR A SCREW SIZE THAT DOES NOT HAVE A DRILL POINT OF SUFFICIENT LENGTH, INCREASE THE SCREW SIZE TO COMPLY WITH THESE REQUIREMENTS. PRE-DRILLED HOLE DIAMETERS SHALL NOT EXCEED THE DIAMETER OF THE DRILL POINT FOR ANY SELF DRILLING SCREWS PROPOSED. OVER-SIZED PRE-DRILLED HOLES ARE NOT PERMITTED.
- 5. THE CONTRACTOR IS PROHIBITED FROM USING TORCHES TO BURN HOLES IN TRACKS OR STUD.



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TESTING CRITERIA FOR ANCHORS INSTALLED IN CONCRETE

- CONDUCT TESTING OF POST- INSTALLED ANCHORS PER SECTION 1910A.5 OF THE CODE.
- 2. WHERE THE MANUFACTURER'S INSTALLATION INSTRUCTIONS OR APPLICABLE ICC-ES EVALUATION SERVICES REPORT CALL FOR THE APPLICATION OF AN INSTALLATION TORQUE, THE SPECIFIED TORQUE SHALL BE APPLIED WITH A CALIBRATED TORQUE WRENCH. THE SPECIFIED INSTALLATION TORQUE SHALL NOT BE EXCEEDED.
- 3. THE SPECIAL INSPECTOR SHALL BE ON THE JOBSITE CONTINUOUSLY DURING ANCHOR INSTALLATIONS, UNLESS OTHERWISE NOTED IN ICC-ES ESR, TO VERIFY ANCHOR, ANCHOR DIMENSIONS, CONCRETE TYPE, CONCRETE COMPRESSIVE STRENGTH, HOLE DIMENSIONS, ANCHOR SPACING, EDGE DISTANCES, SLAB THICKNESS, ANCHOR EMBEDMENT, AND INSTALLATION TORQUE.
- 4. TEST LOAD: REQUIRED TEST LOADS SHALL BE DETERMINED BY ONE OF THE FOLLOWING METHODS:
 - A. TWICE THE MAXIMUM ALLOWABLE TENSION LOAD OR ONE AND A QUARTER (1 1/4) TIMES THE MAXIMUM DESIGN STRENGTH PROVIDED BY THE ICC REPORT OR DETERMINED PER ACI 318. THE TENSION TEST LOAD NEED NOT TO EXCEED 80 PERCENT OF THE NOMINAL YIELD STRENGTH OF THE ANCHOR (0.8 As Fy). SEE STRUCTURAL DETAILS FOR DESIGNBASED TENSION LOADS.
 - B. THE MANUFACTURER'S RECOMMENDED INSTALLATION TORQUE AS APPROVED BY THE ICC REPORT.
- 5. TENSION OR TORQUE TESTING OF POST-INSTALLED ANCHORS SHALL BE DONE IN THE PRESENCE OF THE SPECIAL INSPECTOR AND A REPORT OF THE TEST RESULTS SHALL BE SUBMITTED TO THE IOR AND ENFORCEMENT AGENCY.
- 6. THE SPECIAL INSPECTOR SHALL SELECT ANCHORS FOR TESTING AT RANDOM.
- 7. TEST FREQUENCY:

APPLICATION

NON-STRUCTURAL (SUCH AS EQUIPMENT ANCHORAGE)

QUANTITY

50%; ALTERNATING BOLTS IN A GROUP (TEST AT LEAST HALF OF THE ANCHORS IN GROUP)

EXCEPTIONS:

- A. UNDERCUT ANCHORS THAT ALLOW VISUAL CONFIRMATION OF FULL SET SHALL NOT REQUIRE TESTING.
- B. WHERE THE FACTOR DESIGN TENSION ON ANCHORS IS LESS THAN 100 LBS AND THOSE ANCHORS ARE CLEARLY NOTED ON THE APPROVED CONSTRUCTION DOCUMENTS, ONLY 10% OF THOSE ANCHORS SHALL BE TESTED.



