APPLICATION FOR HCAI PREAPPROVAL OF MANUFACTURER'S CERTIFICATION (OPM)

OFFICE USE ONLY

APPLICATION #: OPM-0641

HCAI Preapproval of Manufacturer's Certification (OPM)

Type: ☐ New ☒ Renewal/Update

Manufacturer Information

Manufacturer: Modular Services Company

Manufacturer's Technical Representative: Sean Flanagan

Mailing Address: 500 E. Britton Rd, Oklahoma City, OK 73114

Telephone: (405) 471-9100 Email: sflanagan@modularservices.com

Product Information

Product Name: Form/Method/H-CORE Wall/Floor Headwall

Product Type: Other electrical and mechanical components

Product Model Number: N/A

General Description: Medical headwall providing med gas and electrical services

REVIEWED FOR CODE COMPLIANCE
HCAI
OPM-0641
BY: Timothy Piland
DATE: 09/02/2025
CALIFORNIA BUILDING CODE

Applicant Information

Applicant Company Name: Modular Services Company

Contact Person: Sean Flanagan

Mailing Address: 500 E. Britton Rd, Oklahoma City, OK 73114

Telephone: (405) 471-9100 Email: sflanagan@modularservices.com

Title: Sr. Product Development Engineer

Registered Design Professonal Preparing Engineering Recommendations

Company Name: CYS STRUCTURAL ENGINEERS, INC.

Name: Dieter Siebald California License Number: S4346

Mailing Address: 2710 Gateway Oaks Drive, Suite 190N, Sacramento, CA 95833

Telephone: (916) 920-2020 Email: dieters@cyseng.com

Certification Method

Testing in accordance with: ☐ ICC-ES AC156 ☐ FM 1950 ☐ ASHRAE 171 ☐ FEMA 461

☐ Other(s) (Please Specify):

*Use of criteria other than those adopted by the California Building Standards Code, 2025 (CBSC 2025) 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 2025 may be used when approved by HCAI prior to testing.

☒ Analysis

☐ Experience Data

☐ Combination of Testing, Analysis, and/or Experience Data (Please Specify):

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BY: Timothy Piland
DATE: 09/02/2025
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HCAI Approval

Date: 9/2/2025

Name: Timothy Piland Title: Senior Structural Engineer

Condition of Approval (if applicable):

MODULAR SERVICES COMPANY

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OPM–0641

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NOTES:

1. THESE DRAWINGS ARE PREPARED FOR MODULAR SERVICES COMPANY, OKLAHOMA CITY, OK.

2. THE CONTRACTOR AND INSPECTOR OF RECORD SHALL OBTAIN A COPY OF THIS PRE–APPROVAL FROM THE DEPARTMENT OF HEALTH CARE ACCESS & INFORMATION (HCAI) OFFICE OF STATEWIDE HOSPITAL PLANNING AND DEVELOPMENT (OSHPD) PRE–APPROVAL PROGRAMS WEBSITE.

3. THIS PRE–APPROVAL COVERS THE SUPPORTS AND ATTACHMENTS OF THE HEADWALL TO THE SUPPORTING STRUCTURE. THE HEADWALL IS SUPPLIED BY THE MANUFACTURER. THE SCREWS, CONCRETE ANCHORS & SUPPORTING FRAMING SHOWN IN THIS OPM SHALL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR, UNLESS NOTED OTHERWISE.

4. NO COMPONENTS, CABINETS, SHELVES, ETC. SHALL BE SUPPORTED BY OR ATTACHED TO THE HEADWALL UNIT EXCEPT THOSE THAT MEET THE REQUIREMENTS OF THIS OPM & ARE ATTACHED TO THE MANUFACTURER PROVIDED CHANNELS NOTED IN THESE DRAWINGS.

5. ARCHITECTURAL & FIRE LIFE SAFETY CODE COMPLIANCES TO BE REVIEWED AT PROJECT SUBMITTAL. THIS OPM IS FOR STRUCTURAL REVIEW OF SUPPORT AND ATTACHMENT ONLY.

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OPM-0641
BY: Timothy Piland
DATE: 9/2/2025
CALIFORNIA BUILDING CODE 2022

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: TABLE OF CONTENTS

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www.cyseng.com

Job No:	25020
Date:	08-06-2025
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FORM / METHOD / H-CORE
WALL / FLOOR MOUNTED HEADWALL

MODULAR SERVICES COMPANY

GENERAL NOTES:

1. THIS HCAI PRE-APPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE CBC 2025. THE DEMAND (DESIGN FORCES) FOR USE WITH THIS OPM MUST BE BASED ON CHAPTER 16A OF THE CBC 2025.
2. IT IS THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER OF RECORD (SEOR) FOR A SITE SPECIFIC PROJECT TO VERIFY:
   - A. THE ADEQUACY OF THE NEW OR (E) STRUCTURE TO RESIST THE FORCES & WT SPECIFIED FOR EA HEADWALL IN ADDITION TO ALL OTHER LOADS. PROVIDE & DESIGN SUPPLEMENTARY MEMBERS AS REQ.
   - B. THAT THE INSTALLATION IS IN CONFORMANCE W/ THE APPLICABLE PORTIONS OF CHAPTERS 16A, 17A, 19A & 22A IN THE CBC 2025 & W/ THE DETAILS SHOWN IN THIS PRE-APPROVAL.
   - C. THAT THE ACTUAL HEADWALL'S WT, CENTER OF GRAVITY (CG) LOCATION, ANCHOR LOCATIONS, ANCHOR DTLS, ATTACHMENT LOCATIONS, ATTACHMENT DETAILS, & THE MATERIAL & GA OF THE HEADWALL WHERE ATTACHMENTS ARE MADE, AGREE W/ THE INFO SHOWN ON THE PRE-APPROVAL DOCUMENTS.
   - D. THAT THE PROJECT SPECIFIC VALUES OF S_{DS} & $Hf/R\mu$ RESULT IN SEISMIC FORCES THAT DO NOT EXCEED THE VALUES PROVIDED IN THE DESIGN CRITERIA.
   - E. THAT THE FLR ANCHORS ARE LOCATED AT AN ADEQUATE DISTANCE FROM ANY SLAB EDGES OR OPGS.
   - F. THAT THE FLR ANCHORS ARE LOCATED AT AN ADEQUATE DISTANCE FROM ANY NEW OR EXISTING ANCHORS. THE SPCG SHOWN IN THE EXPANSION ANCHOR TABLE ON PG 3 IS THE REQ MIN SPCG OF THE GIVEN DIA ANCHORS. THE REQ SPCG FROM ANCHORS OF OTHER DIAMETERS & EMBEDMENTS MAY VARY & SHALL BE EVALUATED BY THE SEOR.
   - G. THAT THE CONC SLAB TO WHICH THE EQUIP IS ANCHORED SHALL MEET THE REQUIREMENTS OF THE APPLICABLE ICC REPORT & THIS OPM.
3. EXPANSION ANCHORS INSTALLED IN NWC OR SLWC SHALL BE CARBON STEEL HILTI KB-TZ2 EXPANSION ANCHORS AS NOTED COMPLYING W/ ESR-4266 MOST RECENT EDITION.
   - A. INSTALLATION: INSTALL THE EXPANSION ANCHORS IN ACCORDANCE W/ THE REQUIREMENTS GIVEN IN THE ICC EVALUATION REPORT FOR THE SPECIFIC ANCHOR & THE PARAMETERS GIVEN IN THE EXPANSION ANCHOR TABLE ON PG 3.
   - B. JOB TESTING: FOR VERIFYING SATISFACTORY INSTALLATION WORKMANSHIP, PERFORM JOBSITE TESTING IN ACCORDANCE W/ THE EXPANSION ANCHOR TABLE PROVIDED IN THIS DOCUMENT. TORQUE TEST 50% OF THE INSTALLED ANCHORS. ALL TESTS SHALL BE CONDUCTED IN THE PRESENCE OF THE SPECIAL INSPECTOR & REPORT OF TEST RESULTS SHALL BE SUBMITTED TO HCAI. IF ANY ANCHOR FAILS THE TEST, TEST ALL ANCHORS. THE TEST SHALL BE PERFORMED 24 HOURS OR MORE AFTER INSTALLATION. TESTING MAY BE DONE PRIOR TO EQUIP INSTALLATION, HOWEVER NUT SHALL BE RETORQUED TO INSTALLATION TORQUE AFTER EQUIPMENT INSTALL. ALSO REFER TO 2025 CBC 1910A.5 "TESTS FOR POST-INSTALLED ANCHORS IN CONCRETE". REPORT OF TEST RESULTS SHALL BE SUBMITTED TO HCAI.
   - C. FAILURE/ACCEPTANCE CRITERIA: THE FOLLOWING CRITERIA APPLY FOR THE ACCEPTANCE OF INSTALLED ANCHORS:
     - TORQUE WRENCH METHOD: THE APPLICABLE TEST TORQUE MUST BE REACHED WITHIN THE FOLLOWING LIMITS:
       WEDGE TYPE: ONE-HALF (½) TURN OF THE NUT.
   - D. AVOID DAMAGING (E) STL REINFORCEMENT IN CONC SLAB WHEN INSTALLING CONC EXPANSION ANCHORS.
   - E. PROVIDE FOR FULL THREAD ENGAGEMENT OF NUT & WASHER.

