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

OFFICE USE ONLY
APPLICATION #: OPM-0418-19

OSHPD Preapproval of Manufacturer's Certification (OPM)

Type: ☒ New ☐ Renewal ☐ Update to Pre-CBC 2013 OPA Number: _____

Manufacturer Information

Manufacturer: **AMICO CORPORATION**

Manufacturer's Technical Representative: Paul Tilcox

Mailing Address: 85 Fulton Way, Richmond Hill, ONT, L4B 2N4 Canada

Telephone: On File Email: On File

Product Information

Product Name: **NuLook Series Panel Wall (Surface Mount)**

Product Type: Other mechanical and electrical components

Product Model Number: 3 panel system; widths from 16"-60" per panel; height at 104" max

General Description: Headwall system providing lighting, electrical and med gas services

Applicant Information

Applicant Company Name: **EASE Co.**

Contact Person: Jonathan Roberson, S.E.

Mailing Address: 5877 Pine Ave. Suite 210, Chino Hills, CA. 91709

Telephone: (909) 606-7622 Email: J.Roberson@EASECo.com

I hereby agree to reimburse the Office of Statewide Health Planning and Development review fees in accordance with the California Administrative Code, 2016.

Signature of Applicant: _____ Date: 4/5/17

Title: Principal Engineer Company Name: **EASE Co.**

Registered Design Professional Preparing Engineering Recommendations

Company Name: **EASE Co.**

Name: Jonathan Roberson, S.E. California License Number: S4197

Mailing Address: 5877 Pine Ave. Suite 210, Chino Hills, CA. 91709

Telephone: 909-606-7622 Email: J.Roberson@EASECo.com

OSHPD Special Seismic Certification Preapproval (OSP)

☐ Special Seismic Certification is preapproved under OSP-
(Separate application for OSP is required)

☒ Special Seismic Certification is not preapproved

Certification Method(s)

☐ Testing in accordance with: ☐ ICC-ES AC156 ☐ FM 1950-16

☐ Other* (Please Specify):

*Use of criteria other than those adopted by the California Building Standards Code, 2016 (CBSC 2016) 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 2016 may be used when approved by OSHPD prior to testing.

☒ Analysis

☐ Experience Data

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

List of Attachments Supporting the Manufacturer's Certification

☐ Test Report ☒ Drawings ☒ Calculations ☐ Manufacturer's Catalog

☐ Other(s) (Please Specify):

OFFICE USE ONLY – OSHPD APPROVAL VALID FOR CBC 2016 & ALL PRE-2016 CODE BASED PROJECTS

Signature: Date: 1/15/2020

Print Name: Jeffrey Kikumoto

Title: Structural Engineer

Condition of Approval (if applicable):

EASE
EQUIPMENT ANCHORAGE & SEISMIC ENGINEERING
5877 Pine Ave, Ste. 210
Chino Hills, CA. 91709
Phn: (909) 606-7622

Office of Statewide Health Planning and Development

PREAPPROVAL OF MANUFACTURER'S CERTIFICATION

OPM-0418-19

THIS PREAPPROVAL CONFORMS TO THE 2019 CALIFORNIA BUILDING CODE

MANUFACTURER: **AMICO CORPORATION**

EQUIPMENT NAME: **NULOOK SERIES PANEL WALL (SURFACE MOUNT)**

Date: 1/14/20

GENERAL NOTES

1. THIS OSHPD PREAPPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE 2019 CBC. THE DEMANDS (DESIGN FORCES) FOR USE WITH THIS OPM SHALL BE BASED ON THE 2019 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 2019 CALIFORNIA BUILDING CODE.
4. FORCES PER ASCE 7-16 SECTION 13.3.1, EQUATIONS 13.3-1, 13.3-2 & 13.3-3, WHERE S_{DS} = 2.00, a_p = 1.0, I_p = 1.5, R_p = 1.5, $z/h \leq 1$.
5. THE DETAILS IN THIS PREAPPROVAL MAY BE USED AT ANY LOCATION IN THE STATE OF CALIFORNIA, WHERE S_{DS} IS NOT GREATER THAN 2.00.
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. THIS PREAPPROVAL COVERS ONLY THE SUPPORTS AND ATTACHMENTS OF THE EQUIPMENT TO THE STRUCTURE.
9. RESPONSIBILITIES OF THE STRUCTURAL ENGINEER OF RECORD OF THE BUILDING

   A. PROVIDE SUPPORTING STRUCTURE REQUIRED TO SUPPORT WEIGHTS AND FORCES SHOWN, IN ADDITION TO ALL OTHER LOADS.

   B. VERIFY THAT THE INSTALLATION IS IN CONFORMANCE WITH THE 2019 CBC AND WITH THE DETAILS SHOWN IN THIS PREAPPROVAL. VERIFY THAT THE ACTUAL EQUIPMENT'S WEIGHT, CG LOCATION, ANCHOR LOCATIONS, ANCHOR DETAILS AND THE MATERIAL AND GAGE OF THE UNIT WHERE ATTACHMENTS ARE MADE AGREE WITH THE INFORMATION SHOWN ON THE PREAPPROVAL DOCUMENTS.

   C. VERIFY THAT THE COMBINATION OF S_{DS} & z/h RESULT IN SEISMIC FORCES (E_h , E_v) THAT ARE NOT GREATER THAN THE VALUES ON THE DETAILS.