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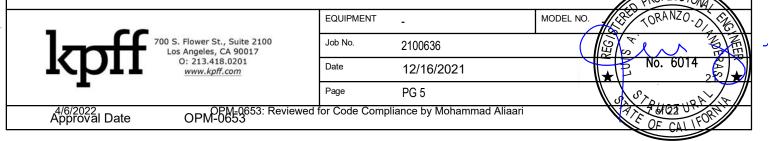




- C. WHERE ADHESIVE ANCHORS SYSTEMS ARE USED TO INSTALL REINFORCING DOWEL BARS IN HARDENED CONCRETE, ONLY 25 PERCENT OF THE DOWELS SHALL BE TESTED IF ALL OF THE FOLLOWING CONDITIONS ARE MET:
- THE DOWELS ARE USED EXCLUSIVELY TO TRANSMIT SHEAR FORCES ACROSS JOINTS BETWEEN EXISTING AND NEW CONCRETE.
- THE NUMBER OF DOWELS IN ANY ONE MEMBER EQUALS OR EXCEED 12.
- THE DOWELS ARE UNIFORMLY DISTRIBUTED ACROSS SEISMIC FORCE RESISTING MEMBERS (SUCH AS SHEAR WALLS, COLLECTORS, AND DIAPHRAGMS).
- D. TESTING OF SHEAR DOWELS ACROSS COLD JOINTS IN SLAB ON GRADE, WHERE THE SLAB IS NOT PART OF THE LATERAL FORCE-RESISTING SYSTEM SHALL NOT BE REQUIRED.
- E. TESTING IS NOT REQUIRED FOR POWER ACTUATED FASTENERS USED TO ATTACH TRACKS OF INTERIOR NON-SHEAR WALL PARTITIONS FOR SHEAR ONLY, WHERE THERE ARE AT LEAST THREE FASTENERS PER SEGMENT OF TRACK.
- 8. TEST METHOD: TEST LOADS MAY BE APPLIED BY ANY METHOD THAT WILL EFFECTIVELY TRANSMIT A MEASURABLE TENSION LOAD TO THE ANCHOR. ACCEPTABLE METHODS INCLUDE:
 - A. USE OF HYDRAULIC JACK, WHEREBY EITHER UNCONFINED OR CONFINED TESTING SHALL BE ACCEPTABLE;
 - B. USE OF CALIBRATED SPRING LOADED DEVICES; OR
 - C. USE OF A CALIBRATED TORQUE WRENCH FOR TORQUE-CONTROLLED EXPANSION ANCHORS.
- 9. TEST ACCEPTANCE CRITERIA: ACCEPTANCE CRITERIA FOR POST-INSTALLED ANCHORS SHALL BE BASED ON THE ICC REPORT OR MANUFACTURER'S WRITTEN INSTRUCTION AS ACCEPTABLE TO OSHPD. FIELD TEST SHALL SATISFY THE FOLLOWING MINIMUM REQUIREMENTS:
 - A. HYDRAULIC RAM METHOD: ANCHORS TESTED WITH A HYDRAULIC JACK OR SPRING LOADED DEVICES SHALL MAINTAIN THE TEST LOAD FOR A MINIMUM OF 15 SECONDS AND SHALL EXHIBIT NO DISCERNABLE MOVEMENT DURING THE TENSION TEST, E.G. AS EVIDENCED BY LOOSENING OF THE WASHER UNDER THE NUT. SCREW ANCHORS MAY BE LOOSENED A MAXIMUM ONE FULL TURN TO FACILITATE THE POSITIONING OF A TENSION TEST COLLAR.
 - B. TORQUE WRENCH METHOD: ANCHORS TESTED WITH A CALIBRATED TORQUE WRENCH MUST ATTAIN THE SPECIFIED TORQUE WITHIN HALF (1/2) TURN OF THE NUT.

EXCEPTIONS:

- WEDGE OR SLEEVE TYPE: ONE-QUARTER (1/4) TURN OF THE NUT FOR A 3/8 INCH ANCHOR ONLY.
- THREADED TYPE: ONE-QUARTER (1/4) TURN OF THE SCREW AFTER INITIAL SEATING OF THE SCREW HEAD.
- 10. IF ANY ANCHOR FAILS TESTING, TEST ALL ANCHORS OF THE SAME TYPE, INSTALLED BY THE SAME TRADE, AND NOT PREVIOUSLY TESTED UNTIL TWENTY (20) CONSECUTIVE ANCHORS PASS, THEN RESUME INITIAL TEST FREQUENCY.