ICAI OPM 0641 BY Timothy Piland DATE: 08/29/2025 CALIFORNIA BUILDING CODE COMPLIANCE

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SHEET TITLE: GENERAL NOTES

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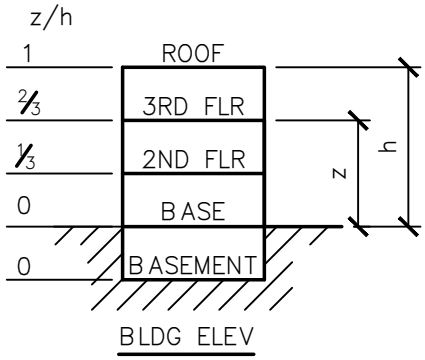
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MODULAR SERVICES COMPANY

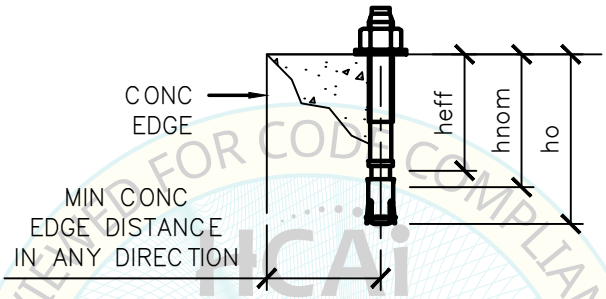
GENERAL NOTES CONTINUED:

4. TWO (2) CASES OF ATTACHMENT ARE SPECIFIED & PRESENTED IN THIS PRE-APPROVAL:



CASE 1: ATTACHMENT DETAILS LOCATED AT UPPER FLRS ABV THE BASE OF A BLDG. THE FLRS ARE ASSUMED TO BE BUILT OF A MIN 3¼" SLWC TOPPING OVER 3" DEEP MIN 20 GA MTL DECK (f'c= 3000 PSI MIN). ANCHORS SHALL BE CARBON STEEL & INTO CONC FILL

CASE 2: ATTACHMENT DETAILS LOCATE AT OR BLW THE BASE OF A BLDG. THE FLRS ARE ASSUMED TO BE BUILT OF A MIN 4" NWC SLAB (f'c= 3000 PSI MIN). ANCHORS SHALL BE CARBON STEEL.



EXPANSION ANCHOR TABLE

CONDITION OF ANCHORAGE	ANCHOR DIA & TYPE (INCH)	INSTALLATION EMBED (INCH) hnom	EFFECTIVE EMBED (INCH) hef	HOLE DEPTH (INCH) ho	MIN CONC THK (INCH) h	MIN CONC EDGE DISTANCE (INCH)	MIN ANCHOR SPCG (INCH)	TEST TORQUE (FT-LBS)
CASE 1	⅜ KB-TZ2	2 1/2	2	2¾	3¼ *	8	8	30
CASE 2	⅜ KB-TZ2	2 1/2	2	2¾	4	8	8	30

NOTE:

* MIN CONC THK SPECIFIED IS THE CONC THK OVER THE MTL DECK.

5. SHEET METAL SCREWS SHALL BE HILTI SELF-DRILLING SCREWS PER ICC ESR-2196 MOST RECENT EDITION OR EQ.

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SHEET TITLE: GENERAL NOTES CONTINUED

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FORM / METHOD / H-CORE
WALL / FLOOR MOUNTED HEADWALL

MODULAR SERVICES COMPANY®

ABBREVIATIONS:

Ω_o	SEISMIC OVERSTRENGTH FACTOR
AB	ANCHOR BOLT
ABV	ABOVE
ADJ	ADJACENT
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASTM	AMERICAN SOCIETY FOR TESTING & MATERIALS
BLDG	BUILDING
BLW	BELOW
BOTT	BOTTOM
BRG	BEARING
BYD	BEYOND
CBC	CALIFORNIA BUILDING CODE
CG	CENTER OF GRAVITY
CLR	CLEAR
CLG	CEILING
℄	CENTERLINE
CONC	CONCRETE
CONN	CONNECTION
COORD	COORDINATE
DBL	DOUBLE
DIA (Ø)	DIAMETER
DL	DEAD LOAD
DTL	DETAIL
(E)	EXISTING CONDITION
EA	EACH
ELEV	ELEVATION
EQ	EQUAL
EQUIP	EQUIPMENT
f'c	MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE
FLG	FLANGE
FLR	FLOOR
FT (')	FOOT/FEET
F_p	HORIZONTAL SEISMIC FORCE PER ASCE 7-22 SEISMIC FORCE REQUIREMENTS
F_v	VERTICAL SEISMIC FORCE PER ASCE 7-22 SEISMIC FORCE REQUIREMENTS
F_y	SPECIFIED MINIMUM YIELD STRESS OF STEEL
GA	GAUGE
HCAI	CALIFORNIA DEPARTMENT OF HEALTHCARE ACCESS AND INFORMATION
HDR	HEADER
IN (")	INCH
INFO	INFORMATION
KSI	KIPS PER SQUARE INCH
LBS	POUNDS
LRFD	LOAD AND RESISTANCE FACTOR DESIGN
MAX	MAXIMUM
MFR	MANUFACTURER
MIN	MINIMUM
mm	MILLIMETER
MTL	METAL
(N)	NEW CONDITION
NO.	(#)NUMBER OR POUNDS
NWC	NORMAL WEIGHT CONCRETE
OP	OPERATING
OPG	OPENING
OPM	HCAI/OSHPD PRE-APPROVAL OF MANUFACTURER'S CERTIFICATION
OSHPD	OFFICE OF STATEWIDE HEALTH PLANNING & DEVELOPMENT
PG(S)	PAGE(S)
PL	PLATE
PSI	POUNDS PER SQUARE INCH
REQ	REQUIRED
SEOR	STRUCTURAL ENGINEER OF RECORD
SIM	SIMILAR
SLWC	SAND-LIGHTWEIGHT CONCRETE
SMS	SHEET METAL SCREW
SPCG	SPACING
SS	STAINLESS STEEL
STL	STEEL
THK	THICK/THICKNESS
THRD	THREAD/THREADED
TRAN	TRANSVERSE
Tu	ANCHORAGE TENSION REACTION DUE TO SEISMIC FORCE
TYP	TYPICAL
T&B	TOP & BOTTOM
UNO	UNLESS NOTED OTHERWISE
Vu	ANCHORAGE SHEAR REACTION DUE TO SEISMIC FORCE
W/	WITH
Wp	OPERATING WEIGHT
WT	WEIGHT

