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

OFFICE USE ONLY
APPLICATION #: OPM-0228-13

OSHPD Preapproval of Manufacturer's Certification (OPM)

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

Manufacturer Information

Manufacturer: Sysmex America, Inc.

Manufacturer's Technical Representative: Alan Burton

Mailing Address: 577 Aptakisic Road, Lincolnshire, IL. 60069

Telephone: (224) 543-9308 Email: burtona@sysmex.com

Product Information

Product Name: XN-9000 Analyzer System

Product Type: Other electrical and mechanical components

Product Model Number: N/A

General Description: Automated hematology analyzer

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: 4/16/15

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: 909-606-7667 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 (CBSC 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 CBSC 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: 09/18/2015

Print Name: William Staehlin

Title: SSE

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-0228-13

THIS PREAPPROVAL CONFORMS TO THE 2013 CALIFORNIA BUILDING CODE

MANUFACTURER: **SYSMEX**

EQUIPMENT NAME: **XN-9000 SERIES**

Date: 12/21/15

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 WHERE S_{DS} IS NOT GREATER THAN 2.20.
4. FORCES PER ASCE 7-10 SECTION 13.3.1, EQUATIONS 13.3-1, 13.3-2 & 13.3-3, WHERE $S_{DS} = 2.20$, $a_p = 1.0$, $I_p = 1.5$, $R_p = 1.5$, $z/h = 0$ AT CONCRETE SLAB & $z/h \leq 1$ AT CONCRETE SLAB ON METAL DECK. 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. CONCRETE SLAB ON METAL DECK DETAIL VALID FOR DEMANDS SHOWN AT ANY ELEVATION IN THE BUILDING. (i.e. $z/h \leq 1$)
8. CONCRETE SLAB ON GRADE DETAIL VALID FOR DEMANDS SHOWN AT ANY ELEVATION BELOW GRADE. (i.e. $z/h = 0$)
9. **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 2013 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 S_{DS} & z/h RESULT IN SEISMIC FORCES (E_h, E_v) THAT DO NOT EXCEED THE VALUES ON THE DETAILS.

   D. VERIFY THAT THE CONCRETE SLAB TO WHICH THE EQUIPMENT IS ANCHORED MEETS THE REQUIREMENTS OF THE APPLICABLE ICC ESR.

   E. VERIFY THAT THE ANCHORS ARE AN ADEQUATE DISTANCE FROM ANY SLAB 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.

REGISTERED PROFESSIONAL ENGINEER
JONATHAN ROBERSON
No. 4197
EXP. 6-30-2016
12/21/15
STRUCTURAL
STATE OF CALIFORNIA

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
3/8"	Sand Light Weight	3000	Hilti Kwik Bolt TZ	ESR-1917	2"	N/A	N/A	See Sheet 35 of 36	25 FT-LB	1186 lb
1/2"	Normal Weight	3000	Hilti Kwik Bolt TZ	ESR-1917	3-1/4"	3"	9"	6"	40 FT-LB	2174 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 2013 CBC, 1913A.7: 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.

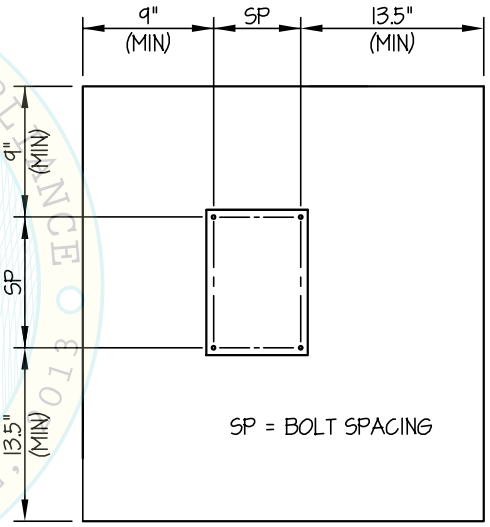
(ii) ACCEPTANCE CRITERIA:

- 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.



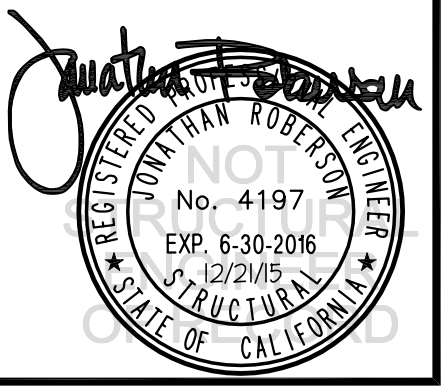
TYPICAL CONCRETE EDGE DETAIL

11. BOLTS THROUGH CONCRETE ON METAL DECK

A. BOLTS SHALL BE TORQUED BY 3/4 TURN OF THE NUTS AFTER THE SNUG TIGHT (THE SNUG-TIGHT CONDITION IS DEFINED AS THE TIGHTNESS REQUIRED TO BRING THE CONNECTED PLIES INTO FIRM CONTACT) CONDITION IS ACHIEVED, UNLESS OTHERWISE NOTED.

B. THROUGH BOLT HOLES SHALL BE 1/16" LARGER THAN BOLT SIZE (HOLE SIZE = BOLT SIZE + 1/16) FOR CONCRETE.

C. THROUGH-BOLTS IN CONCRETE SHALL RECEIVE SPECIAL INSPECTION AND TESTING (THROUGH BOLTS WITH STEEL TO STEEL CONNECTION IN TENSION DO NOT REQUIRE TENSION TESTING) IN ACCORDANCE WITH REQUIREMENTS FOR POST-INSTALLED ANCHORS.