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11. REQUIRED TORQUE TEST LOADS SHALL BE EQUAL TO THE MANUFACTURER'S RECOMMENDED INSTALLATION TORQUE PROVIDED IN THE ICC-ESR FOR THE SPECIFIC ANCHOR. TEST TORQUE VALUES ARE SUMMARIZED IN THE TABLE BELOW:

NOMINAL ANCHOR	INSTALLATION TORQUE (FT-LBS)	
DIAMETER	CS HILTI KWIK-BOLT TZ2	
INCHES	(ICC ES ESR-4266)	
1/4	4	
3/8	30	
1/2	50	
5/8	40	
3/4	110	

NOMINAL ANCHOR	INSTALLATION TORQUE (FT-LBS)	
DIAMETER		
INCHES	(ICC ES ESR-4266)	0653
1/4	6	
3/8	30 BY: Mohamr	nad Aliaari
1/2	40	
5/8	60 DATE: 04/	06/2022
3/4	125	

12. TENSION TEST VALUES FOR ADHESIVE ANCHORS IN CONCRETE ARE NOTED IN DETAILS.

VIA BUILDING CO

kpff^{*}

700 S. Flower St., Suite 2100 Los Angeles, CA 90017 O: 213.418.0201 www.kpff.com

OPM-0653: Reviewed

	EQUIPMENT	-	MC
Job No. Date		2100636	
		12/16/2021	
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PLAN VIEW AT ELEVATED SLAB CONDITION