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SHEET TITLE: ABBREVIATIONS

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DESIGN CRITERIA & SEISMIC DESIGN FORCES (LRFD):

$C_{PM} = F_p/W_p = 0.4\ S_{DS}\ I_p \left[\frac{H_f}{R\mu}\right]\left[\frac{C_{AR}}{R_{po}}\right]$ ASCE 7-22 (13.3-1)

$C_{PM} = F_p/W_p$ (MAX) $= 1.6\ S_{DS}\ I_p$ ASCE 7-22 (13.3-2)

$C_{PM} = F_p/W_p$ (MIN) $= 0.3\ S_{DS}\ I_p$ ASCE 7-22 (13.3-3)

$C_{VM} = F_v/W_p = \pm 0.2\ S_{DS}\ I_p$ ASCE 7-22 (12.4-4a)

$Hf_{MIN} = 1.0$ AT OR BELOW GRADE PLANE

$Hf_{MAX} = 1+2.5\ (z/h) = 3.50$ ABOVE GRADE z/h = 1.00

$R\mu_{MIN} = 1.0$ AT OR BELOW GRADE PLANE

$R\mu_{MIN} = 1.3$ ABOVE GRADE FOR UNSPECIFIED BUILDING SFRS

$[Hf/R\mu]_{MAX} = 2.692$ ABOVE GRADE z/h = 1.00

$[Hf/R\mu]_{MIN} = 1.00$ AT OR BELOW GRADE PLANE

SUPPORT & ATTACHMENT DESIGN IS PER 2025 CBC AT LRFD LEVEL FORCES PER TABLE 13.6-1 OF ASCE 7-22. OTHER RIGID COMPONENTS PER TABLE 13.5-1 OF ASCE 7-22 INCL SUPPLEMENT #1 & ERRATA:

- $C_{AR} = 1.0$
- $R_{po} = 1.5$
- $I_p = 1.5$
- $\Omega_o = 1.5$ (FOR CONC ANCHORS ONLY)
- W_p = AS NOTED ON DRAWINGS

THEREFORE,

$Fp = 0.4S_{DS}\ 1.5W_p\ (1.0/1.0)(1.0/1.5) = 0.4S_{DS}W_p$ AT OR BELOW GRADE PLANE

$MIN\ Fp = 0.3S_{DS}\ 1.5W_p = 0.45S_{DS}W_p$ GOVERNS AT OR BELOW GRADE PLANE

$Fp = 0.4S_{DS}\ 1.5W_p\ (3.50/1.3)(1.0/1.5) = 1.077S_{DS}W_p$ AT z/h = 1.00

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TABLE 2 (LRFD)

	S_{DS}	$Hf/R\mu$	$C_{PM} = F_p/W_p$	$C_{VM} = F_v/W_p$
CASE 1	2.30	2.692	2.477	0.500
CASE 2	2.50	1.000	1.125	0.500

LOAD COMBINATIONS

1. $(1.2 + 0.2\ S_{DS})$ D+1.0E ASCE 7-22 (2.3.6)
2. $(0.9-0.2\ S_{DS})$ D+1.0E ASCE 7-22 (2.3.6)

NOTE:

THIS PRE-APPROVAL MAY BE USED ONLY AT GEOGRAPHICAL LOCATIONS IN THE STATE OF CALIFORNIA WHERE S_{DS} & $Hf/R\mu$ IS LESS THAN OR EQ TO THE VALUES NOTED ABV. SEOR SHALL VERIFY THAT OTHER COMBINATIONS OF S_{DS} & $Hf/R\mu$ MUST RESULT IN A C_{PM} VALUE THAT IS EQ TO OR LESS THAN C_{PM} FORCE FOR CASE UNDER CONSIDERATION.



SHEET TITLE: DESIGN CRITERIA & LOAD COMBINATIONS

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FORM / METHOD / H-CORE
WALL / FLOOR MOUNTED HEADWALL

MODULAR SERVICES COMPANY

HEADWALL UNIT DIMENSIONS & WEIGHT (LBS)

# OF HEADWALL FRAMES	WIDTH, W (IN)	DEPTH, D (IN)	MAX HEIGHT, H (IN)	MAX WEIGHT, Wp (LBS)
1	12" MIN 36" MAX	5.5	130	450
2	24" MIN 72" MAX	5.5	130	900
3	36" MIN 108" MAX	5.5	130	1350
4	48" MIN 144" MAX	5.85	130	1800

NOTES:

1. THE ABV TABLE PRESENTS THE OPERATING WEIGHTS (Wp) IN POUNDS & INCLUDES THE MAX WT OF ACCESSORIES TO BE MOUNTED ON THE MFR PROVIDED CHANNELS.
2. THE MAX WT SUPPORTED BY EA MONITOR CHANNEL IS 80 LBS.
3. THE MAX WT SUPPORTED BY EA ACCESSORY CHANNEL IS 40 LBS.
4. A HEADWALL UNIT CONSISTS OF MULTIPLE (ONE TO FOUR) HEADWALL FRAMES.
5. EA HEADWALL FRAME IS 12"–36" WIDE.

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SHEET TITLE: HEADWALL UNIT WEIGHTS

