

DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION OFFICE OF STATEWIDE HOSPITAL PLANNING AND DEVELOPMENT

APPLICATION FOR HCAI PREA	OFFICE USE ONLY APPLICATION #: OPM-0734								
MANUFACTURER'S CERTIFICA									
HCAI Preapproval of Manufacturer's Certification (OPM)									
Type: X New Renewal/Update									
Manufacturer Information									
Manufacturer: Door Systems, Inc									
Manufacturer's Technical Representative: Jeff I	Bonnema								
Mailing Address: 1150 Las Brisas Place, Placentia, CA 92870									
Telephone: (714) 258-7100	Email: jeff@doorsysinc.com								
· ·	OFOR CODE COMP								
Product Information									
Product Name: DSI-HS10B HOSE STREAM RA	ATED SMOKE & FIRE CURTAIN	2							
Product Type: other mechanical or electrical co	omponents	mi l							
Product Model Number: DSI-HS10B	3Y ∙ William Staehlin								
General Description: smoke and fire containment	ent system at elevator door and la	rge <mark>open</mark> ings, from 16 ft to 984 ft.							
	DATE: 1 1001/2024	2							
12.11		6							
Applicant Information									
Applicant Company Name: EASE LLC.		<u> </u>							
Contact Person: Tiffany Tonn	BUILDING								
Mailing Address: 1515 FAIRVIEW AVE, STE 2	05, MISSOULA, MT 59801								
Telephone: (406) 541-3273	Email: tiffany@easeco.com								

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HC

STATE OF CALIFORNIA - HEALTH AND HUMAN SERVICES AGENCY

Title: Office Assistant



DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION OFFICE OF STATEWIDE HOSPITAL PLANNING AND DEVELOPMENT

Registered Design Professonal Preparing Engineering Recommendations								
Company Name: EASE LLC								
Name: Jonathan Roberson California License Number: S4197								
Mailing Address: 5877 Pine Ave., Suite 210, Chino Hills, CA 91709								
Telephone: (951) 295-1892 Email: jon@EASECo.com								
HCAI Special Seismic Certification Preapproval (OSP)								
Special Seismic Certification is preapproved under OSP OSP Number:								
OR CODE CO								
Certification Method								
Testing in accordance with:								
Other(s) (Please Specify):								
*Use of criteria other than those adopted by the California Building Standards Code, 2022 (CBSC 2022) 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 2022 may be used when approved by HCAI prior to testing.								
X Analysis								
Experience Data DATE: 1-EGJ/2024								
Combination of Testing, Analysis, and/or Experience Data (Please Specify):								
CODE:								
HCAI Approval								
Date: 8/29/2024								
Name: William Staehlin Title: Senior Structural Engineer								
Condition of Approval (if applicable):								

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STATE OF CALIFORNIA - HEALTH AND HUMAN SERVICES AGENCY



5877 Pine Ave, Ste. 210 Chino Hills, CA. 91709 Phn: (909) 606-7622

The Department of Health Care Access and Information
PREAPPROVAL OF MANUFACTURER'S CERTIFICATION
OPM-0734

THIS PREAPPROVAL CONFORMS TO THE 2022 CALIFORNIA BUILDING CODE

MANUFACTURER: DOOR SYSTEMS INC

Sheet: 1 of 16

EQUIPMENT NAME:

DSI-HS10B HOSE STREAM RATED SMOKE & FIRE CURTAIN

Date: 8/28/24

GENERAL NOTES

- 1. THIS HCAI PREAPPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE 2022 CBC. THE DEMANDS (DESIGN FORCES) FOR USE WITH THIS OPM SHALL BE BASED ON THE 2022 CBC
- 2. THIS DOCUMENT MAY ONLY BE USED WITH THE EXPRESS WRITTEN CONSENT OF THE MANUFACTURER LISTED ABOVE FOR THE SPECIFIC PROJECT SITE AND INSTALLATION LOCATION. THIS DOCUMENT IS INVALID WITHOUT SUCH CONSENT.
- 3. THIS PREAPPROVAL CONFORMS TO THE 2022 CALIFORNIA BUILDING CODE WHERE SDS IS NOT GREATER THAN 2.00, 2.30.
- 4. FORCES PER ASCE 7-16 SECTION 13.3.1, EQUATIONS 13.3-1, 13.3-2 & 13.3-3,
 - WHERE SDS = 2.00 a_p = 1.0, l_p = 1.5, R_p = 1.5, z/h < 1 CONCRETE WALL. SEE FOLLOWING SHEETS FOR Ω_0
 - WHERE SDS = 2.30 a_p = 1.0, l_p = 1.5, R_p = 1.5, z/h < 1 CONCRETE WALL. SEE FOLLOWING SHEETS FOR Ω_0
- 5. THIS PREAPPROVAL COVERS ONLY THE SUPPORTS AND ATTACHMENTS OF THE EQUIPMENT TO THE STRUCTURE.
- 6. ALL DESIGN FORCES SHOWN ON THE DRAWINGS ARE FACTORED LOADS THAT SHALL BE USED FOR STRENGTH DESIGN.
- 7. SHEET METAL SCREWS SHALL BE TEKS SCREWS BY ITW BUILDEX (ICC ESR-1976).
- 8. CONCRETE WALL DETAIL VALID FOR DEMANDS SHOWN AT ANY ELEVATION. (i.e. z/h < 1)
- 9. REFER TO ESR-4761 FOR DSI 600 SYSTEM'S FIRE AND SMOKE PROTECTION APPROVAL.

10. RESPONSIBILITIES OF THE STRUCTURAL ENGINEER OF RECORD OF THE BUILDING

- A. PROVIDE SUPPORTING STRUCTURE TO SUPPORT WEIGHTS AND FORCES SHOWN IN ADDITION TO ALL OTHER LOADS.
- B. VERIFY THAT THE INSTALLATION IS IN CONFORMANCE WITH THE 2022 CBC AND WITH THE DETAILS, MATERIAL AND GAGE OF THE UNIT WHERE ATTACHMENTS ARE MADE AGREE WITH THE INFORMATION SHOWN ON THE PREAPPROVAL DOCUMENTS.
- C. VERIFY THAT PROJECT SPECIFIC VALUES OF SDS & z/h RESULT IN SEISMIC FORCES (Eh, Ev) THAT DO NOT EXCEED THE VALUES ON THE DETAILS.
- D. VERIFY THAT THE CONCRETE WALL TO WHICH THE EQUIPMENT IS ANCHORED MEETS THE REQUIREMENTS OF THE APPLICABLE ICC ESR AND THIS OPM.
- E. VERIFY THAT THE ANCHORS ARE AN ADEQUATE DISTANCE FROM ANY CONCRETE WALL EDGES OR OPENINGS (SEE TYPICAL DETAIL ON SHEET 2).
- F. VERIFY THAT ALL NEW OR EXISTING ANCHORS ARE AN ADEQUATE DISTANCE FROM THE UNIT ATTACHMENTS AND CHECK FOR INTERACTION WHERE OTHER ANCHORS ARE WITHIN 18" OR 6hef FROM THIS UNIT'S ANCHORS.
- G. DESIGN BACKING BARS, STUDS, ETC. WHICH THE UNITS ARE ATTACHED TO AS NOTED ON THE DRAWINGS.