   D. DESIGN BACKING BARS, STUDS, ETC. WHICH THE UNITS ARE ATTACHED TO AS NOTED ON THE DRAWINGS.

REGISTERED PROFESSIONAL ENGINEER
JONATHAN ROBERSON
No. 4197
EXP. 6-30-2020
1/14/20
STRUCTURAL
STATE OF CALIFORNIA

AMICO CORPORATION

NULOOK SERIES PANEL WALL

DES. J. ROBERSON
JOB NO. 11-1704
DATE 1/14/20
SHEET 2 OF 10 SHEETS

10. **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 Test
3/8"	Normal Weight	3000	Hilti Kwik Bolt TZ	ESR-1917	2"	3"	9"	4"	25 FT-LB	1204 lb

B. THIS PREAPPROVAL ALLOWS FOR UP TO A MAXIMUM OF 2 ADJACENT CONCRETE SLAB EDGES, 9" AWAY MINIMUM (i.e. - CORNER). SEE ADJACENT DETAIL FOR ADDITIONAL MINIMUM ALLOWABLE CONCRETE EDGE DISTANCES.

C. TESTING OF EXPANSION ANCHORS PER 2019 CBC, 1910A.5: TESTING SHALL BE DONE IN THE PRESENCE OF THE SPECIAL INSPECTOR AND A REPORT OF THE TEST RESULTS SHALL BE SUBMITTED TO OSHPD

(i) AFTER AT LEAST 24 HOURS HAVE ELAPSED SINCE INSTALLATION, DIRECT PULL TENSION TEST OR TORQUE TEST AT LEAST 50% OF THE ANCHORS.

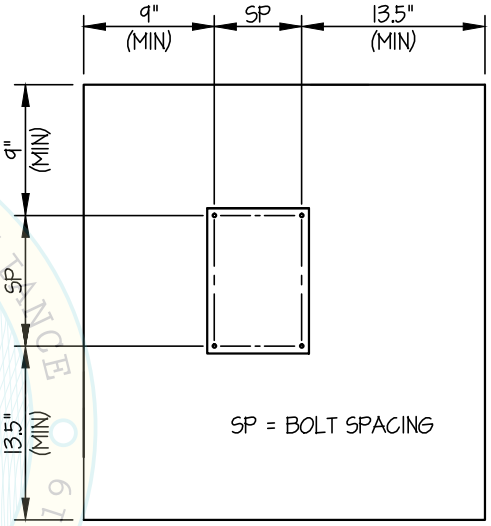
(ii) ACCEPTANCE CRITERIA:

- 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

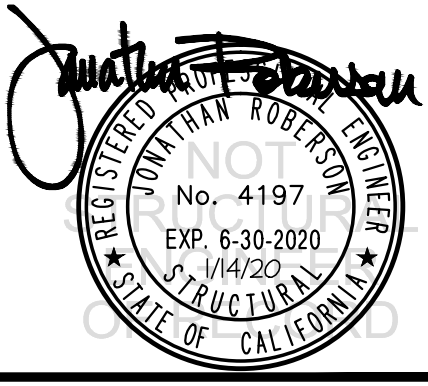
(iii) IF ANY ANCHOR FAILS, TEST ALL ANCHORS.