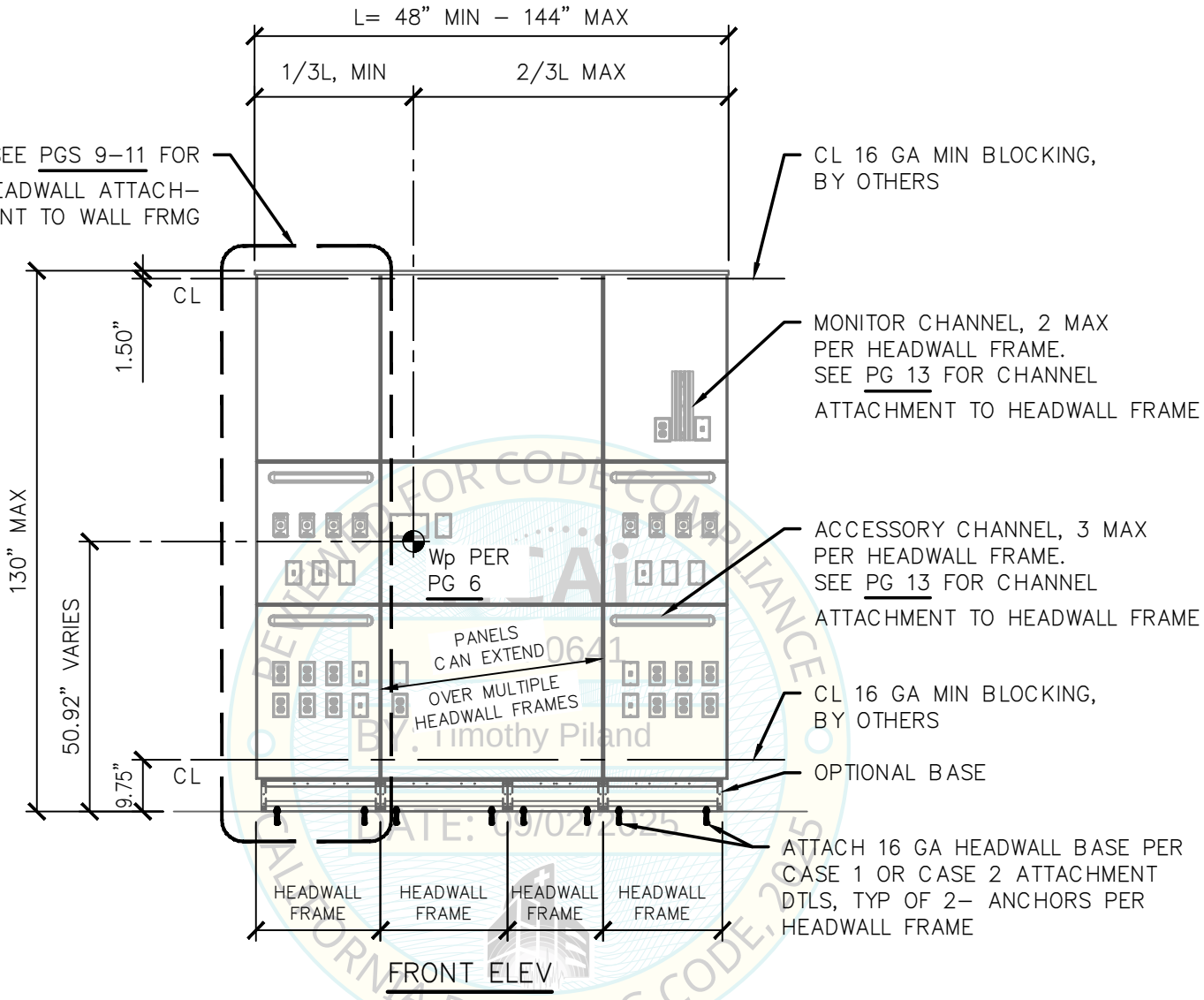
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FORM / METHOD / H-CORE
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NOTES:

1. QTY & LOCATION OF MED GAS OUTLETS, ELECTRICAL RECEPTACLES, MONITOR CHANNELS & ACCESSORY CHANNELS MAY VARY. ITEMS SHOWN ON THIS ELEV IS A REPRESENTATION ONLY, UNO.
2. ITEMS MOUNTED TO ACCESSORY CHANNELS ARE MANUFACTURED BY MODULAR SERVICES COMPANY (MSC). ITEMS HAVE INDIVIDUAL LOAD RATINGS OF 25 LBS OR LESS & SHALL HAVE A COMBINED OP WT OF 40 LBS OR LESS PER CHANNEL.
3. ITEMS MOUNTED TO MONITOR CHANNELS ARE BY OTHERS & REQUIRE THEIR OWN MFR'S OPM. ITEMS SHALL HAVE A COMBINED OP WT MOMENT OF 80 FT–LBS OR LESS PER CHANNEL.

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SHEET TITLE: COMPONENT PLANS & ELEVATIONS
MULTIPLE HEADWALL FRAMES

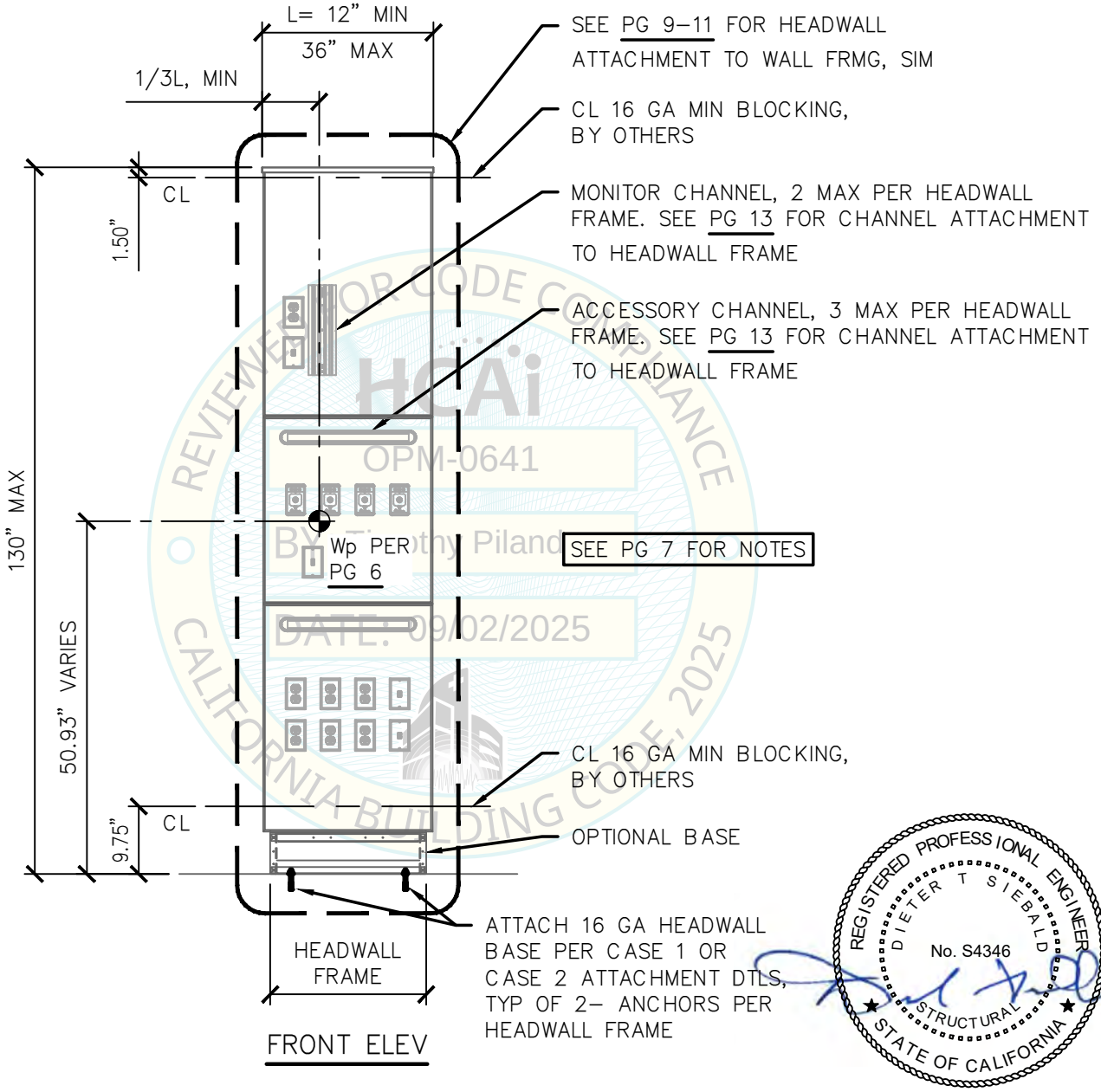
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SHEET TITLE: COMPONENT PLANS & ELEVATIONS
SINGLE HEADWALL FRAME