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DOOR SYSTEMS INC

DSI-HS10B HOSE STREAM RATED SMOKE & FIRE CURTAIN DES. J. ROBERSON 11-2404 JOB NO. 8/28/24

DATE

SHEET

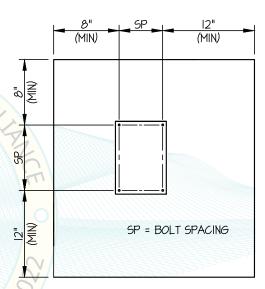
SHEETS

11. EXPANSION ANCHORS:

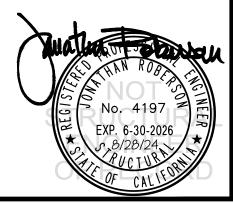
A. ATTACHMENT IS TO BE MADE WITH THE ANCHORS LISTED BELOW AND INSTALLED AS DESCRIBED IN THE CORRESPONDING ICC REPORT.

Anchor Diameter	Concrete Type	Min. f'c (psi)	Anchor Type	ICC Report No.	Min. Embed.	Min. Spacing	Min. + Edge Dist.	Min. Conc. Thickness	Torque Test	Direct Tension
3/8"	Normal Weight	3000	Hilti Kwik Bolt TZ2	ESR-4266	2"	6"	8"	4"	30 FT-LB	1982 lb

- B. THIS PREAPPROVAL ALLOWS FOR UP TO A MAXIMUM OF 2 ADJACENT CONCRETE SLAB EDGES, 8" AWAY MINIMUM (i.e. - CORNER). SEE ADJACENT DETAIL FOR ADDITIONAL MINIMUM ALLOWABLE CONCRETE EDGE DISTANCES.
 - + FOOTNOTE: MINIMUM ALLOWABLE EDGE DISTANCE OF 2.5" AT GUIDE **RAILS ONLY**
- C. TESTING AND SPECIAL INSPECTION OF EXPANSION ANCHORS SHALL BE PERFORMED BY AN APPROVED INDEPENDENT AGENCY EMPLOYED BY THE FACILITY OWNER PER CBC 1704A & 1910A.5 AND CAC 7-149, ALL REPORTS SHALL BE SENT TO THE INSPECTOR OF RECORD, OWNER AND THE ARCHITECT OR ENGINEER IN achlin RESPONSIBLE CHARGE.
 - (i) AFTER AT LEAST 24 HOURS HAVE ELAPSED SINCE INSTALLATION. DIRECT PULL TENSION TEST AT LEAST 50% OF THE ANCHORS.
 - (ii) ACCEPTANCE CRITERIA:
 - DIRECT TENSION TEST: THE ANCHOR SHOULD HAVE NO OBSERVABLE MOVEMENT AT THE TEST LOAD, A PRACTICAL WAY TO DETERMINE OBSERVABLE MOVEMENT IS THAT THE WASHER BECOMES LOOSE.
 - TORQUE TEST: THE APPLICABLE TORQUE MUST BE ACHIEVED WITHIN THE FOLLOWING LIMITS: WEDGE TYPE: 1/2 TURN OF THE NUT
 - (iii) IF ANY ANCHOR FAILS, TEST ALL ANCHORS.