D. AVOID DAMAGING EXISTING STEEL REINFORCING IN CONCRETE SLAB WHEN INSTALLING CONCRETE EXPANSION ANCHORS.

E. PROVIDE FOR FULL THREAD ENGAGEMENT OF NUT & WASHER.



TYPICAL CONCRETE EDGE DETAIL



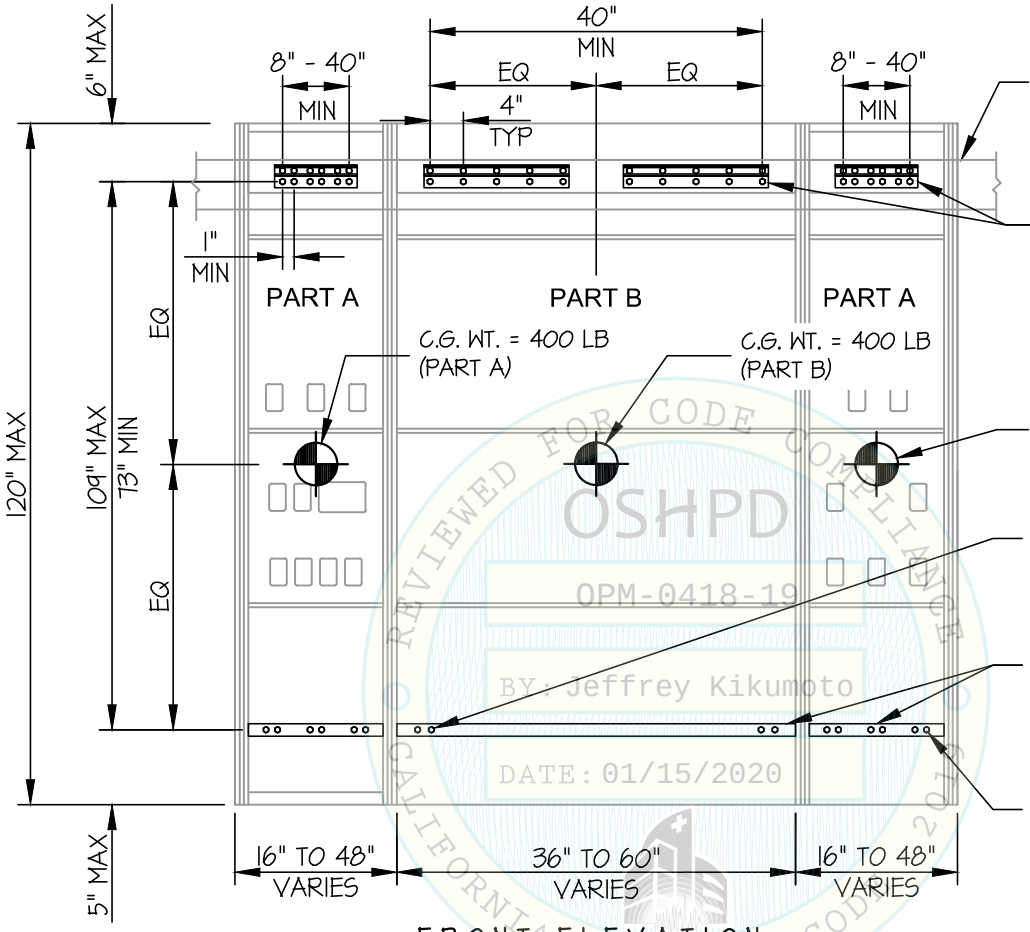
AMICO CORPORATION

NULOOK SERIES PANEL WALL (SURFACE MOUNT)

DES.	J. ROBERSON
JOB NO.	11-1704
DATE	1/14/20
SHEET	3
	10

SEISMIC SUPPORTS & ATTACHMENTS

WALL MOUNTED



FRONT ELEVATION
(WITHOUT BASE)

NOTES:

1. **FORCES ARE DETERMINED PER 2019 CALIFORNIA BUILDING CODE AND ASCE 7-16.**
   STRENGTH DESIGN IS USED. (S_{DS} = 2.00, a_p = 1.0, I_p = 1.5, R_p = 1.5, $z/h \leq 1$)

   HORIZONTAL FORCE (E_h) = 2.40 W_p
   VERTICAL FORCE (E_v) = 0.40 W_p
2. CENTER OF GRAVITY (C.G.) AND WEIGHT ARE THE GOVERNING PARAMETERS FOR DESIGN. THIS PREAPPROVAL ENCOMPASSES ALL WEIGHTS UP TO THE MAXIMUM WEIGHT SHOWN.
3. STRUCTURAL ENGINEER OF RECORD FOR THE BUILDING SHALL PROVIDE SUPPORT STRUCTURE DESIGNED TO SUPPORT WEIGHTS AND FORCES SHOWN IN COMBINATION WITH ALL OTHER LOADS THAT MAY BE PRESENT.
4. WEIGHTS SHOWN REFLECT LARGER PANEL SIZE.
5. SEE GENERAL NOTES: SHEET 1

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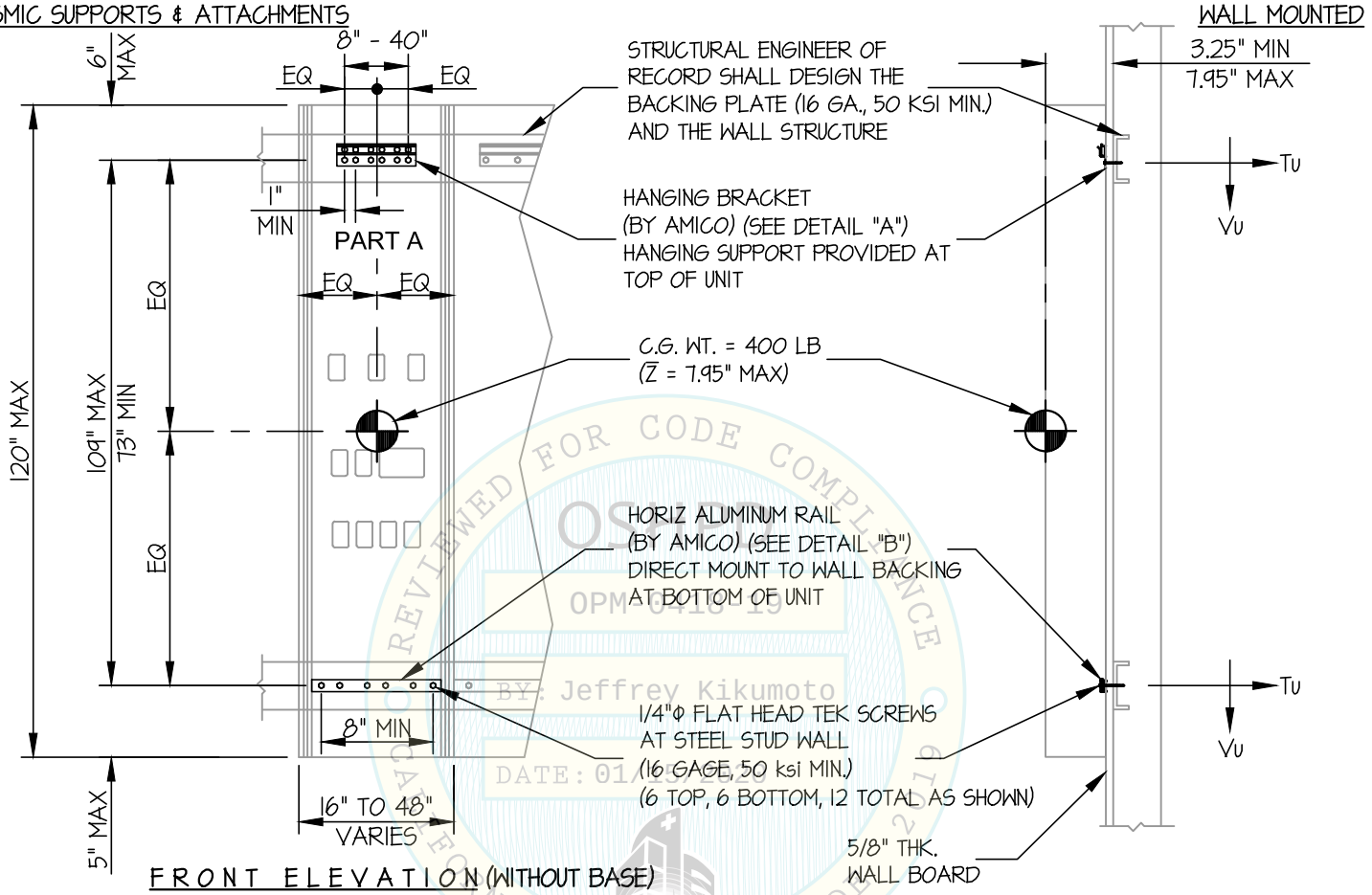
NULOOK SERIES PANEL WALL (SURFACE MOUNT)