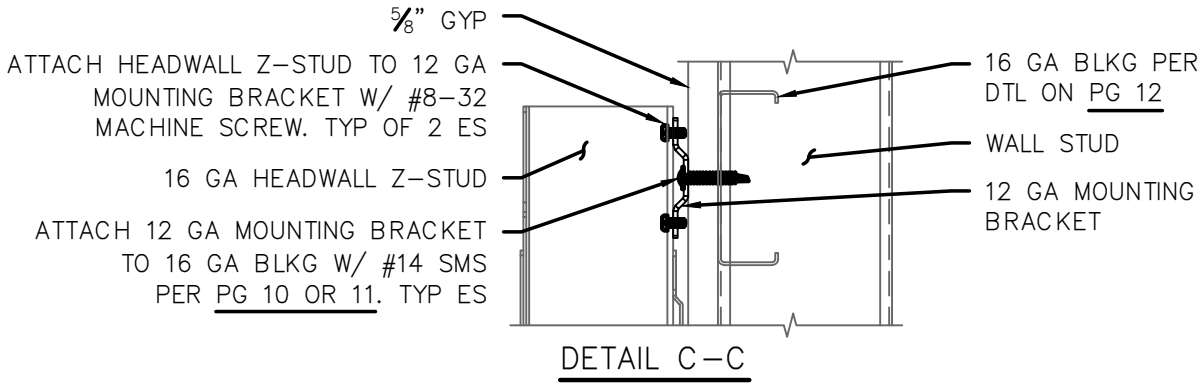
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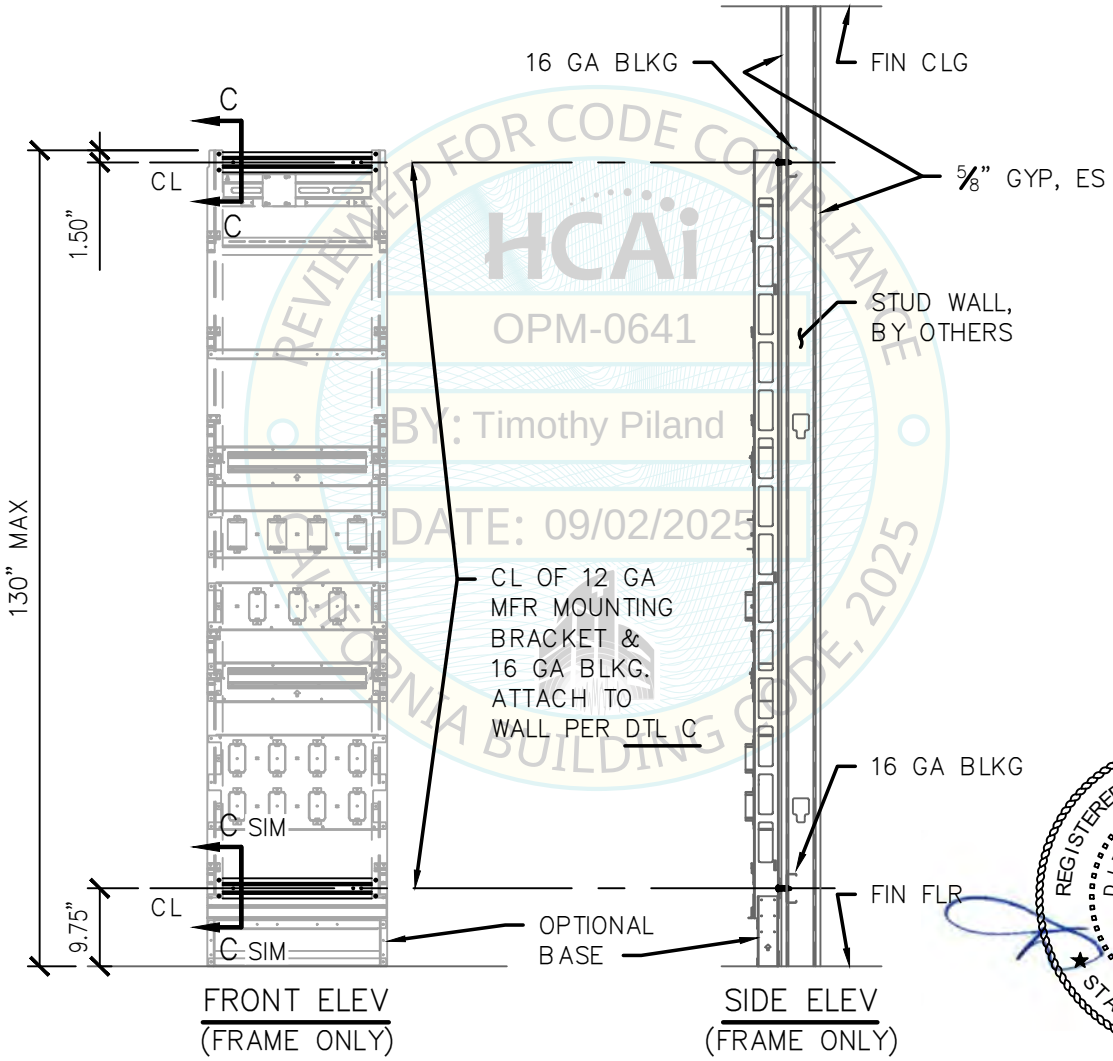
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WALL / FLOOR MOUNTED HEADWALL

MODULAR SERVICES COMPANY



DETAIL C-C



FRONT ELEV (FRAME ONLY)

SIDE ELEV (FRAME ONLY)

REVIEWED FOR CODE COMPLIANCE
HCAi
OPM-0641
BY: Timothy Piland
DATE: 09/02/2025
CALIFORNIA BUILDING CODE, 2025

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: HEADWALL FRAME SECTIONS

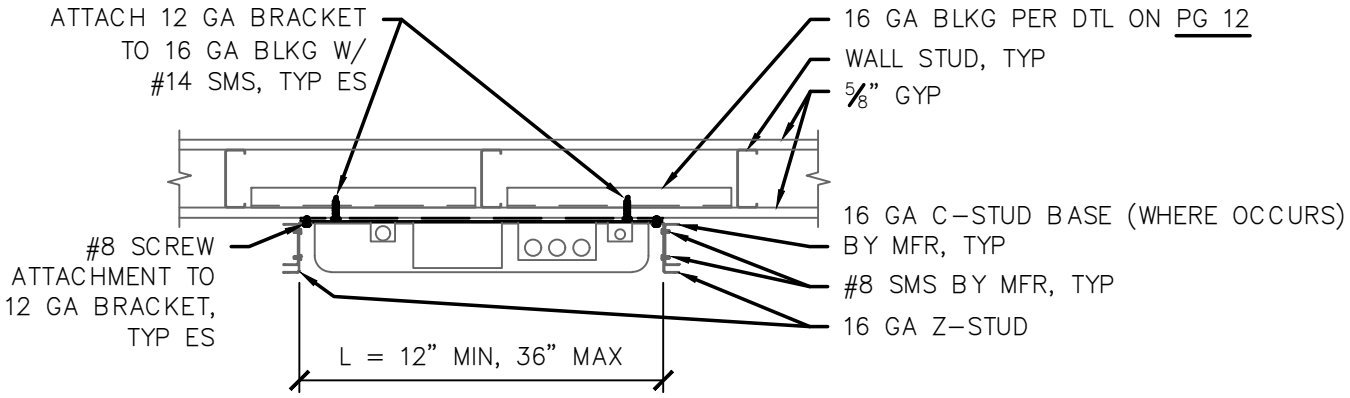
CYS STRUCTURAL ENGINEERS, INC.
2710 GATEWAY OAKS DRIVE, SUITE 190N
SACRAMENTO, CA 95833
TEL (916) 920-2020
www.cyseng.com