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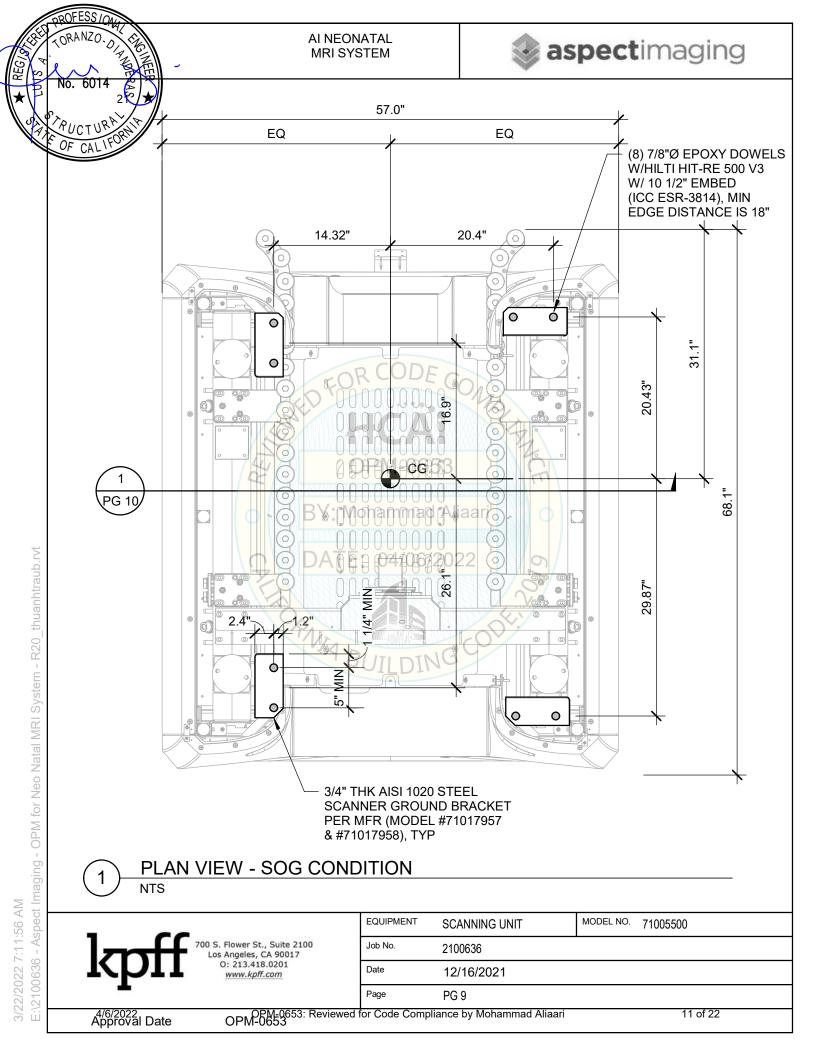
EQUIPMENT	SCANNING UNIT	MODEL NO.	71005500
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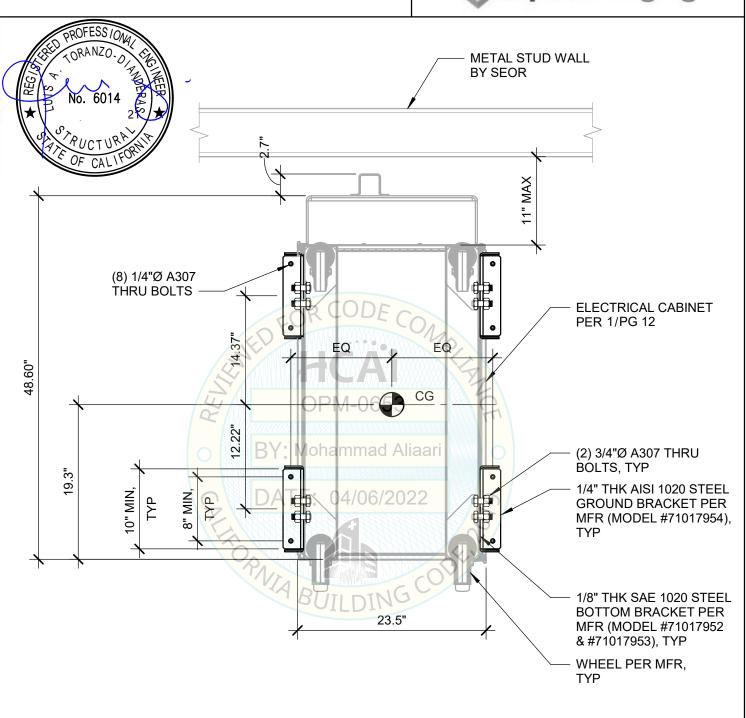


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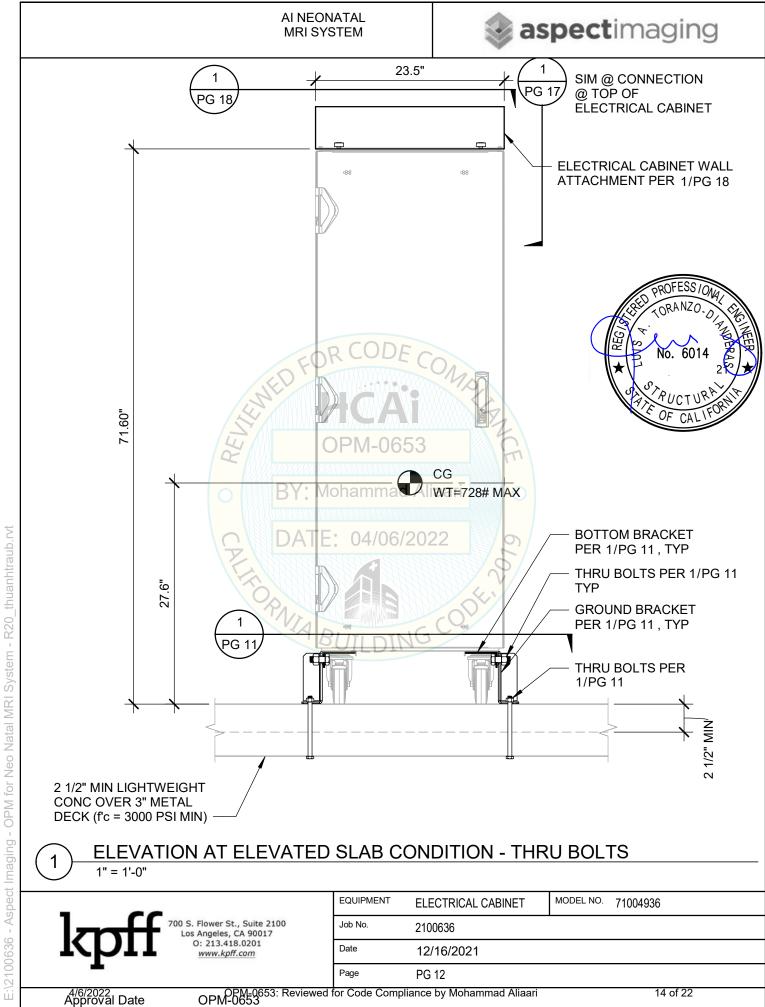