TYPICAL CONCRETE EDGE DETAIL



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DER. J. ROBERSON

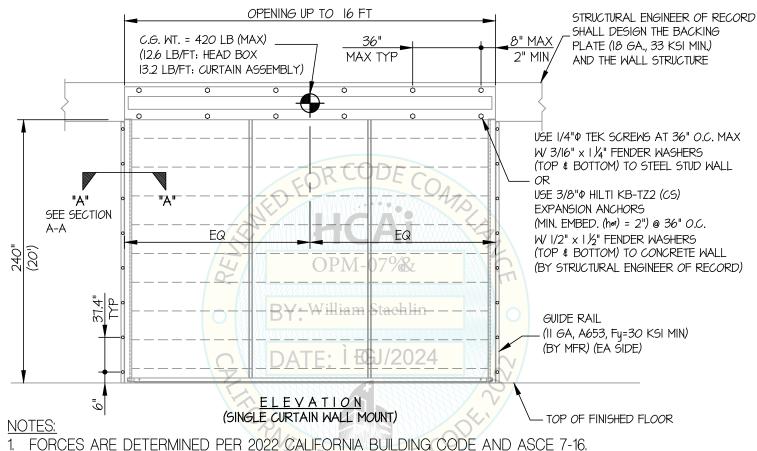
11-2404

8/28/24 DATE

SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

WALL MOUNTED



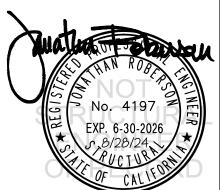
STRENGTH DESIGN IS USED. (EXAMPLE: SDS = 2.00, 2p = 1.0, p = 1.5, Rp = 1.5, $\Omega_0 = 2.0$, z/h < 1)

HORIZONTAL FORCE (En) = 2.40 Wp

HORIZONTAL FORCE (Emh) = 4.80 Wp (FOR CONCRETE ANCHORAGE)

VERTICAL FORCE (Ev) = 0.40 Wp

- 2. THIS PREAPPROVA ENCOMPASSES WEIGHTS AND VERTICAL C.G. POSITIONS NOT EXCEEDING VALUES SHOWN.
- 3. THIS PREAPPROVA WAS PREPARED WITHOUT KNOWLEDGE OF ANY SITE CONDITION. COMPATIBILITY FOR USE WITH A SITE SHALL BE EVALUATED BY THE STRUCTURAL ENGINEER OF RECORD OF THE INSTALLATION (SEOR), USE REQUIRES APPROVAL BY THE SEOR.
- 4. STRUCTURAL ENGINEER OF RECORD FOR THE INSTALLATION SHALL VERIFY ALL CONDITIONS, EVALUATE INTERACTION WITH ADJACENT EQUIPMENT AND ANCHORS, AND PROVIDE SUPPORT STRUCTURE DESIGNED TO SUPPORT WEIGHTS AND FORCES SHOWN IN COMBINATION WITH ALL OTHER LOADS THAT MAY BE PRESENT.
- SEE GENERAL NOTES: SHEETS 1 AND 2



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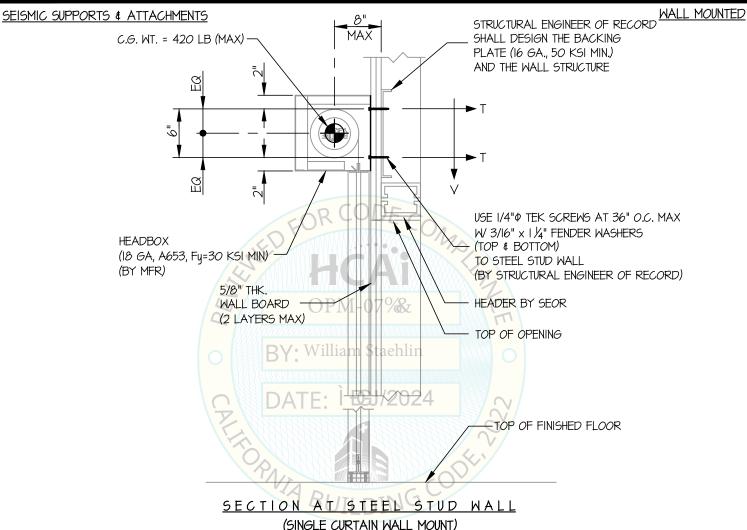
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SHEET