DES.	J. ROBERSON
JOB NO.	11-1704
DATE	1/14/20
SHEET	4 / 10

SEISMIC SUPPORTS & ATTACHMENTS

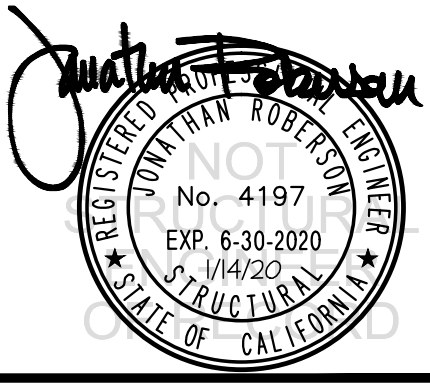


FRONT ELEVATION (WITHOUT BASE)

STEEL STUD WALL SECTION

TOP SCREW FORCES (PART A)
Tu = 309 LB/SCREW (MAX)
Vu = 96 LB/SCREW (MAX)

BOT SCREW FORCES (PART A)
Tu = 297 LB/SCREW (MAX)
Vu = 96 LB/SCREW (MAX)

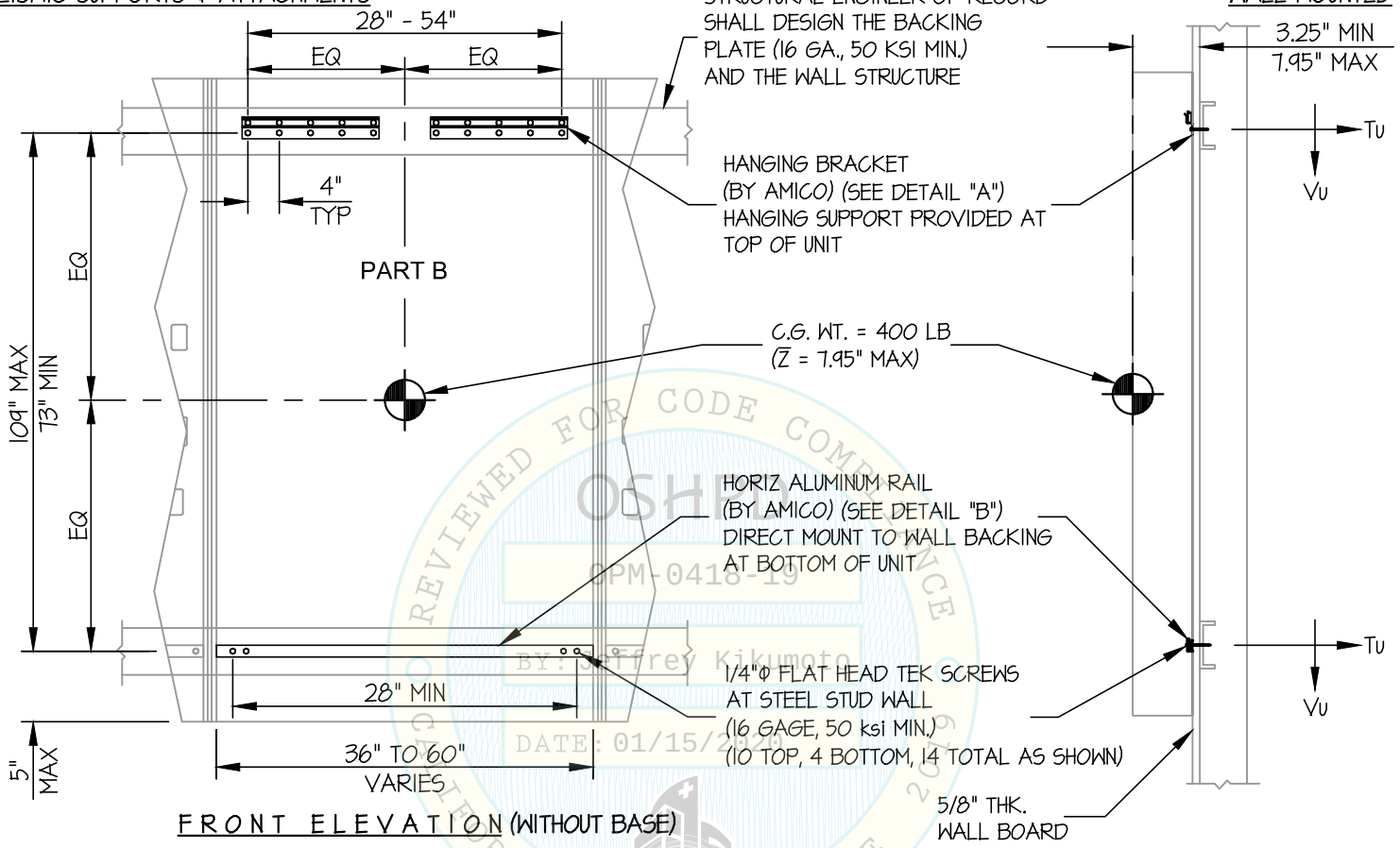


AMICO CORPORATION

NULOOK SERIES PANEL WALL (SURFACE MOUNT)