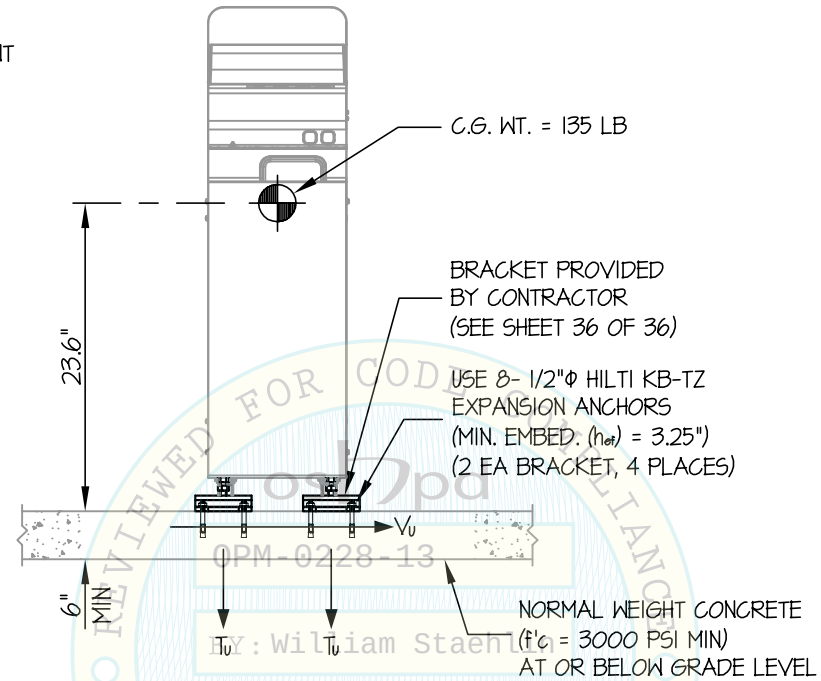
SYSMEX

XN-9000 SERIES

DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15
SHEET 3 OF 36 SHEETS

SEISMIC SUPPORTS & ATTACHMENTS — CONCRETE SLAB

NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER



T_u = 447 LB/BOLT (MAX)
V_u = 51 LB/BOLT (MAX)
(VALUES INCLUDE Ω_o)

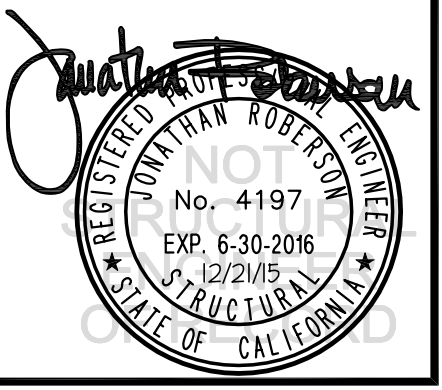
FRONT ELEVATION
(XN-9000 (BT-ST) MODEL)

NOTES:

1. FORCES ARE DETERMINED PER 2013 CALIFORNIA BUILDING CODE AND ASCE 7-10. STRENGTH DESIGN IS USED. (S_{DS} = 2.20, a_p = 1.0, I_p = 1.5, R_p = 1.5, Ω_o = 1.5, z/h = 0)

   HORIZONTAL FORCE (E_h) = 0.99 W_p
   HORIZONTAL FORCE (E_{mh}) = 1.49 W_p (FOR CONCRETE ANCHORAGE)
   VERTICAL FORCE (E_v) = 0.44 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. SEE GENERAL NOTES: SHEETS 1 AND 2.



SYSMEX

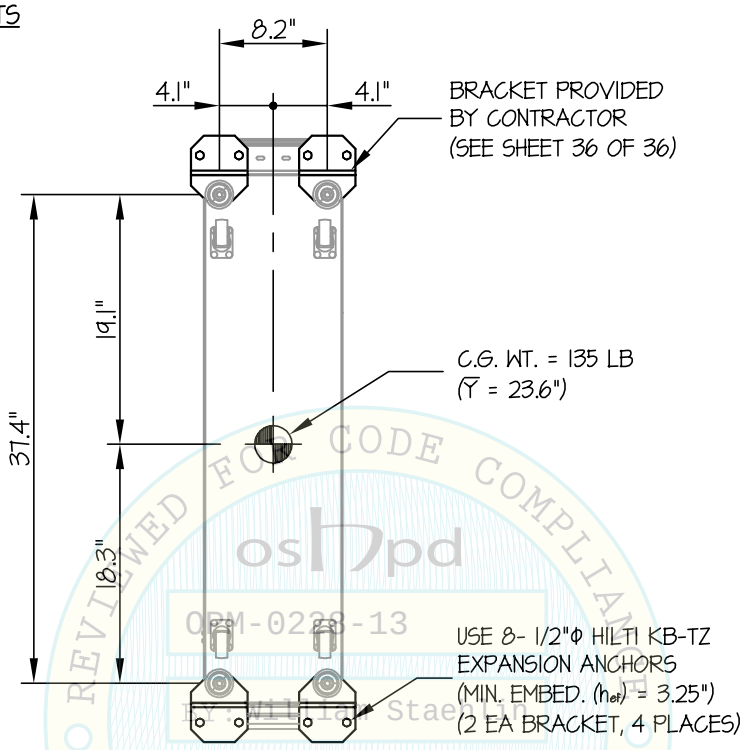
XN-9000 SERIES

DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15
SHEET 4 OF 36 SHEETS

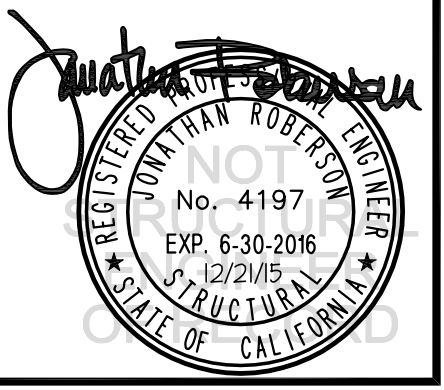
SEISMIC SUPPORTS & ATTACHMENTS

NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER

CONCRETE SLAB



PLAN AT BASE
(XN-9000 (BT-ST) MODEL)



