



**OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION**

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

OFFICE USE ONLY

APPLICATION #: OPM-0217-13

OSHPD Preapproval of Manufacturer's Certification (OPM)

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

Manufacturer Information

Manufacturer: Knappe & Vogt Waterloo

Manufacturer's Technical Representative: Wayne Gauvin

Mailing Address: 685 Wabanaki Drive, Kitchener, ON. N2C 2G3 Canada

Telephone: (800) 253-1561 ext 3438

Email: Wayne.gauvin@kv.com

Product Information

Product Name: ULT Arm Monitor & Computer Wall Mount

Product Type: Computer

OPM-0217-13

Product Model Number: N/A

BY: Jeffrey Y. Kikumoto

General Description: Monitor, Keyboard/Mouse & CPU Wall Mounted Station

DATE: 04/16/2015

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, 2013.

Signature of Applicant: _____

Date: 4/2/15

Title: Principal Engineer

Company Name: EASE Co.

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

STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY
OSH-FD-700 (REV 1/24/13)



osHPD

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OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT FACILITIES DEVELOPMENT DIVISION

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: 909-606-7667

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 1950-10

Other* (Please Specify): _____

*Use of test criteria other than those adopted by the California Building Standards Code, 2013 (CBCS 2013) 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 CBCS 2013 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 2013 ONLY

Signature: Date: 04/16/2015

Print Name: Jeffrey Kikumoto

Title: SSE

Condition of Approval (if applicable): _____

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STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY
OSH-FD-700 (REV 1/24/13)



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**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-0217-13

THIS PREAPPROVAL CONFORMS TO THE 2013 CALIFORNIA BUILDING CODE

MANUFACTURER: **KNAPE & VOGT WATERLOO**
EQUIPMENT NAME: **ULT ARM (WITH OR WITHOUT EXTENSION)**

Sheet: 1 of 5
Date: 4/14/15

GENERAL NOTES

1. THIS OSHPD PREAPPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE 2013 CBC. THE DEMANDS (DESIGN FORCES) FOR USE WITH THIS OPM SHALL BE BASED ON THE 2013 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 2013 CALIFORNIA BUILDING CODE.
4. FORCES PER ASCE 7-10 SECTION 13.3.1, EQUATIONS 13.3-1, 13.3-2 & 13.3-3, WHERE $S_{ds} = 1.80$ & 2.20 , $a_p = 2.5$, $I_p = 1.5$, $R_p = 2.5$, $z/h \leq 1$.
5. THE DETAILS IN THIS PREAPPROVAL MAY BE USED AT ANY LOCATION IN THE STATE OF CALIFORNIA, WHERE SDS IS NOT GREATER THAN 1.80 & 2.20; REFER TO DETAILS FOR APPLICABILITY.
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 2013 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.