DES.	J. ROBERSON
JOB NO.	11-1704
DATE	1/14/20
SHEET	5
	10

SEISMIC SUPPORTS & ATTACHMENTS

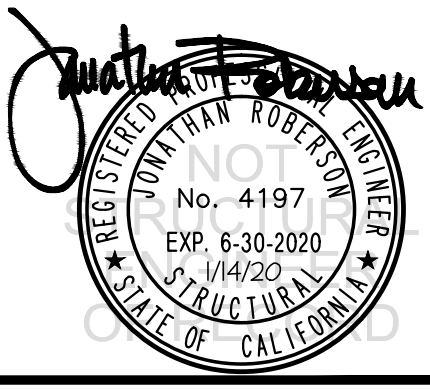


FRONT ELEVATION (WITHOUT BASE)

STEEL STUD WALL SECTION

TOP SCREW FORCES (PART B)
Tu = 102 LB/SCREW (MAX)
Vu = 67 LB/SCREW (MAX)

BOT SCREW FORCES (PART B)
Tu = 144 LB/SCREW (MAX)
Vu = 129 LB/SCREW (MAX)



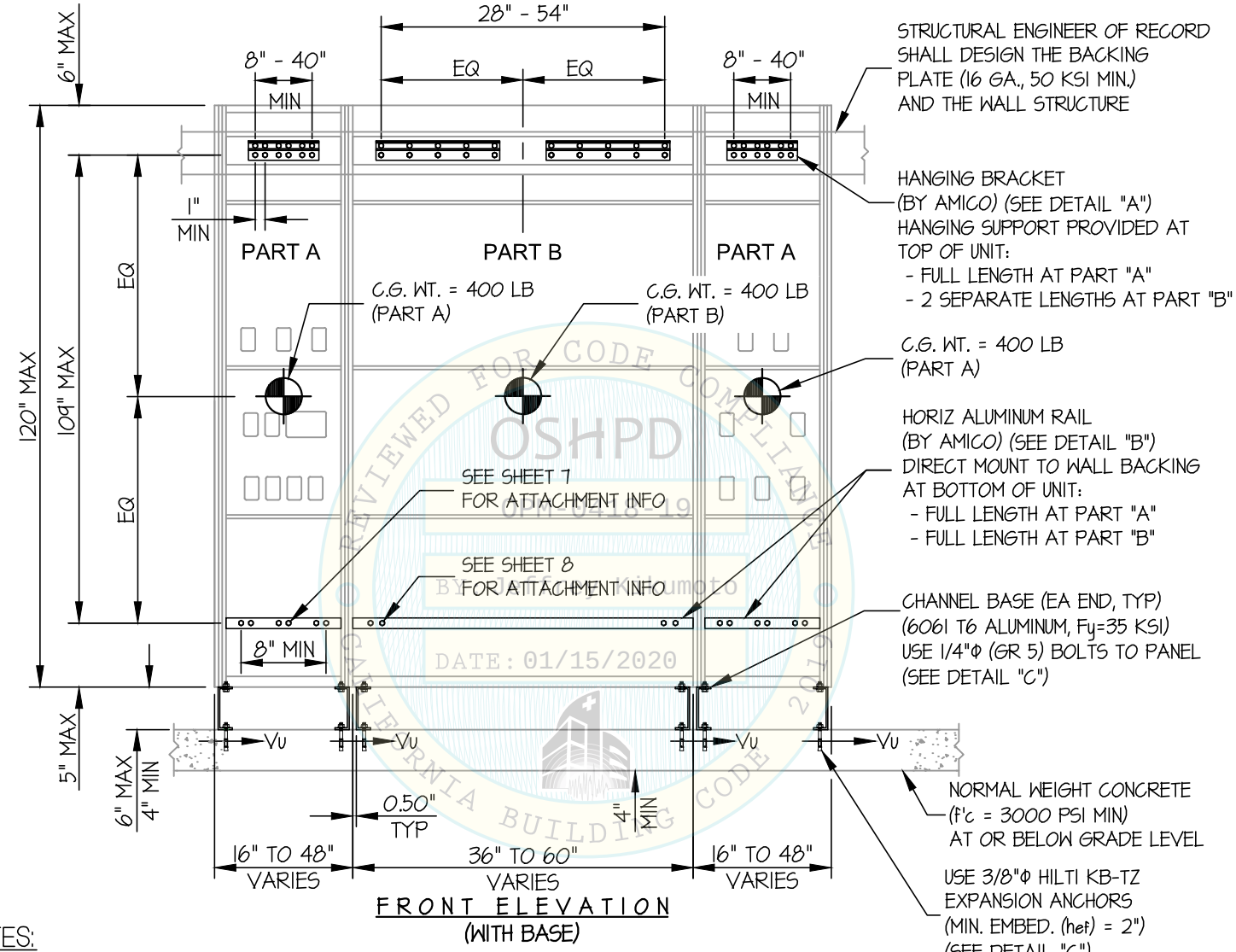
AMICO CORPORATION

NULOOK SERIES PANEL WALL (SURFACE MOUNT)