SYSMEX

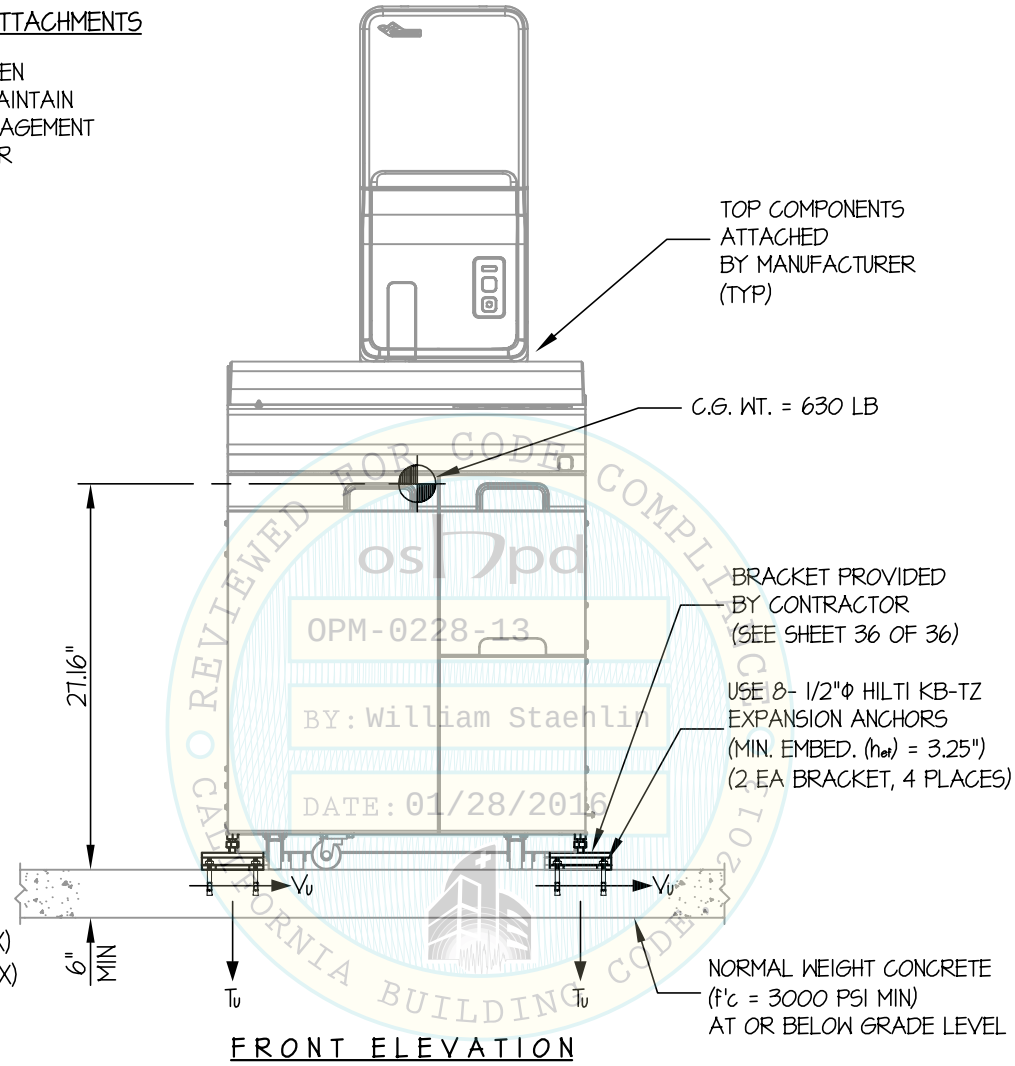
XN-9000 SERIES

DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15
SHEET 5 OF 36 SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE SLAB

NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER



Tu = 971 LB/BOLT (MAX)
Vu = 249 LB/BOLT (MAX)
(VALUES INCLUDE Ω_0)

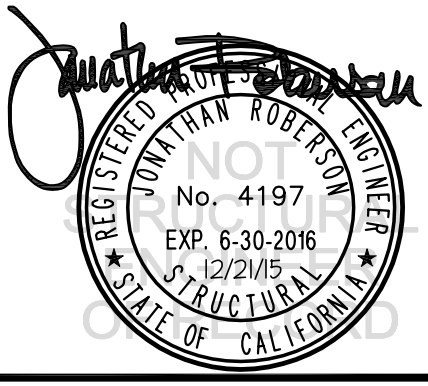
FRONT ELEVATION
(XN-9000 (CV-50) MODEL)

NOTES:

1. FORCES ARE DETERMINED PER 2013 CALIFORNIA BUILDING CODE AND ASCE 7-10. STRENGTH DESIGN IS USED. (S_{DS} = 2.20, a_p = 1.0, I_p = 1.5, R_p = 1.5, Ω_0 = 1.5, z/h = 0)

   HORIZONTAL FORCE (E_h) = 0.99 W_p
   HORIZONTAL FORCE (E_{mh}) = 1.49 W_p (FOR CONCRETE ANCHORAGE)
   VERTICAL FORCE (E_v) = 0.44 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. SEE GENERAL NOTES: SHEETS 1 AND 2.



SYSMEX

XN-9000 SERIES

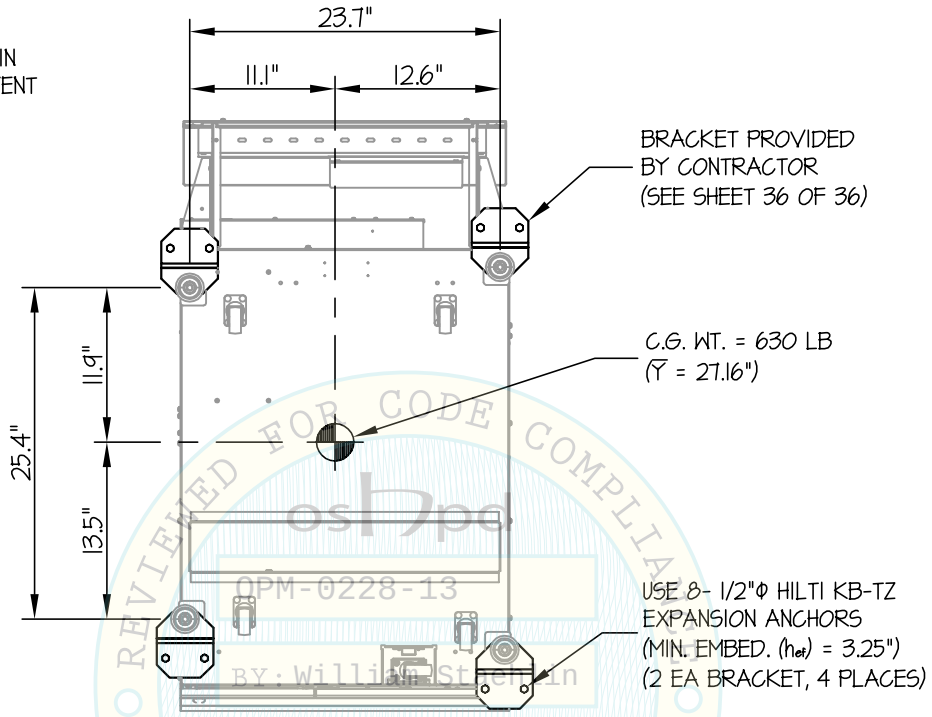
DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15

SHEET 6 OF 36 SHEETS

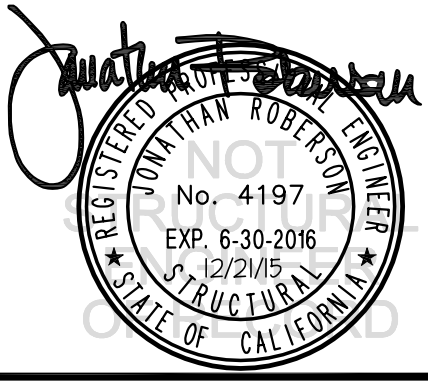
SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE SLAB

NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER



PLAN AT BASE
(XN-9000 (CV-50) MODEL)



SYSMEX

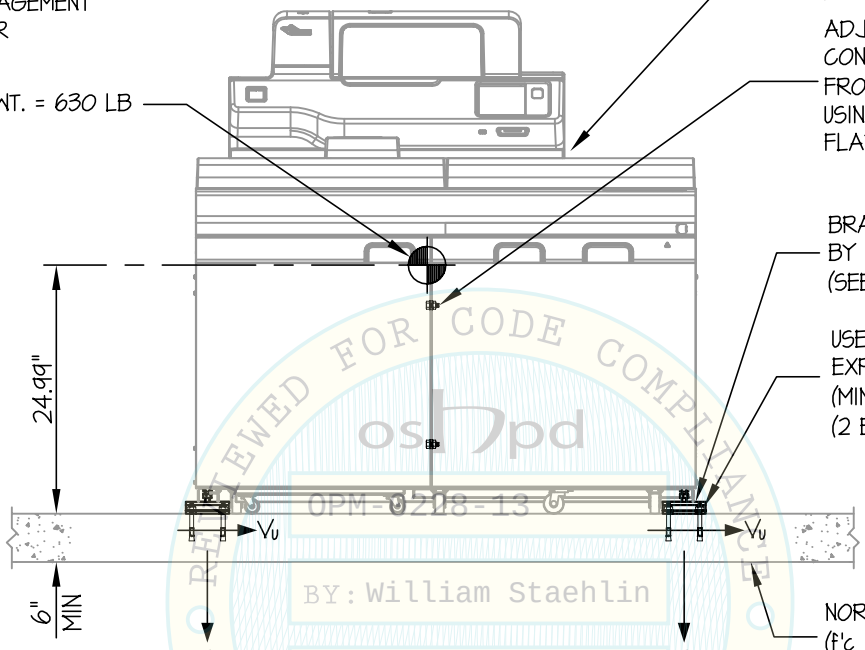
XN-9000 SERIES

DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15

SHEET 7 OF 36 SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER



CONCRETE SLAB

Tu = 494 LB/BOLT (MAX)
Vu = 252 LB/BOLT (MAX)
(VALUES INCLUDE Ω_0)

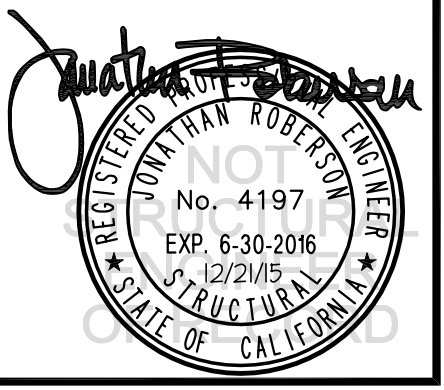
FRONT ELEVATION
(XN-9000 (CV-60) MODEL)

NOTES:

1. FORCES ARE DETERMINED PER 2013 CALIFORNIA BUILDING CODE AND ASCE 7-10. STRENGTH DESIGN IS USED. (S_{DS} = 2.20, a_p = 1.0, I_p = 1.5, R_p = 1.5, Ω_0 = 1.5, z/h = 0)

   HORIZONTAL FORCE (E_h) = 0.99 W_p
   HORIZONTAL FORCE (E_{mh}) = 1.49 W_p (FOR CONCRETE ANCHORAGE)
   VERTICAL FORCE (E_v) = 0.44 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. SEE GENERAL NOTES: SHEETS 1 AND 2.



SYSMEX

XN-9000 SERIES

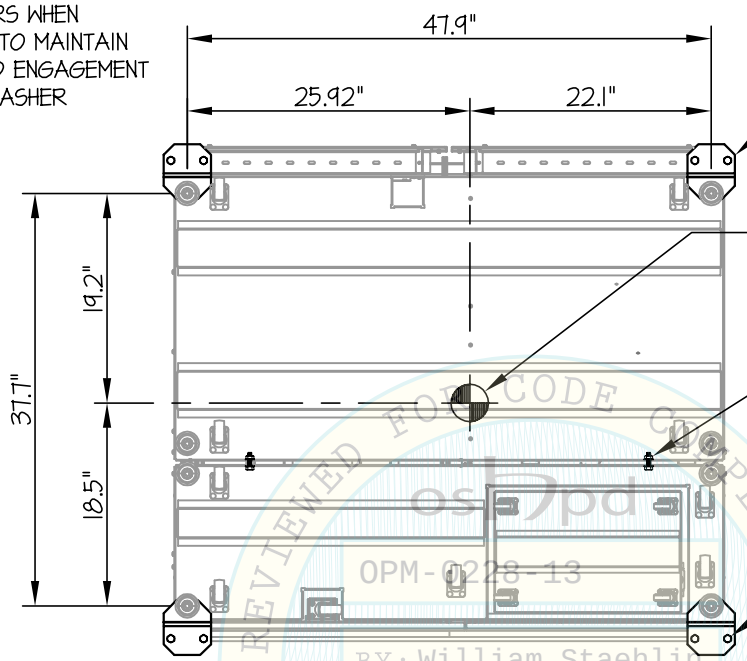
DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15

SHEET 8 OF 36 SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE SLAB

NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER



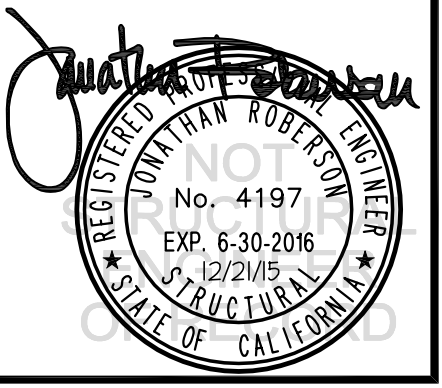
BRACKET PROVIDED BY CONTRACTOR (SEE SHEET 36 OF 36)

C.G. WT. = 630 LB ($\bar{Y}$ = 24.99")

ADJACENT UNITS ARE CONNECTED AT TWO POINTS FRONT & BACK, (4) TOTAL, BY MFR USING 3/8"Φ A307 BOLTS W/ FLAT WASHERS & NUTS

USE 8- 1/2"Φ HILTI KB-TZ EXPANSION ANCHORS (MIN. EMBED. (h_{ef}) = 3.25") (2 EA BRACKET, 4 PLACES)