KNAPE & VOGT WATERLOO

ULT ARM WITHOUT EXTENSION

DES. **J. ROBERSON**

JOB NO. **11-1505**

DATE **4/14/15**

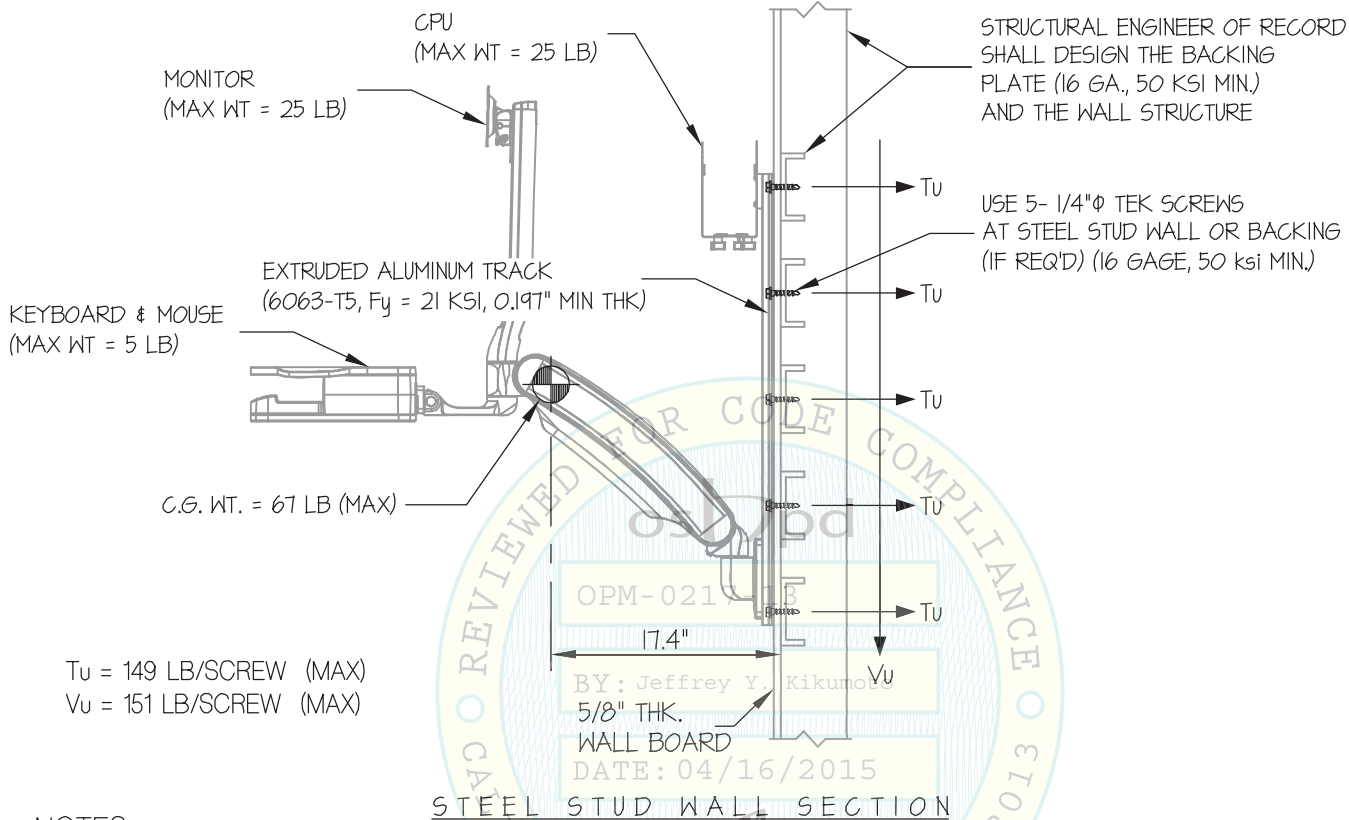
SHEET

2

OF **5** SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

WALL MOUNTED

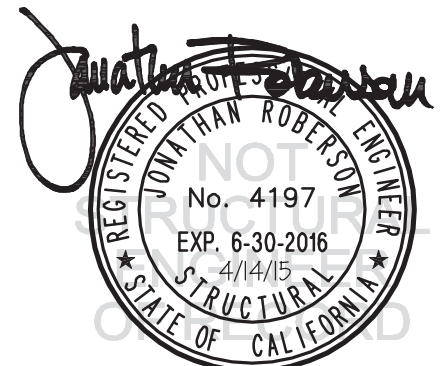


NOTES:

- FORCES ARE DETERMINED PER 2013 CALIFORNIA BUILDING CODE AND ASCE 7-10 STRENGTH DESIGN IS USED. ($S_Ds = 2.20$, $a_p = 2.5$, $I_p = 15$, $R_p = 2.5$, $z/h \leq 1$)

HORIZONTAL FORCE (E_h) = $3.96 W_p$
VERTICAL FORCE (E_v) = $0.44 W_p$

- CENTER OF GRAVITY (C.G.) AND WEIGHT, INCLUSIVE OF WALL SUPPORT SYSTEM, CPU, MONITOR, MOUSE AND KEYBOARD, ARE THE GOVERNING PARAMETERS FOR DESIGN. THIS PREAPPROVAL ENCOMPASSES ALL WEIGHTS UP TO THE MAXIMUM WEIGHT SHOWN.
- 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.
- SEE GENERAL NOTES: SHEETS 1