1 PLAN (BASE) AT ELEVATED SLAB CONDITION - THRU BOLTS



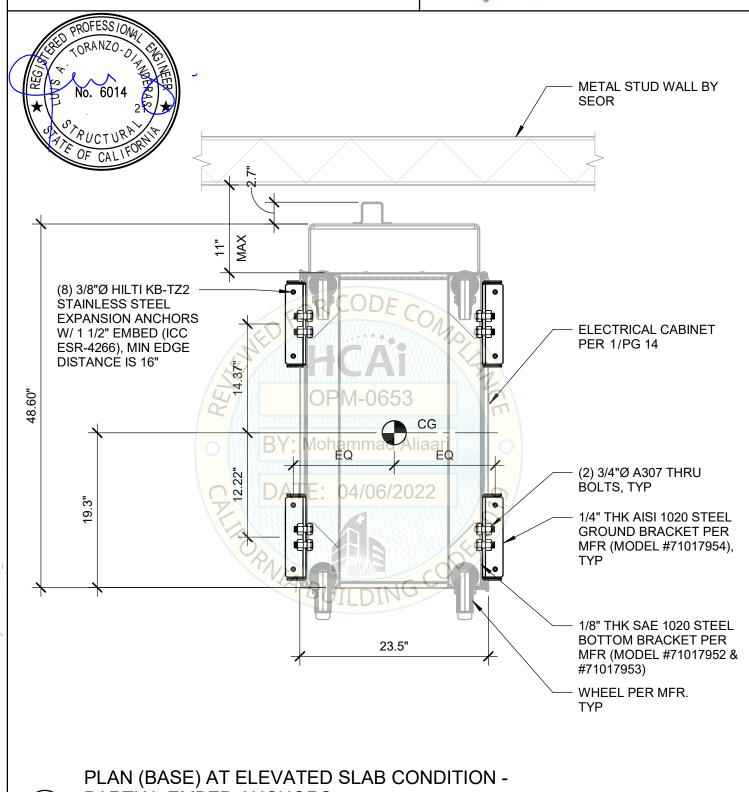
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PARTIAL EMBED ANCHORS

1" = 1'-0"