PLAN AT BASE
(XN-9000 (CV-60) MODEL)



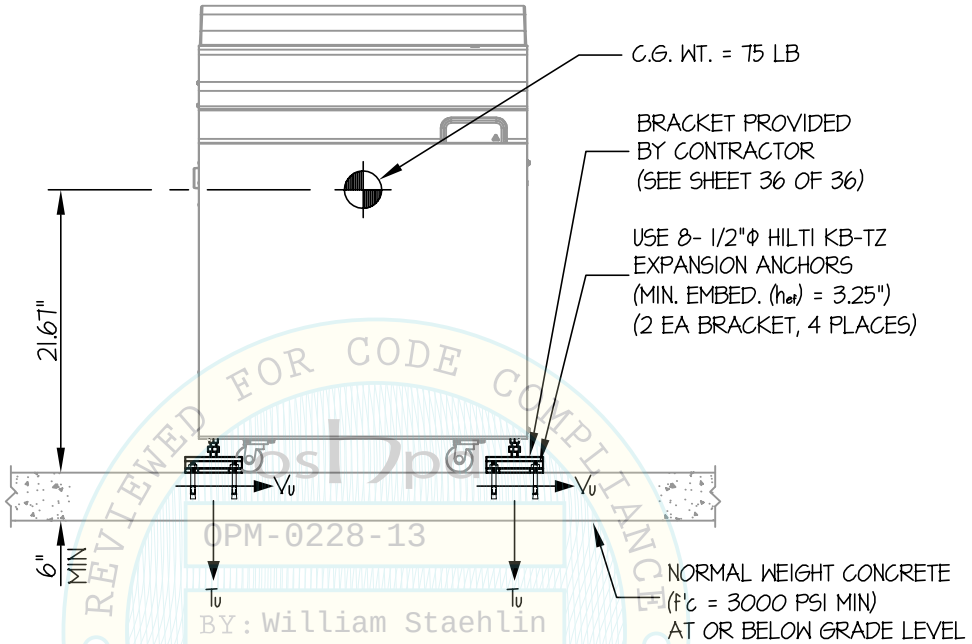
SYSMEX

XN-9000 SERIES

DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15
SHEET 9 OF 36 SHEETS

SEISMIC SUPPORTS & ATTACHMENTS — CONCRETE SLAB

NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER



FRONT ELEVATION
(XN-9000 (CV-70) MODEL)

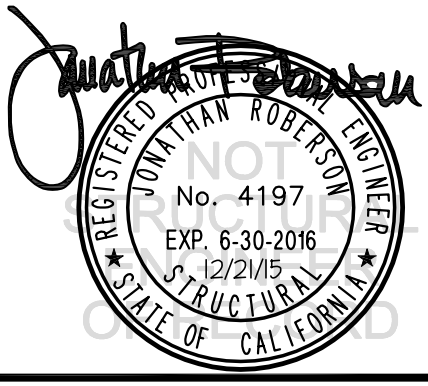
Tu = 321 LB/BOLT (MAX)
Vu = 34 LB/BOLT (MAX)
(VALUES INCLUDE Ω_0)

NOTES:

1. FORCES ARE DETERMINED PER 2013 CALIFORNIA BUILDING CODE AND ASCE 7-10. STRENGTH DESIGN IS USED. (S_{DS} = 2.20, a_p = 1.0, I_p = 1.5, R_p = 1.5, Ω_0 = 1.5, z/h = 0)

   HORIZONTAL FORCE (E_h) = 0.99 W_p
   HORIZONTAL FORCE (E_{mh}) = 1.49 W_p (FOR CONCRETE ANCHORAGE)
   VERTICAL FORCE (E_v) = 0.44 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. SEE GENERAL NOTES: SHEETS 1 AND 2.



SYSMEX

XN-9000 SERIES

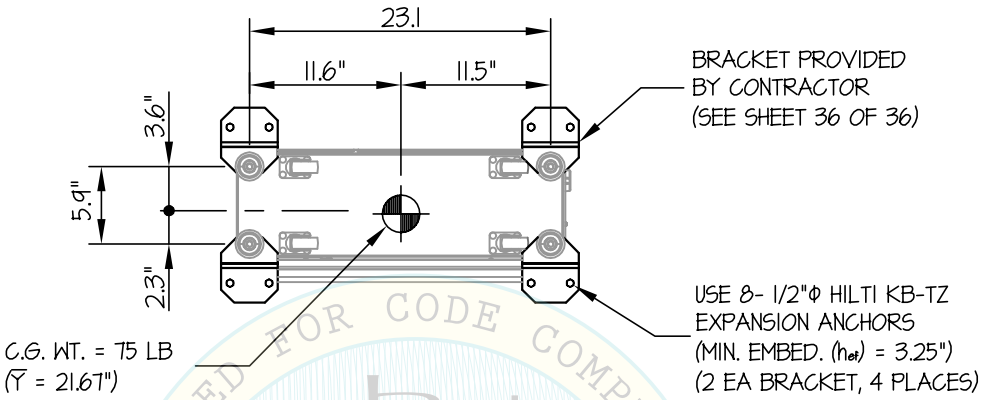
DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15

SHEET 10 OF 36 SHEETS

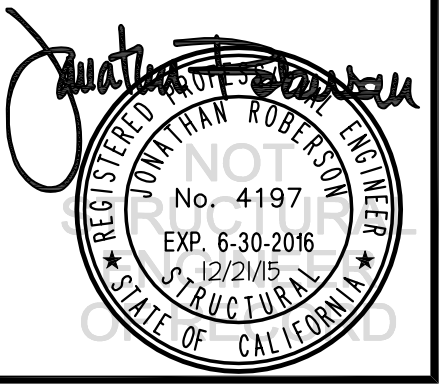
SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE SLAB

NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER



PLAN AT BASE
(XN-9000 (CV-70) MODEL)