KNAPE & VOGT WATERLOO

ULT ARM WITHOUT EXTENSION

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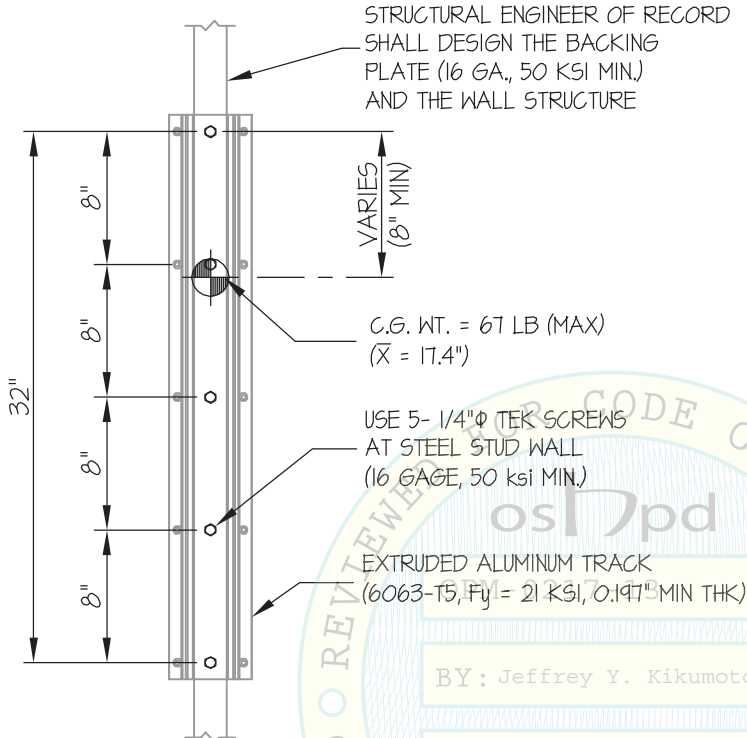
SHEET

3

OF **5** SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

WALL MOUNTED

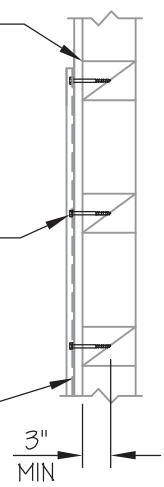


2 x STUDS OR 4 x BLKG (DOUGLAS-FIR LARCH NUMBER 2 MIN.) (DESIGNED BY STRUCTURAL ENGINEER OF RECORD)

USE 5- 1/4"Ø X 4" WOOD SCREWS TO WOOD STUD OR BLKG. (PRE-DRILL HOLES TO 70% SHANK DIAMETER)

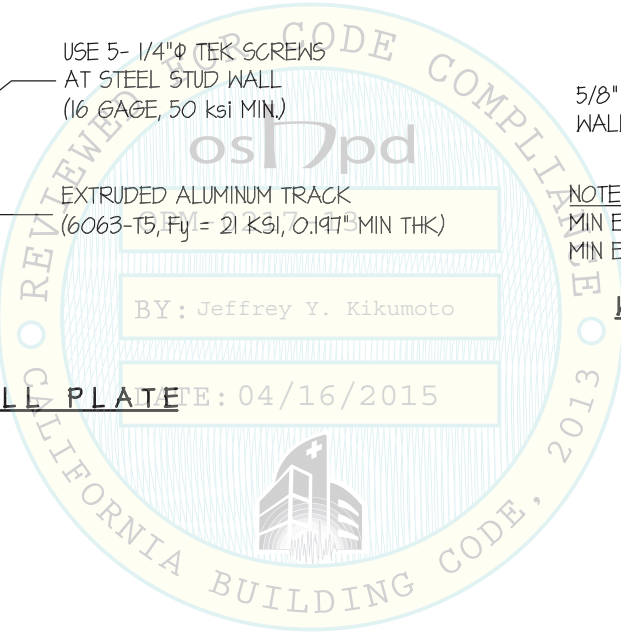
5/8" THK. WALL BOARD

NOTE:
MIN EDGE DISTANCE = 1"
MIN END DISTANCE = 2"



WOOD STUD WALL SECTION

ELEVATION AT WALL PLATE



Jonathan Roberson
REGISTERED PROFESSIONAL ENGINEER
No. 4197
EXP. 6-30-2016
4/14/15
STATE OF CALIFORNIA