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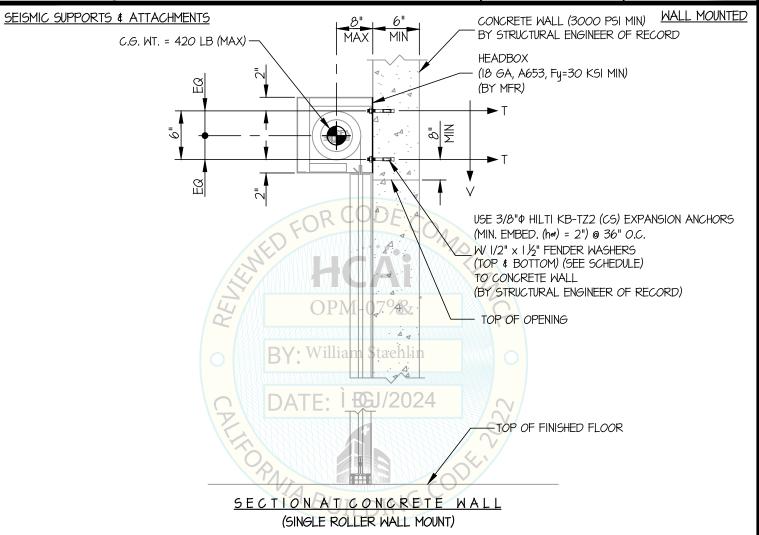
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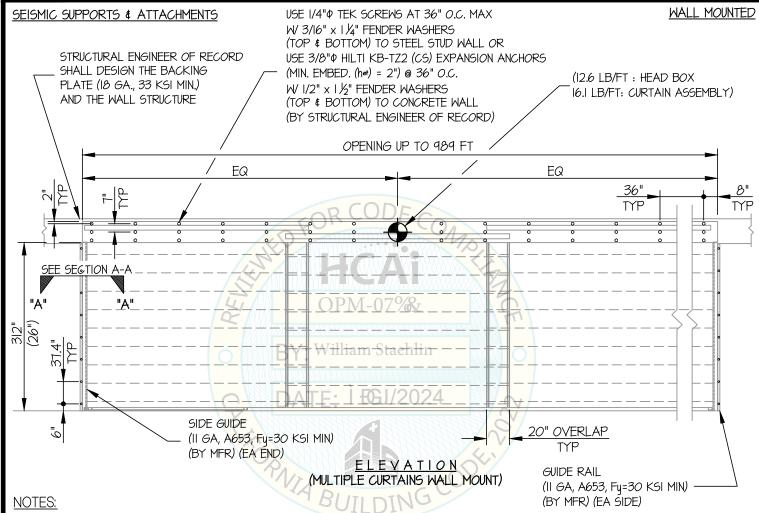
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DATE 8/28/24

SHEET

16 _{SHEETS}



1. FORCES ARE DETERMINED PER 2022 CALIFORNIA BUILDING CODE AND ASCE 7-16. STRENGTH DESIGN IS USED. (EXAMPLE: SDS = 2.30, 2p = 1.0, 1p = 1.5, 2p = 1.5, 2p = 2.0, 2p = 2.0, 2p = 1.5, 2p

HORIZONTAL FORCE (Eh) = 2.76 Wp

HORIZONTAL FORCE (Emh) = 5.52 Wp (FOR CONCRETE ANCHORAGE)