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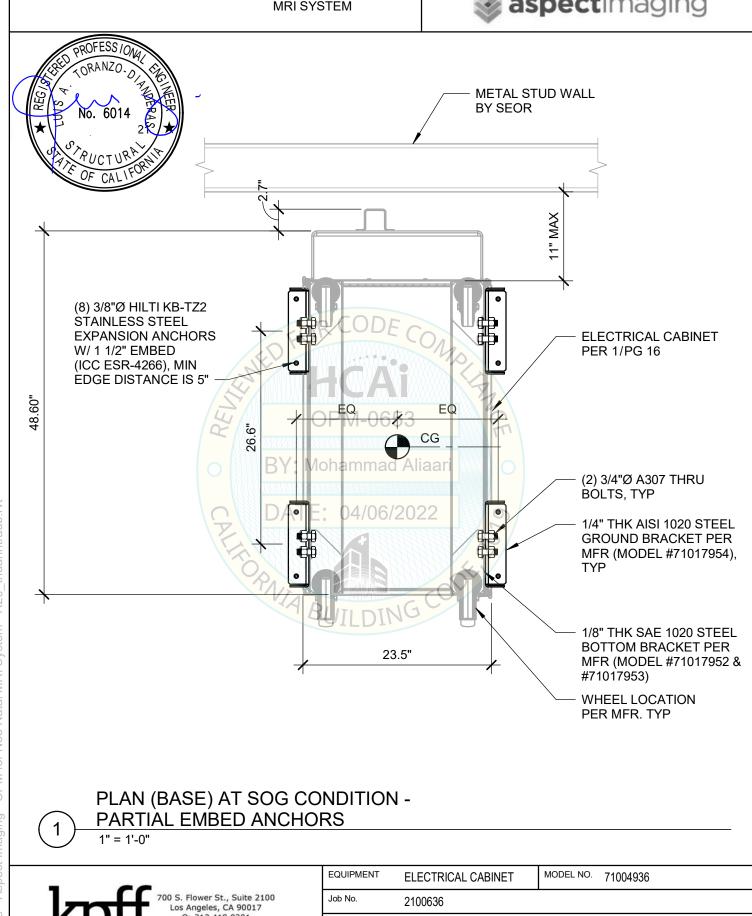
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AI NEONATAL

MRI SYSTEM



ELEVATION AT SOG CONDITION - PARTIAL EMBED ANCHORS

1" = 1'-0"



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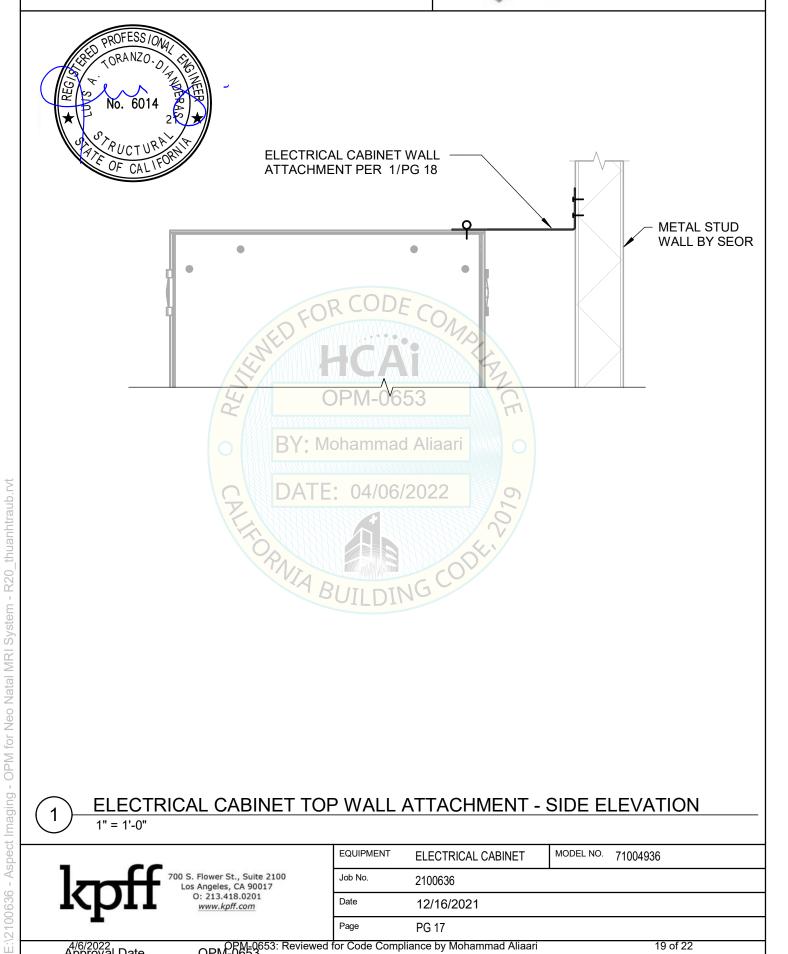
-1" MIN

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aspectimaging



ELECTRICAL CABINET TOP WALL ATTACHMENT - SIDE ELEVATION 1" = 1'-0"