DES. J. ROBERSON
JOB NO. 11-1704
DATE 1/14/20
SHEET 6 10

SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE SLAB / WALL MOUNTED



FRONT ELEVATION
(WITH BASE)

NOTES:

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4. SEE GENERAL NOTES: SHEET 1

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DES. J. ROBERSON
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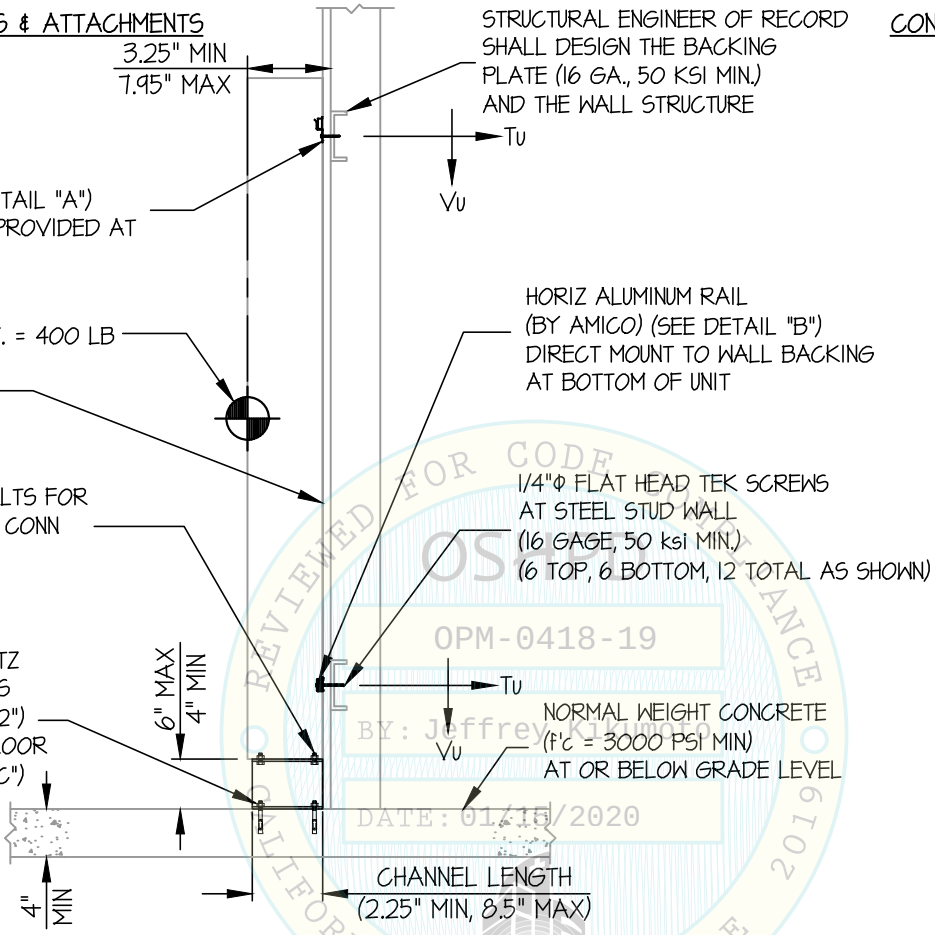
SHEET 7 10

SEISMIC SUPPORTS & ATTACHMENTS

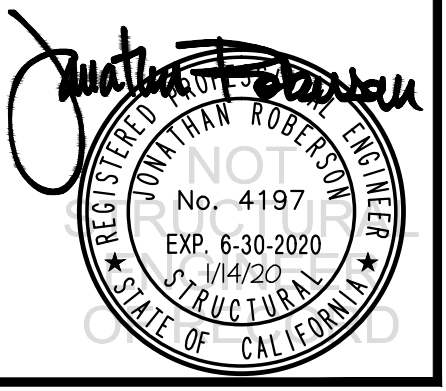
CONCRETE SLAB / WALL MOUNTED



STEEL STUD WALL SECTION
(PANEL "A" WITH BASE)

TOP SCREW FORCES (PART A)
Tu = 297 LB/SCREW (MAX)
Vu = 96 LB/SCREW (MAX)

BOT SCREW FORCES (PART A)
Tu = 297 LB/SCREW (MAX)
Vu = 96 LB/SCREW (MAX)