Job No:	25020
Date:	08-06-2025
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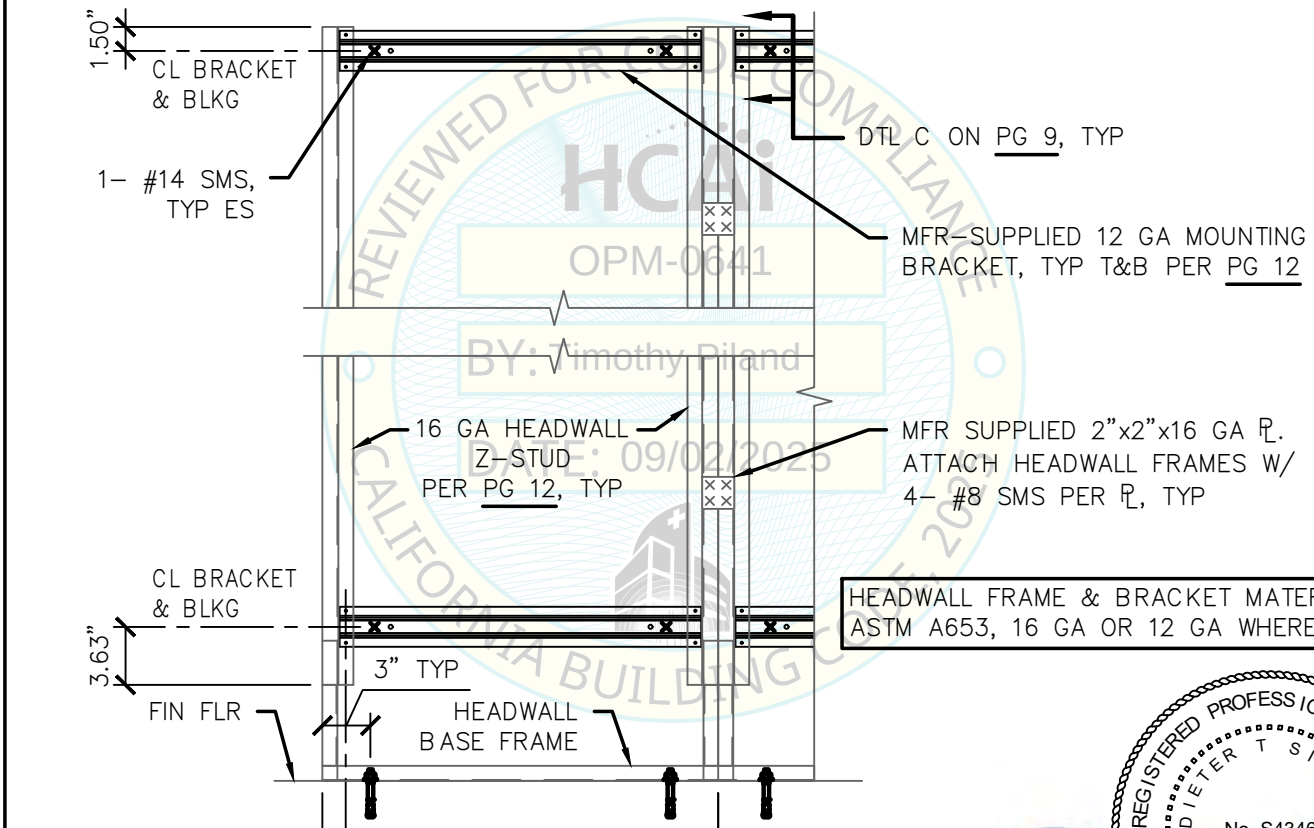
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FORM / METHOD / H-CORE
WALL / FLOOR MOUNTED HEADWALL

MODULAR SERVICES COMPANY



PLAN VIEW



ELEVATION

HEADWALL FRAME & BRACKET MATERIAL:
ASTM A653, 16 GA OR 12 GA WHERE NOTED

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OPM-0641
BY: Timothy Piland
DATE: 09/02/2025
CALIFORNIA BUILDING CODE 2022

REGISTERED PROFESSIONAL ENGINEER
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No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: HEADWALL FRAME WITH BASE TO STUD WALL / FLOOR ATTACHMENT DETAILS

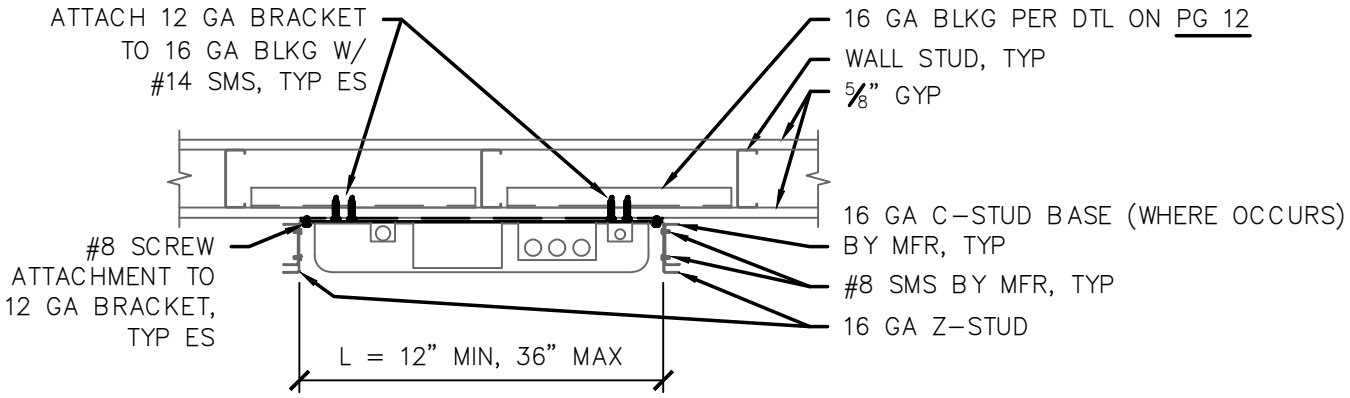
CYS STRUCTURAL ENGINEERS, INC.
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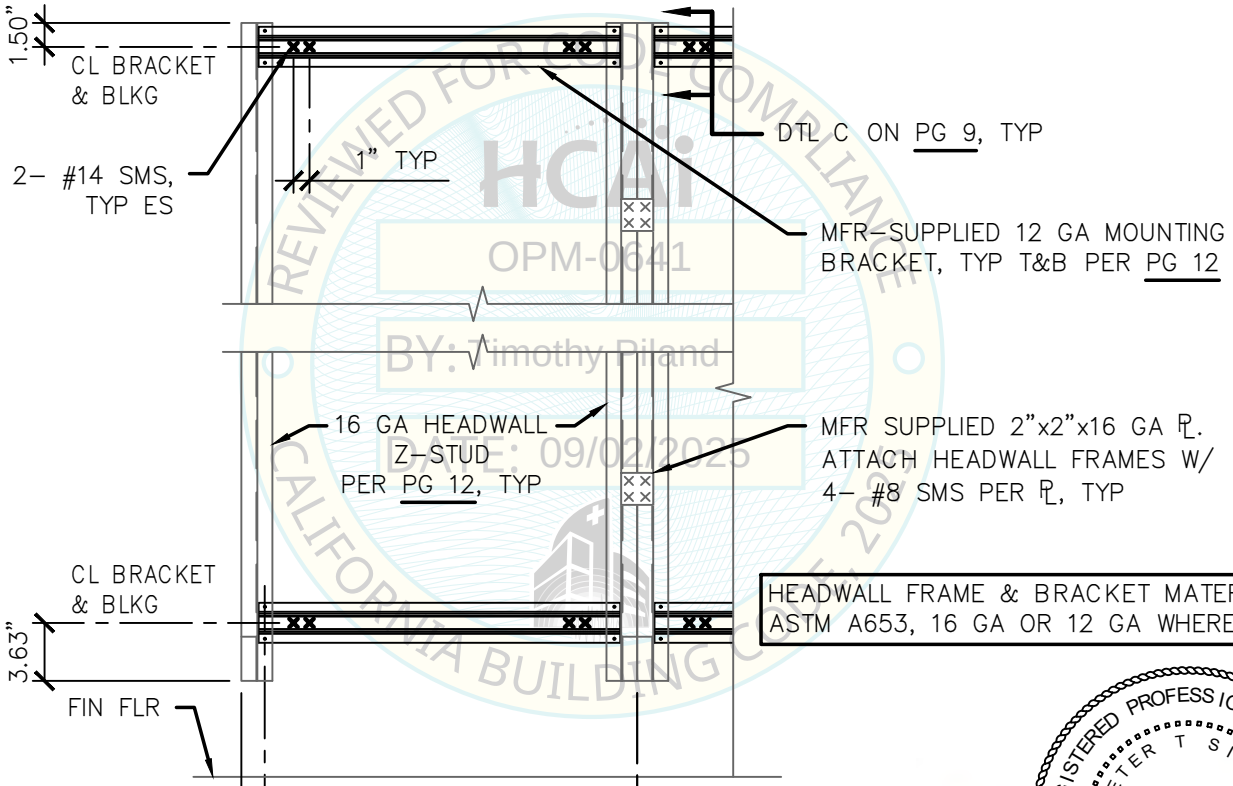
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FORM / METHOD / H-CORE
WALL / FLOOR MOUNTED HEADWALL