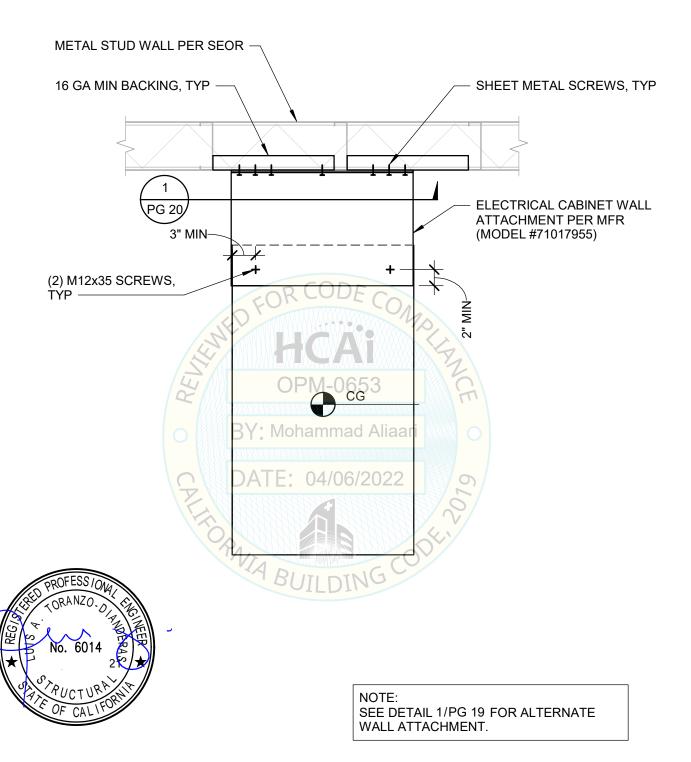


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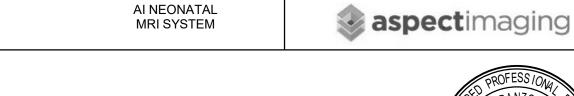
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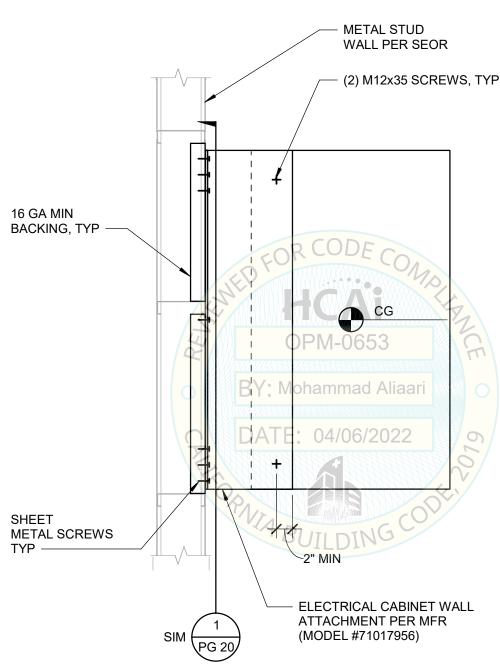


1 PLAN (TOP) WALL ATTACHMENT - ATTACHED TO BACK



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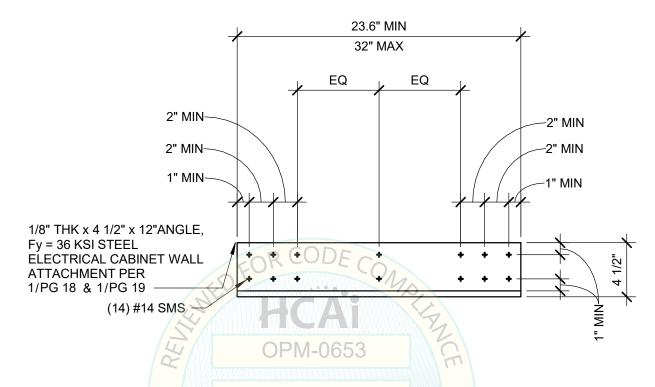








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ELECTRICAL CABINET WALL ATTACHMENT DETAIL

1 1/2" = 1'-0"

DATE: 04/06/2022





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