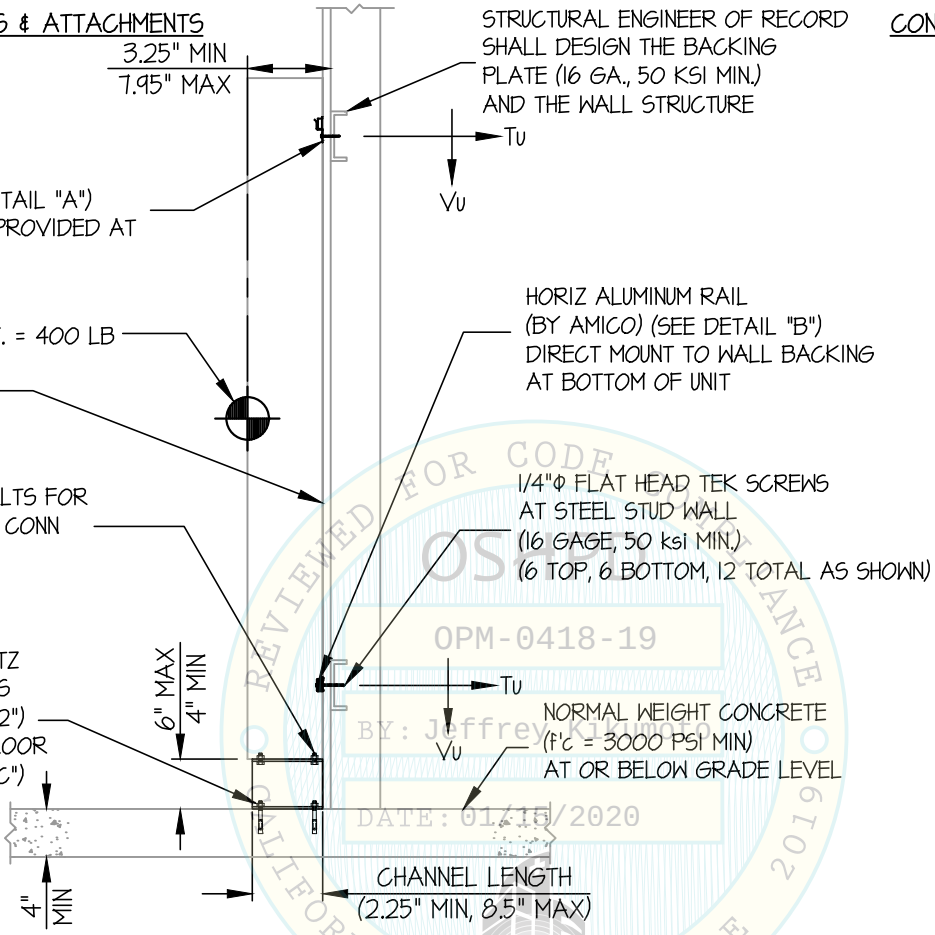
AMICO CORPORATION

NULOOK SERIES PANEL WALL (SURFACE MOUNT)

DES. J. ROBERSON
JOB NO. 11-1704
DATE 1/14/20
SHEET 8 10

SEISMIC SUPPORTS & ATTACHMENTS

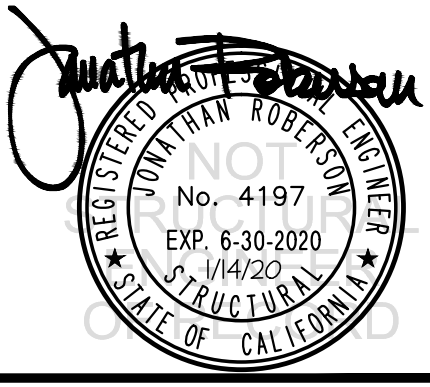
CONCRETE SLAB / WALL MOUNTED



STEEL STUD WALL SECTION
(PANEL "B" WITH BASE)

TOP SCREW FORCES (PART B)
Tu = 95 LB/SCREW (MAX)
Vu = 67 LB/SCREW (MAX)

BOT SCREW FORCES (PART B)
Tu = 144 LB/SCREW (MAX)
Vu = 129 LB/SCREW (MAX)



AMICO CORPORATION

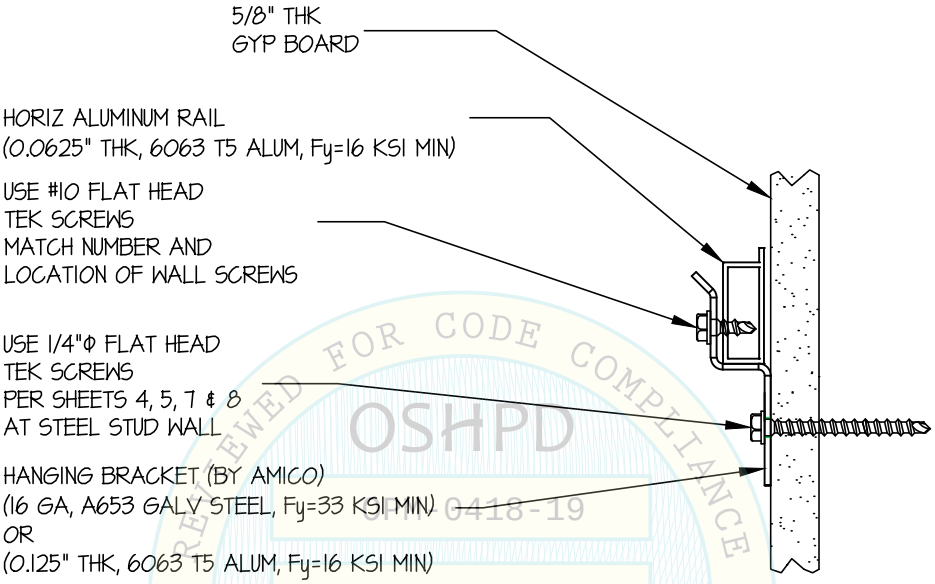
NULOOK SERIES PANEL WALL (SURFACE MOUNT)