MODULAR SERVICES COMPANY



PLAN VIEW



ELEVATION

HEADWALL FRAME & BRACKET MATERIAL:
ASTM A653, 16 GA OR 12 GA WHERE NOTED

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CALIFORNIA BUILDING CODE 2022

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No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: HEADWALL FRAME WITHOUT BASE WALL ATTACHMENT DETAILS

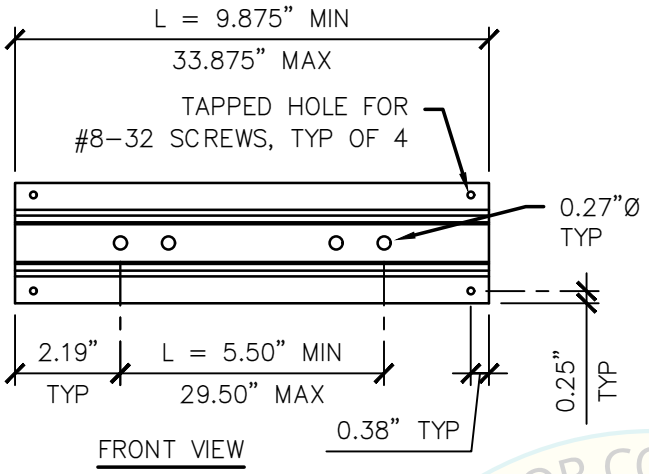
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FORM / METHOD / H-CORE
WALL / FLOOR MOUNTED HEADWALL

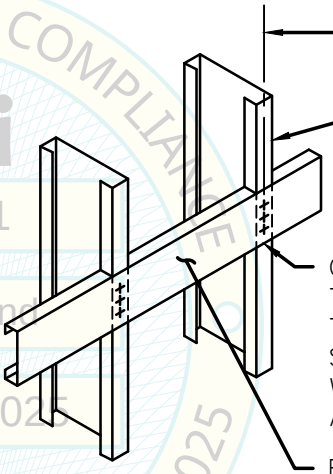
MODULAR SERVICES COMPANY



NOTES:

1. 16 GA HEADWALL STUDS ARE FASTENED WITH #8–32 x 0.375" TYPE B MACHINE SCREWS TO THE 12 GA BRACKET.

12 GA MOUNTING BRACKET DETAIL



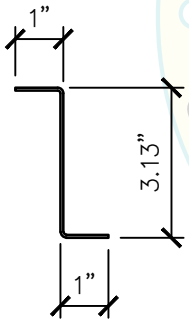
3– #10 SMS EE OF BLKG TO STUD

MTL STUDS BY OTHERS

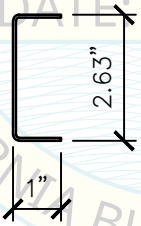
CLIP FLG OF BLKG SUCH THAT THE WEB OVERLAPS THE FULL WIDTH OF THE STUD FLG. ADJ BLKG WEBS SHALL OVERLAP AT COMMON STUD

BLKG SHALL BE FABRICATED FROM 4"x1½"x16 GA 50 KSI TRACK OR STUD MIN

BLOCKING DETAIL



Z–STUD



C–STUD

16 GA HEADWALL STUD PROFILES

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SHEET TITLE: HEADWALL FRAME TO STUD
12 GA MOUNTING BRACKET DETAILS

CYS STRUCTURAL ENGINEERS, INC.
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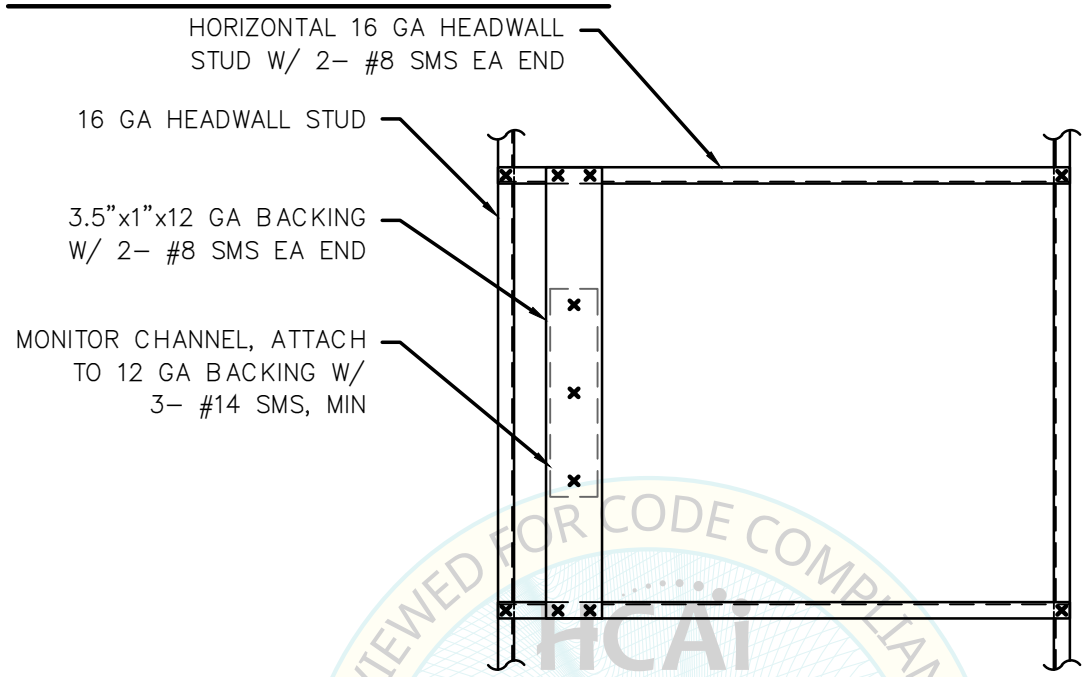
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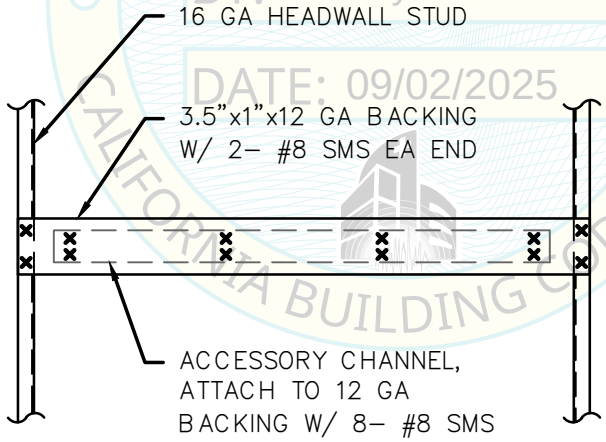
FORM / METHOD / H-CORE
WALL / FLOOR MOUNTED HEADWALL