SYSMEX

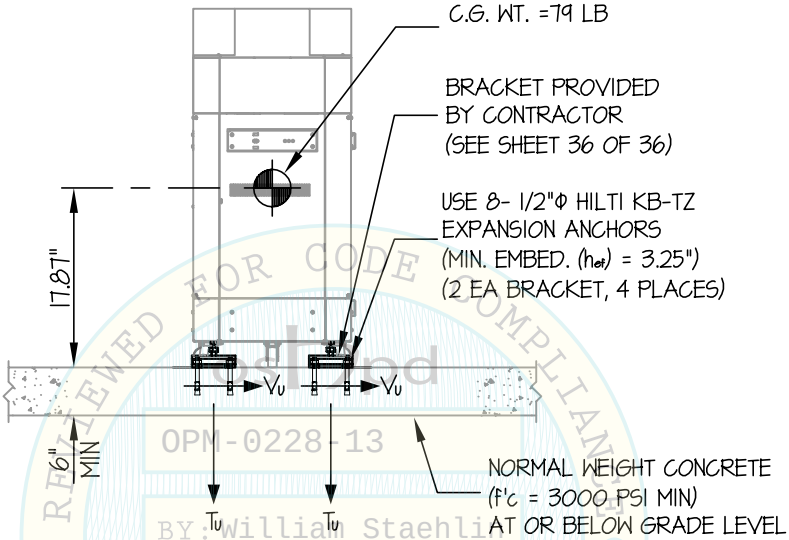
XN-9000 SERIES

DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15

SHEET 11 OF 36 SHEETS

SEISMIC SUPPORTS & ATTACHMENTS — CONCRETE SLAB

NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER



Tu = 163 LB/BOLT (MAX)
Vu = 29 LB/BOLT (MAX)
(VALUES INCLUDE Ω_o)

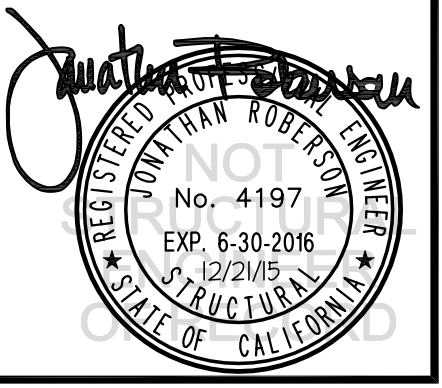
FRONT ELEVATION
(XN-9000 (TU-40) MODEL)

NOTES:

1. FORCES ARE DETERMINED PER 2013 CALIFORNIA BUILDING CODE AND ASCE 7-10. STRENGTH DESIGN IS USED. (S_{DS} = 2.20, a_p = 1.0, I_p = 1.5, R_p = 1.5, Ω_o = 1.5, z/h = 0)

   HORIZONTAL FORCE (E_h) = 0.99 W_p
   HORIZONTAL FORCE (E_{mh}) = 1.49 W_p (FOR CONCRETE ANCHORAGE)
   VERTICAL FORCE (E_v) = 0.44 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. SEE GENERAL NOTES: SHEETS 1 AND 2.



SYSMEX

XN-9000 SERIES

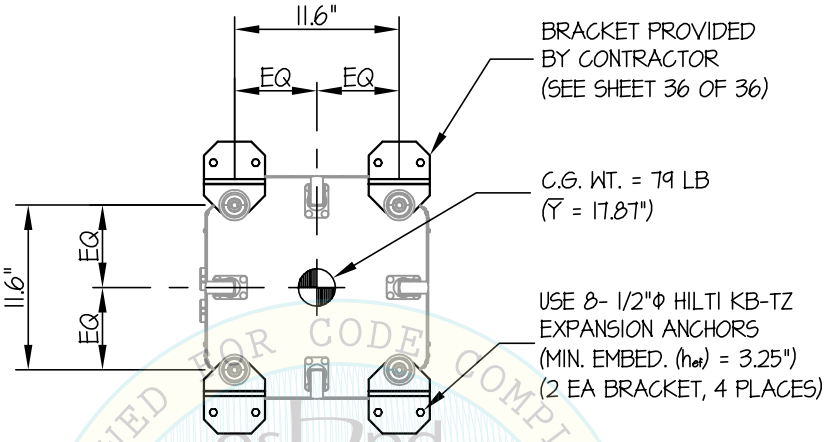
DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15

SHEET 12 OF 36 SHEETS

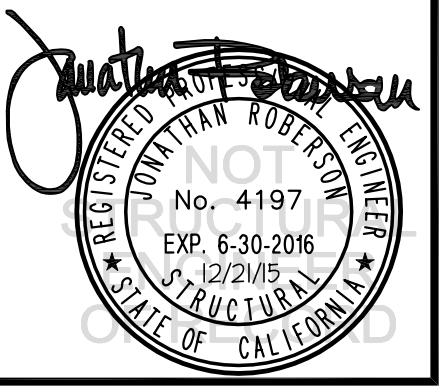
SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE SLAB

NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER



PLAN AT BASE
(XN-9000 (TU-40) MODEL)



SYSMEX

XN-9000 SERIES

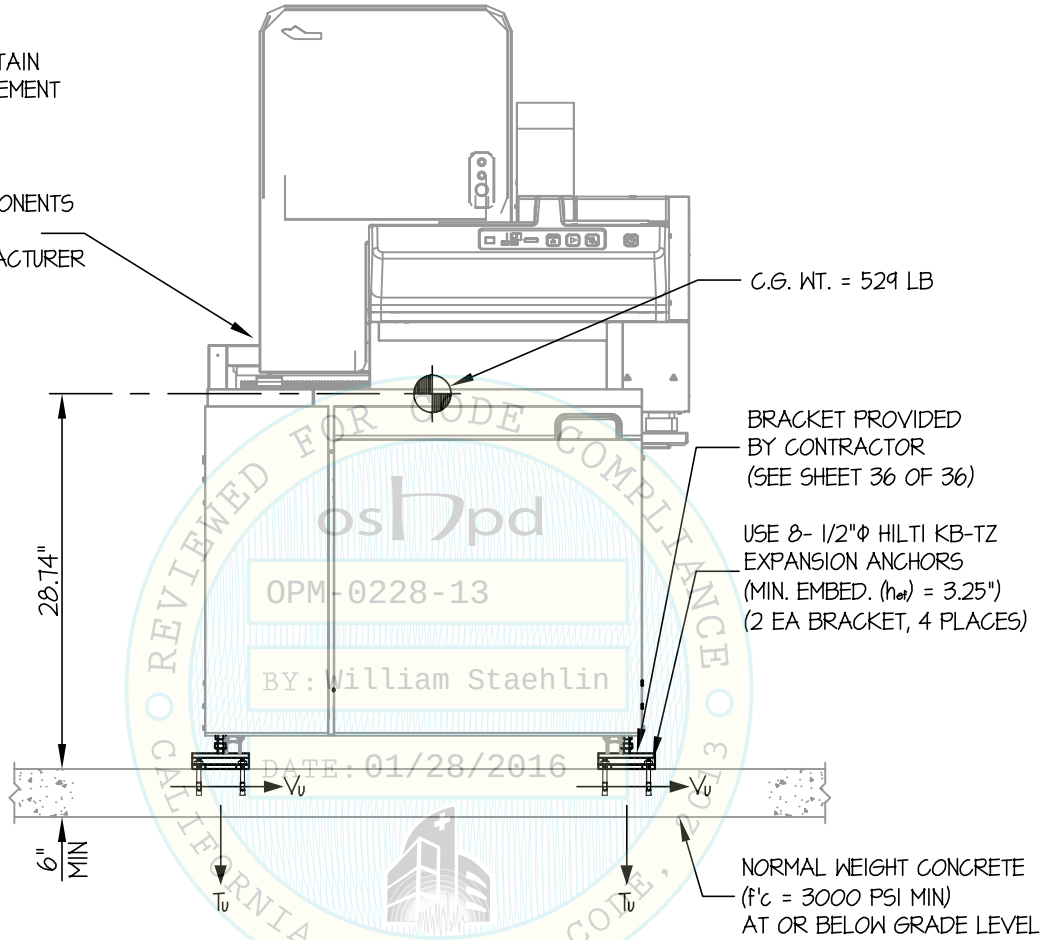
DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15