KNAPE & VOGT WATERLOO ULT ARM WITH EXTENSION

DES. **J. ROBERSON**

SHEET

4

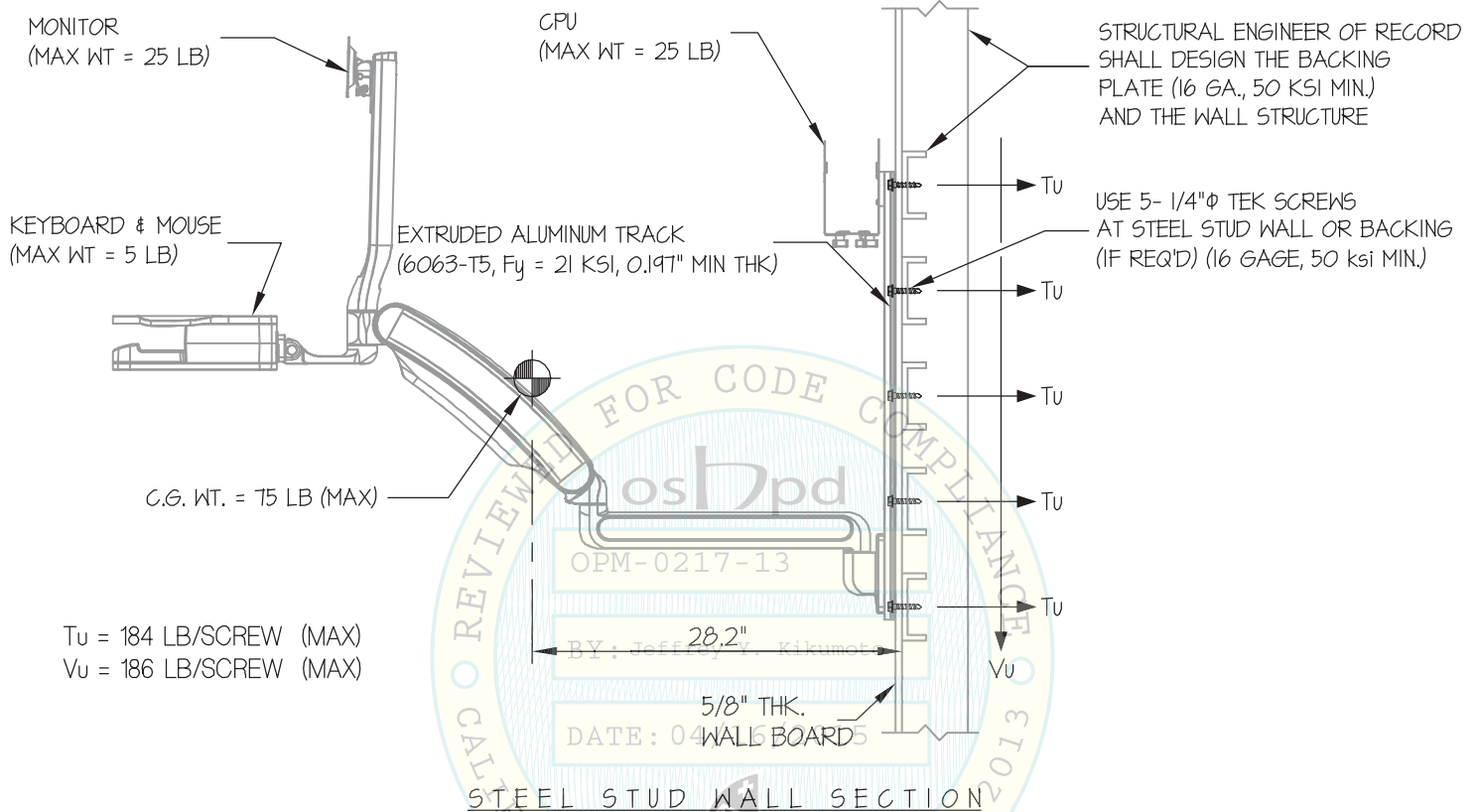
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OF **5** SHEETS