MODULAR SERVICES COMPANY

MONITOR CHANNEL ATTACHMENT DETAIL



ACCESSORY CHANNEL ATTACHMENT DETAIL



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SHEET TITLE: CHANNEL ATTACHMENT DETAILS

CYS STRUCTURAL ENGINEERS, INC.
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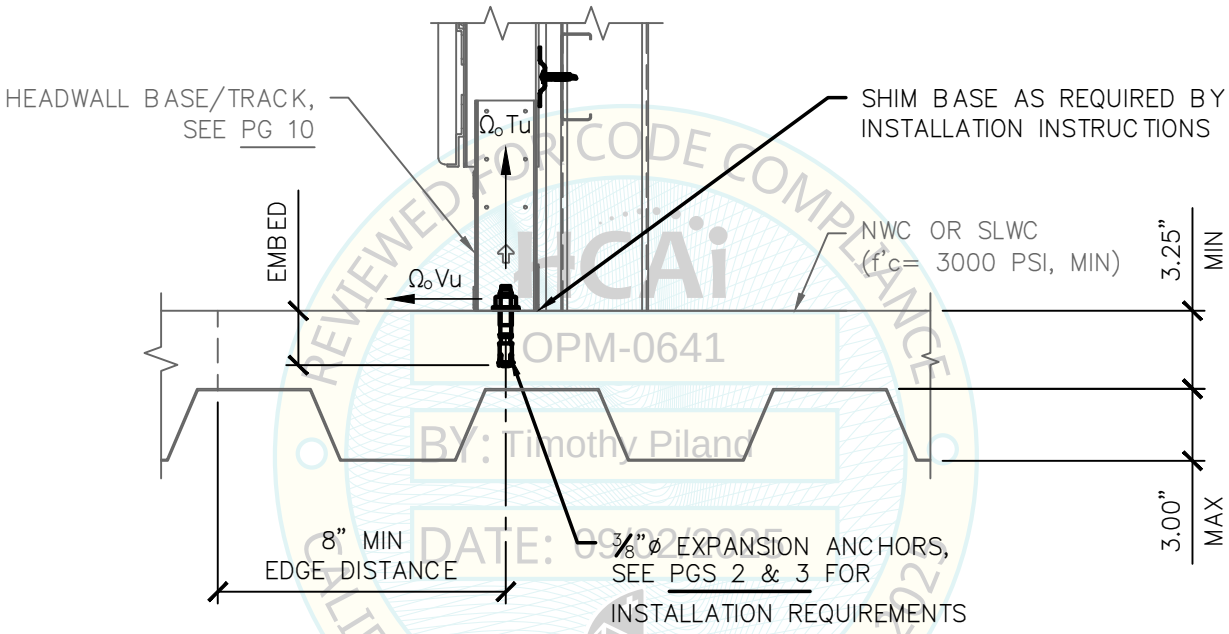
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FORM / METHOD / H-CORE
WALL / FLOOR MOUNTED HEADWALL

MODULAR SERVICES COMPANY

	MAX LRFD FORCES AT EA ANCHOR	
	$\Omega_o T_u$	$\Omega_o V_u$
CASE 1	0	355#

OVERSTRENGTH FACTOR (Ω_o) INCLUDED.



SUSPENDED FLR (CASE 1)

REVIEWED FOR CODE COMPLIANCE
HCAi
OPM-0641
BY: Timothy Piland
DATE: 09/02/2025
CALIFORNIA BUILDING CODE, 2022

NOTE:
CASE 1 CAN ALSO BE USED IN SUSPENDED FLOORS WITH A MIN. 4" THICK NWC (F'C=3000 PSI, MIN) SLAB.

REGISTERED PROFESSIONAL ENGINEER
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SHEET TITLE: ATTACHMENT DETAILS
CONCRETE FILL OVER METAL DECK (CASE 1)

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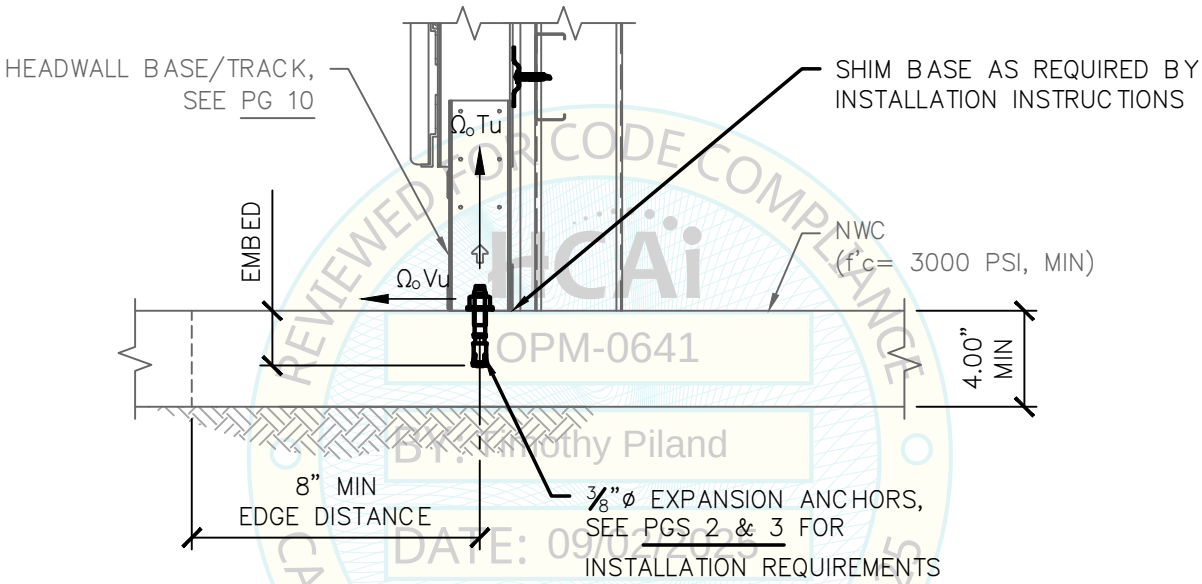
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FORM / METHOD / H-CORE
WALL / FLOOR MOUNTED HEADWALL

MODULAR SERVICES COMPANY

	MAX LRFD FORCES AT EA ANCHOR	
	$\Omega_o T_u$	$\Omega_o V_u$
CASE 2	0	161#

OVERSTRENGTH FACTOR (Ω_o) INCLUDED.



SLAB–ON–GRADE (CASE 2)

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STATE OF CALIFORNIA

SHEET TITLE: ATTACHMENT DETAILS
CONCRETE SLAB-ON-GRADE (CASE 2)

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