DES. J. ROBERSON
JOB NO. 11-1704
DATE 1/14/20

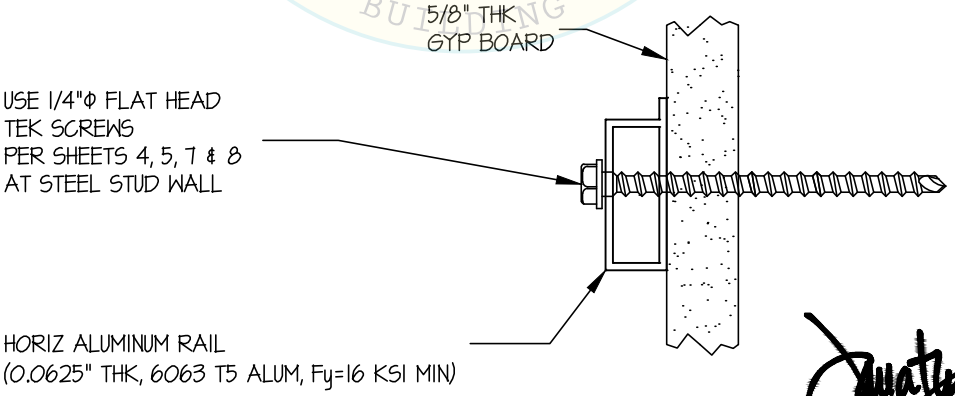
SHEET 9 OF 10 SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

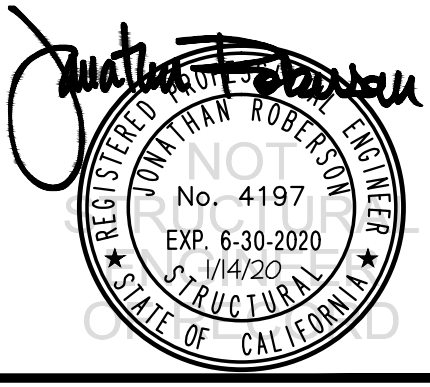
BRACKET DETAIL



DETAIL "A"
(UPPER CONNECTION)



DETAIL "B"
(LOWER CONNECTION)



AMICO CORPORATION

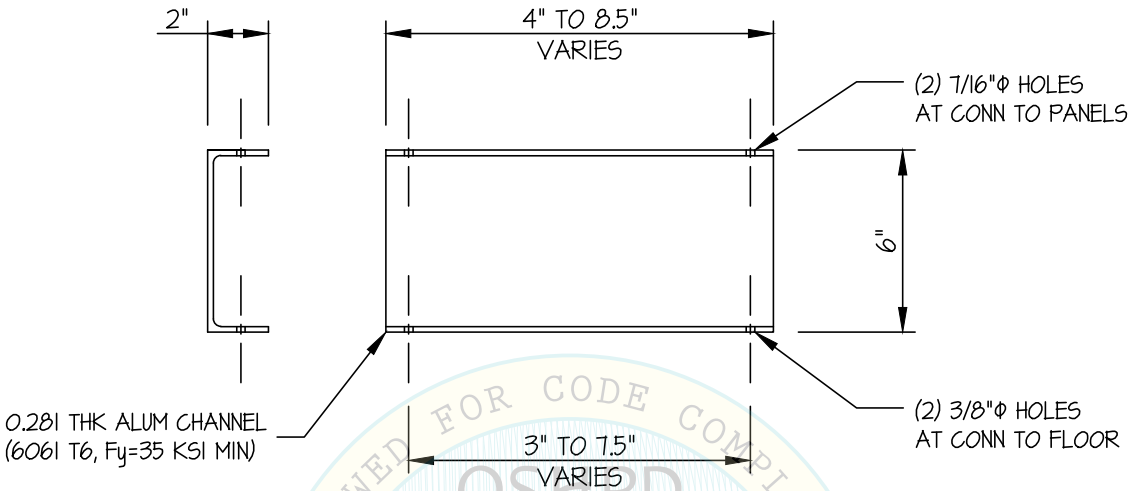
NULOOK SERIES PANEL WALL (SURFACE MOUNT)

DES. J. ROBERSON
JOB NO. 11-1704
DATE 1/14/20

SHEET 10 OF 10 SHEETS

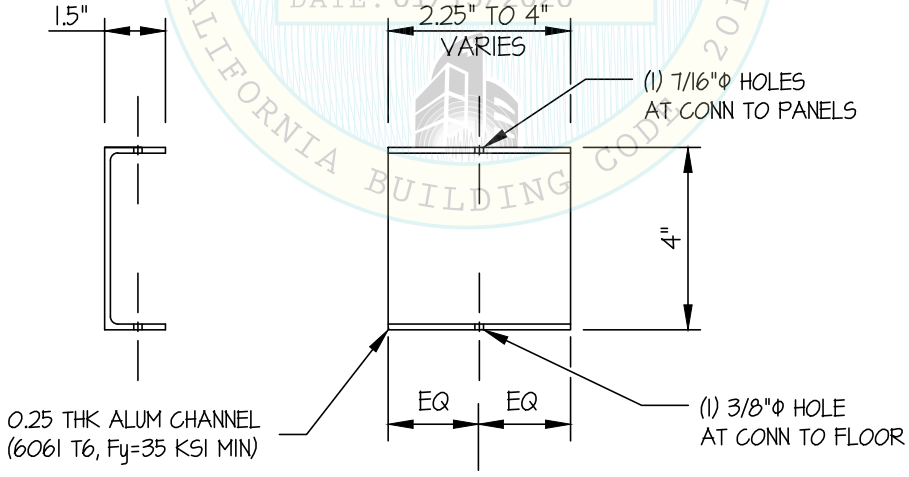
SEISMIC SUPPORTS & ATTACHMENTS

BRACKET DETAIL



SIDE

FRONT
(CHANNEL PROFILE 1)



SIDE

FRONT
(CHANNEL PROFILE 2)

DETAIL "C"