SHEET 13 OF 36 SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE SLAB

NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER



Tu = 643 LB/BOLT (MAX)
Vu = 220 LB/BOLT (MAX)
(VALUES INCLUDE Ω_0)

FRONT ELEVATION
(XN-9000 (WG-84) MODEL)

NOTES:

1. FORCES ARE DETERMINED PER 2013 CALIFORNIA BUILDING CODE AND ASCE 7-10. STRENGTH DESIGN IS USED. (S_{DS} = 2.20, a_p = 1.0, I_p = 1.5, R_p = 1.5, Ω_0 = 1.5, z/h = 0)

   HORIZONTAL FORCE (E_h) = 0.99 W_p
   HORIZONTAL FORCE (E_{mh}) = 1.49 W_p (FOR CONCRETE ANCHORAGE)
   VERTICAL FORCE (E_v) = 0.44 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. SEE GENERAL NOTES: SHEETS 1 AND 2.

REGISTERED PROFESSIONAL ENGINEER
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NOT STRUCTURAL ENGINEER OF RECORD

SYSMEX

XN-9000 SERIES

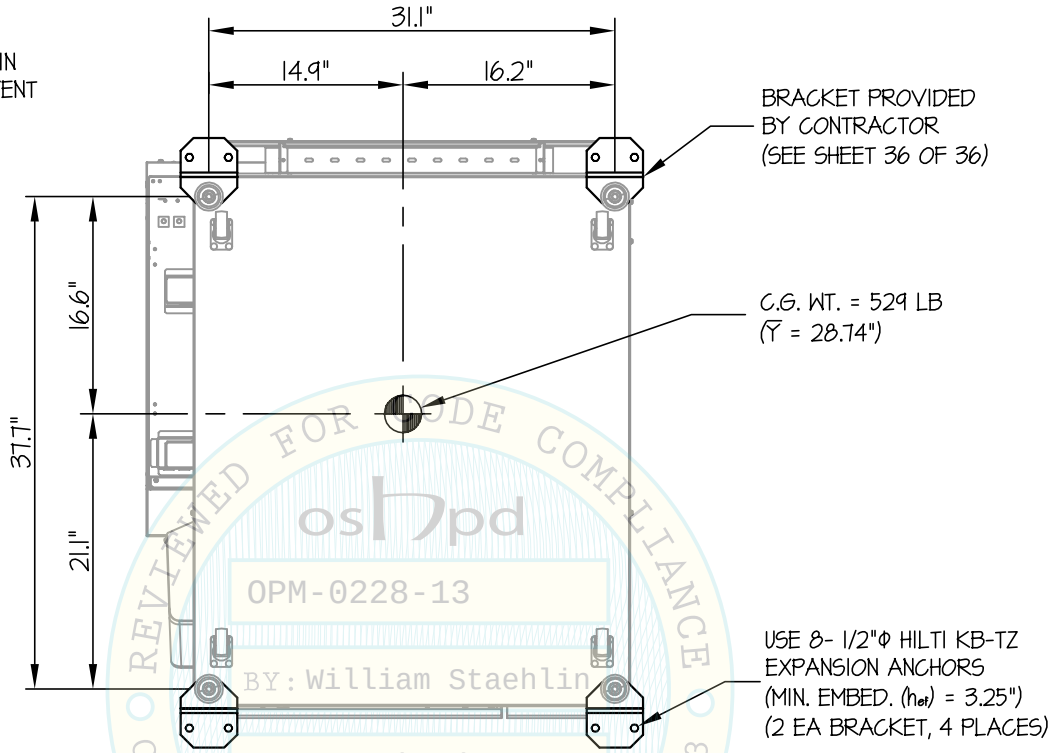
DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15

SHEET 14 OF 36 SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE SLAB

NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER



PLAN AT BASE
(XN-9000 (WG-84) MODEL)

REGISTERED PROFESSIONAL ENGINEER
JONATHAN ROBERSON
No. 4197
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12/21/15
STRUCTURAL
STATE OF CALIFORNIA