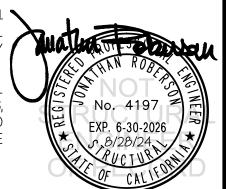
VERTICAL FORCE (Ev) = 0.46 Wp

2. THIS PREAPPROVA ENCOMPASSES WEIGHTS AND VERTICAL C.G. POSITIONS NOT EXCEEDING VALUES SHOWN.

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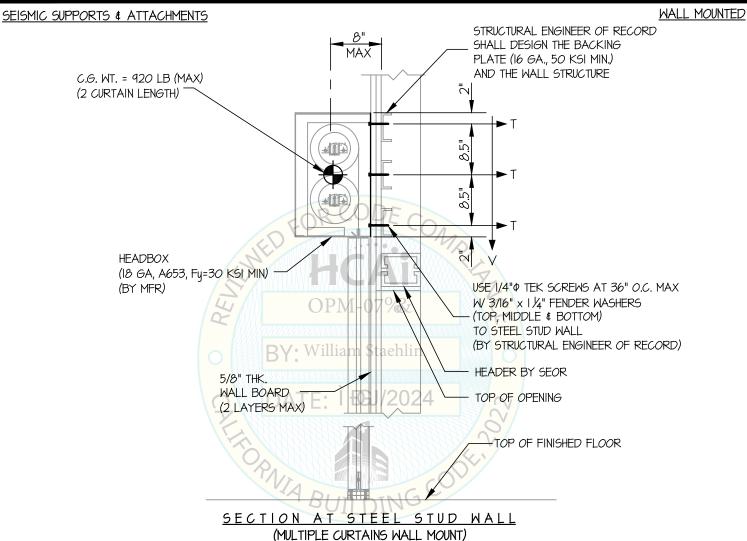
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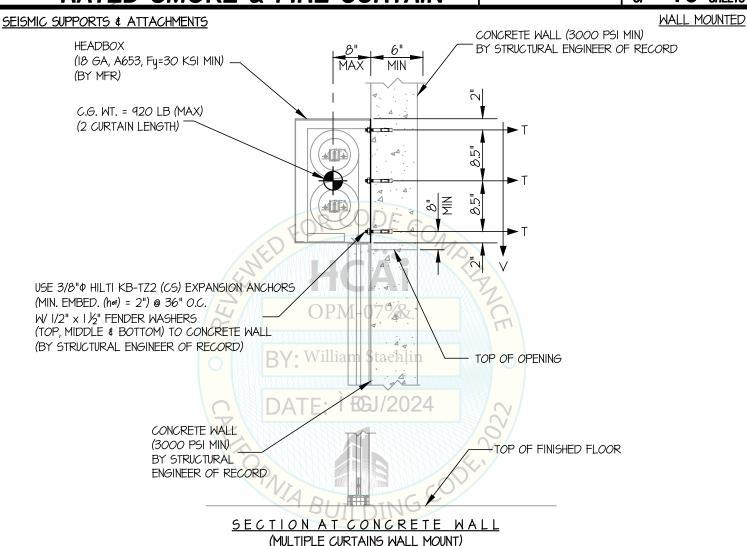
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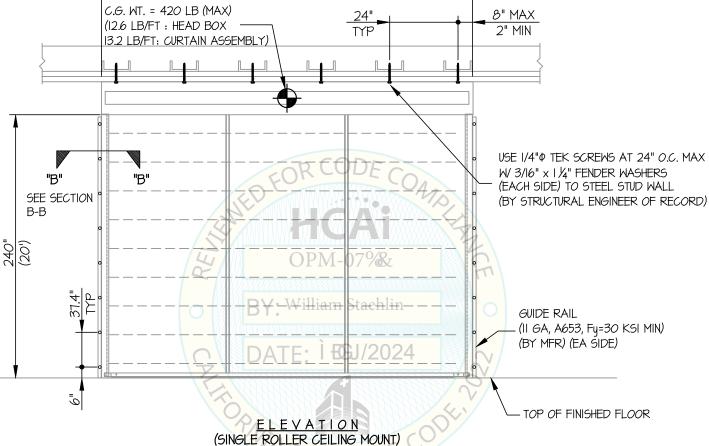
SHEET

SHEETS

WALL MOUNTED

SEISMIC SUPPORTS & ATTACHMENTS

OPENING UP TO 16 FT 8" MAX 2" MIN



NOTES:

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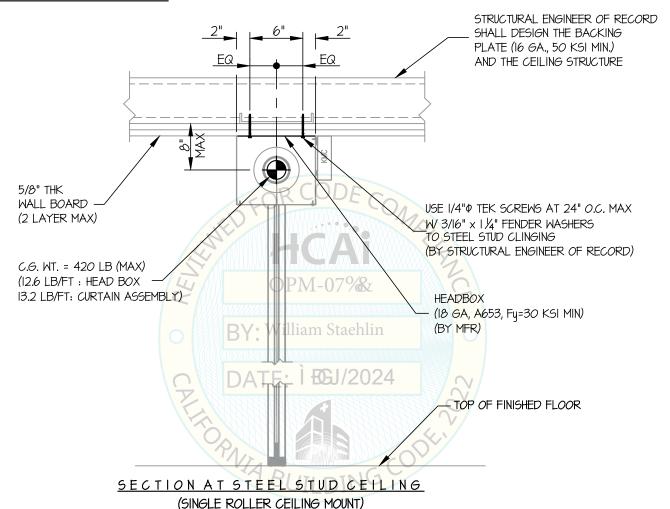
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SEISMIC SUPPORTS & ATTACHMENTS