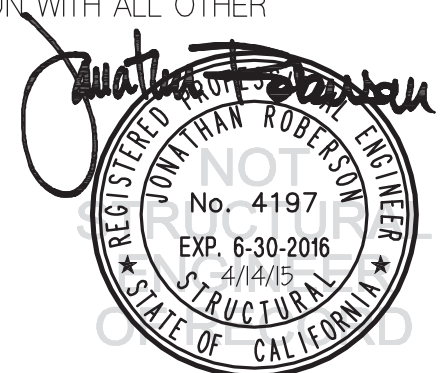
SEISMIC SUPPORTS & ATTACHMENTS

WALL MOUNTED



NOTES:

- FORCES ARE DETERMINED PER 2013 CALIFORNIA BUILDING CODE AND ASCE 7-10 STRENGTH DESIGN IS USED. ($Sds = 1.80, ap = 2.5, ip = 1.5, Rp = 2.5, z/h \leq 1$)
HORIZONTAL FORCE (Eh) = $3.24 Wp$
VERTICAL FORCE (Ev) = $0.36 Wp$
- CENTER OF GRAVITY (C.G.) AND WEIGHT, INCLUSIVE OF WALL SUPPORT SYSTEM, CPU, MONITOR, MOUSE AND KEYBOARD, ARE THE GOVERNING PARAMETERS FOR DESIGN. THIS PREAPPROVAL ENCOMPASSES ALL WEIGHTS UP TO THE MAXIMUM WEIGHT SHOWN.
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- SEE GENERAL NOTES: SHEETS 1



KNAPE & VOGT WATERLOO ULT ARM WITH EXTENSION

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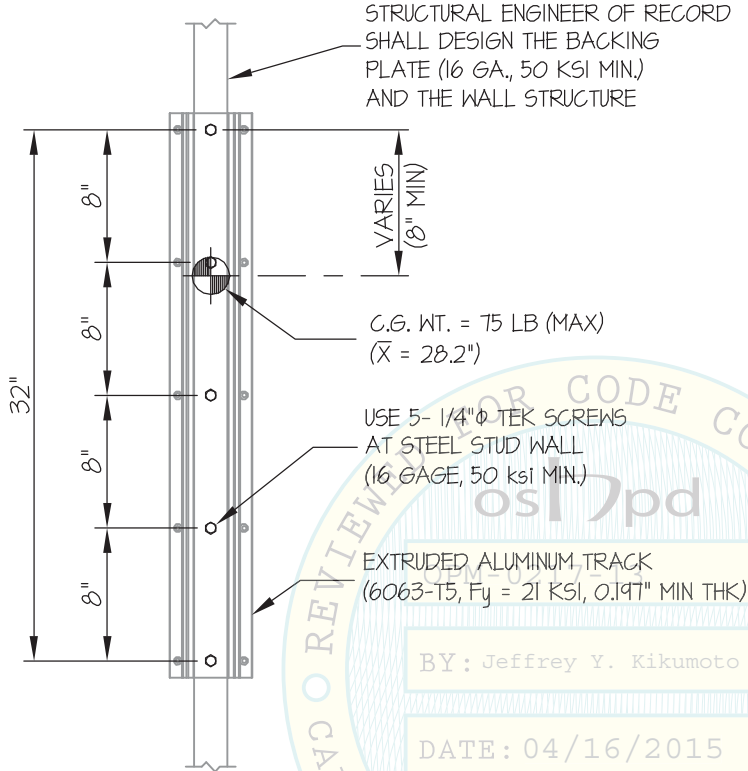
SHEET

5

OF **5** SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

WALL MOUNTED



2 x STUDS OR 4 x BLKG
(DOUGLAS-FIR LARCH
NUMBER 2 MIN.)
(DESIGNED BY STRUCTURAL
ENGINEER OF RECORD)

USE 5- 1/4"φ x 4"
WOOD SCREWS TO
WOOD STUD OR BLKG.
(PRE-DRILL HOLES
TO 70% SHANK DIAMETER)

5/8" THK.
WALL BOARD

3"
MIN

NOTE:
MIN EDGE DISTANCE = 1"
MIN END DISTANCE = 2"

BY: Jeffrey Y. Kikumoto

DATE: 04/16/2015

WOOD STUD WALL SECTION

ELEVATION AT WALL PLATE