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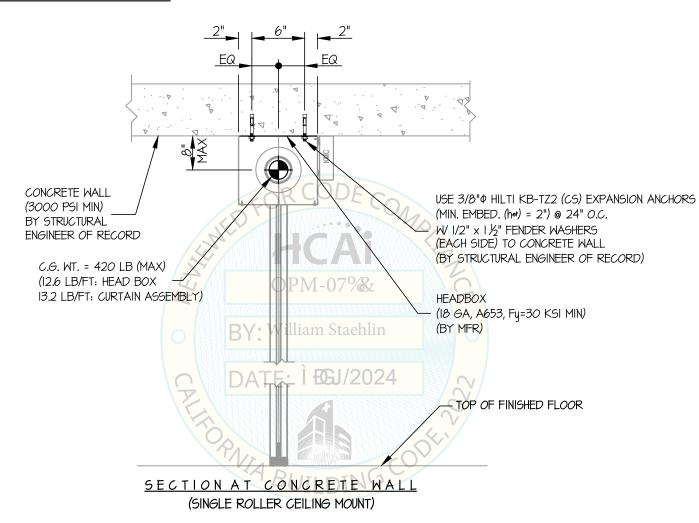
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SHEET 1 1

of 16 SHEETS

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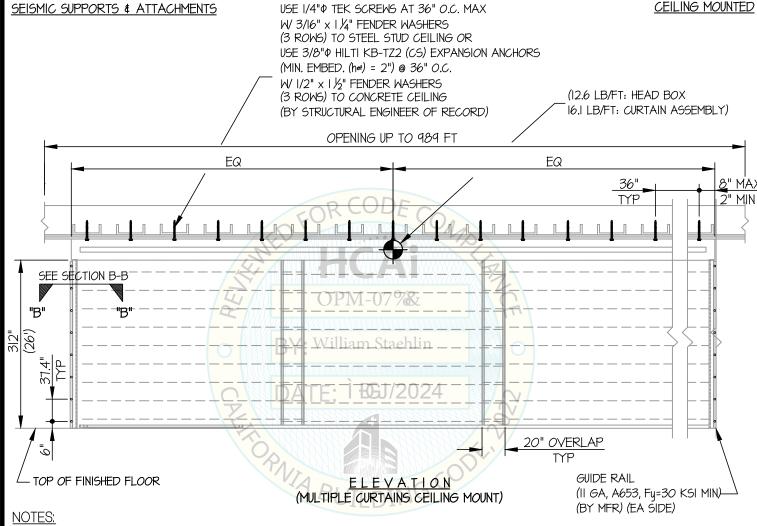
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SHEET

SHEETS



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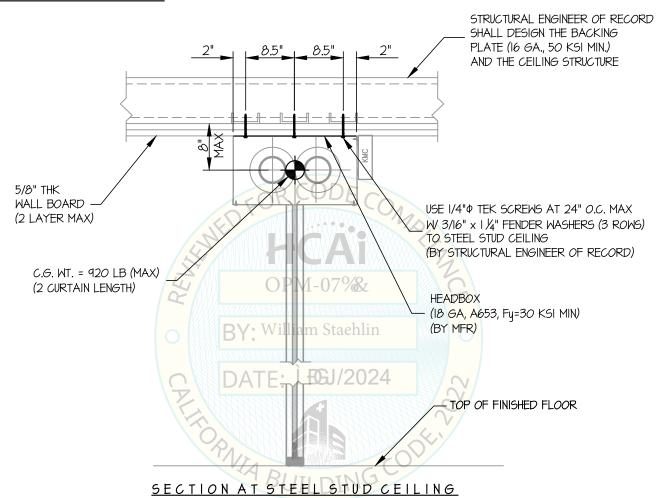
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SEISMIC SUPPORTS & ATTACHMENTS

CEILING MOUNTED



(MULTIPLE CURTAINS CEILING MOUNT)



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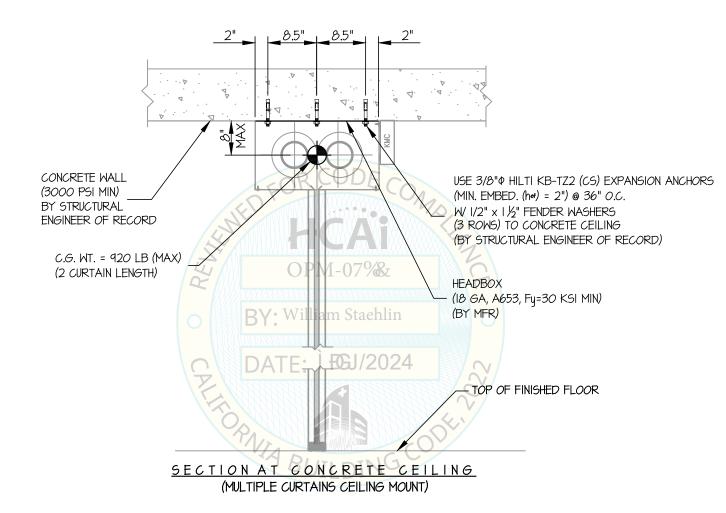
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SEISMIC SUPPORTS & ATTACHMENTS





EQUIPMENT ANCHORAGE & SEISMIC ENGINEERING www.EquipmentAnchorage.com

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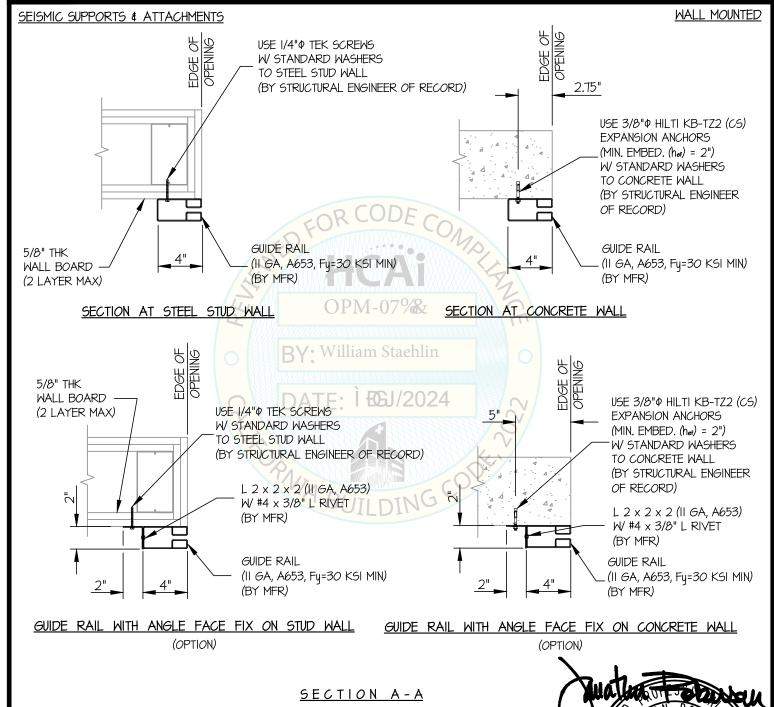
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No. 4197 EXP. 6-30-2026

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