SYSMEX

XN-9000 SERIES

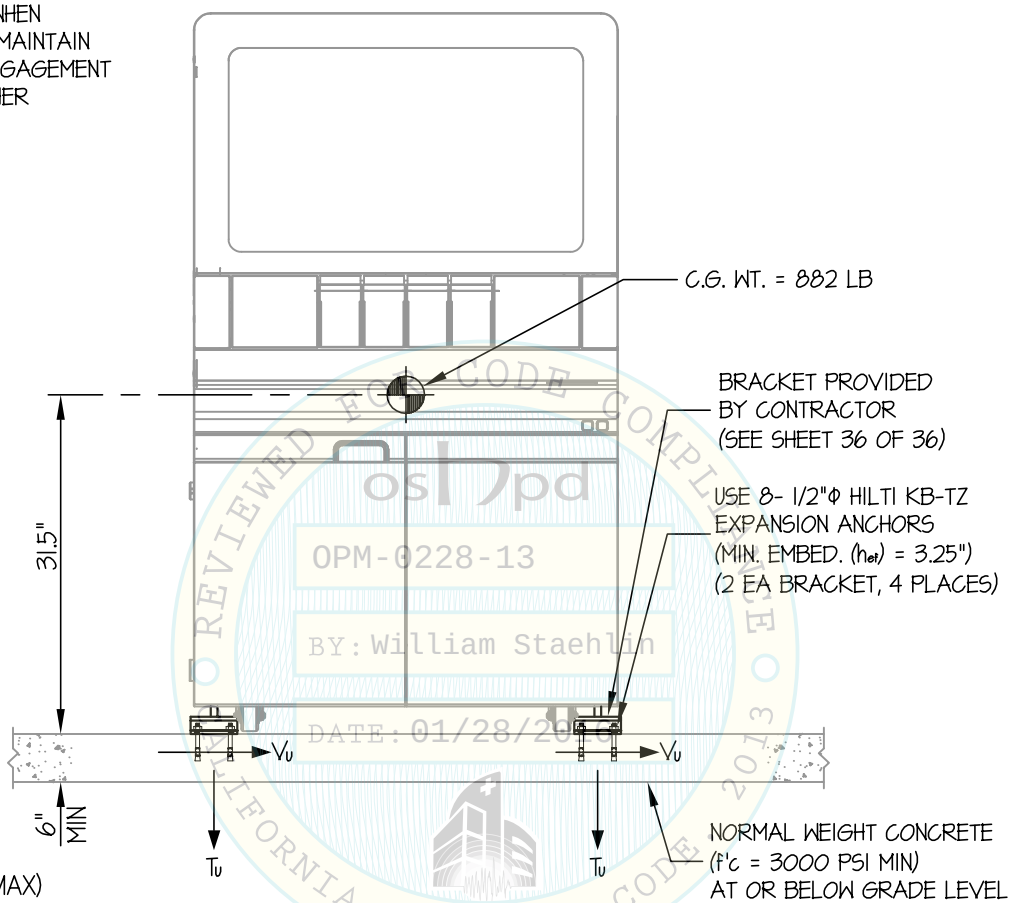
DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15

SHEET 15 OF 36 SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE SLAB

NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER



Tu = 1073 LB/BOLT (MAX)
Vu = 399 LB/BOLT (MAX)
(VALUES INCLUDE Ω_0)

FRONT ELEVATION
(XN-9000 (TS-10) MODEL)

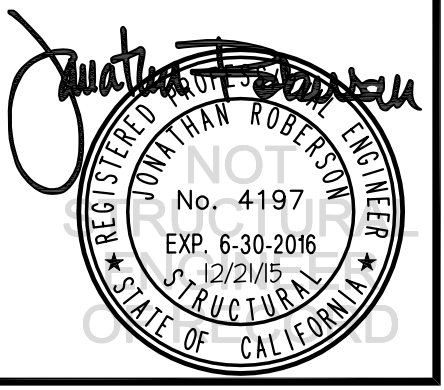
NOTES:

1. **FORCES ARE DETERMINED PER 2013 CALIFORNIA BUILDING CODE AND ASCE 7-10**
   STRENGTH DESIGN IS USED. (S_{DS} = 2.20, a_p = 1.0, I_p = 1.5, R_p = 1.5, Ω_0 = 1.5, z/h = 0)

   HORIZONTAL FORCE (E_h) = 0.99 W_p (FOR CONCRETE ANCHORAGE)
   VERTICAL FORCE (E_v) = 0.44 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.



SYSMEX

XN-9000 SERIES

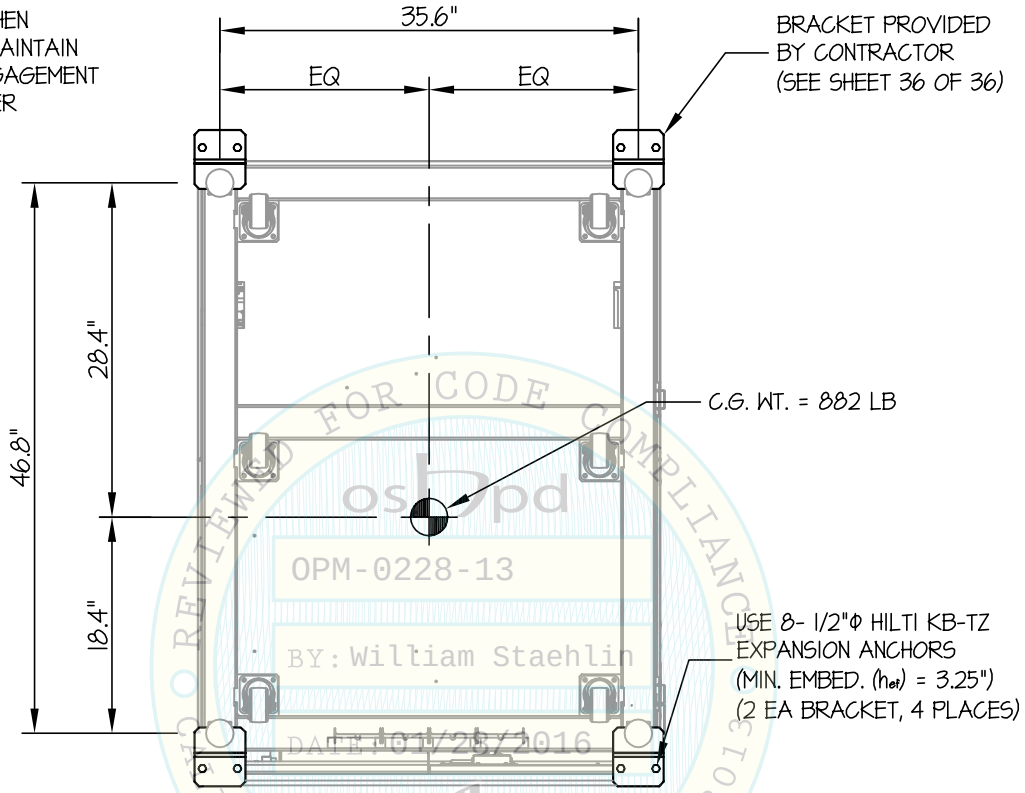
DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15

SHEET 16 OF 36 SHEETS

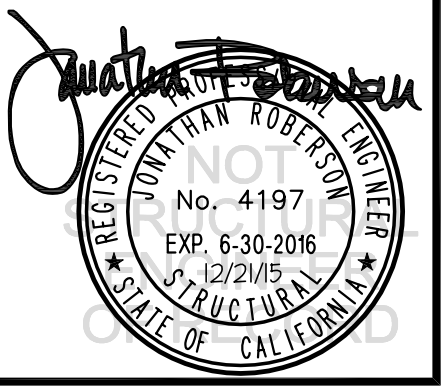
SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE SLAB

NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER



PLAN AT BASE
(XN-9000 (TS-10) MODEL)



SYSMEX

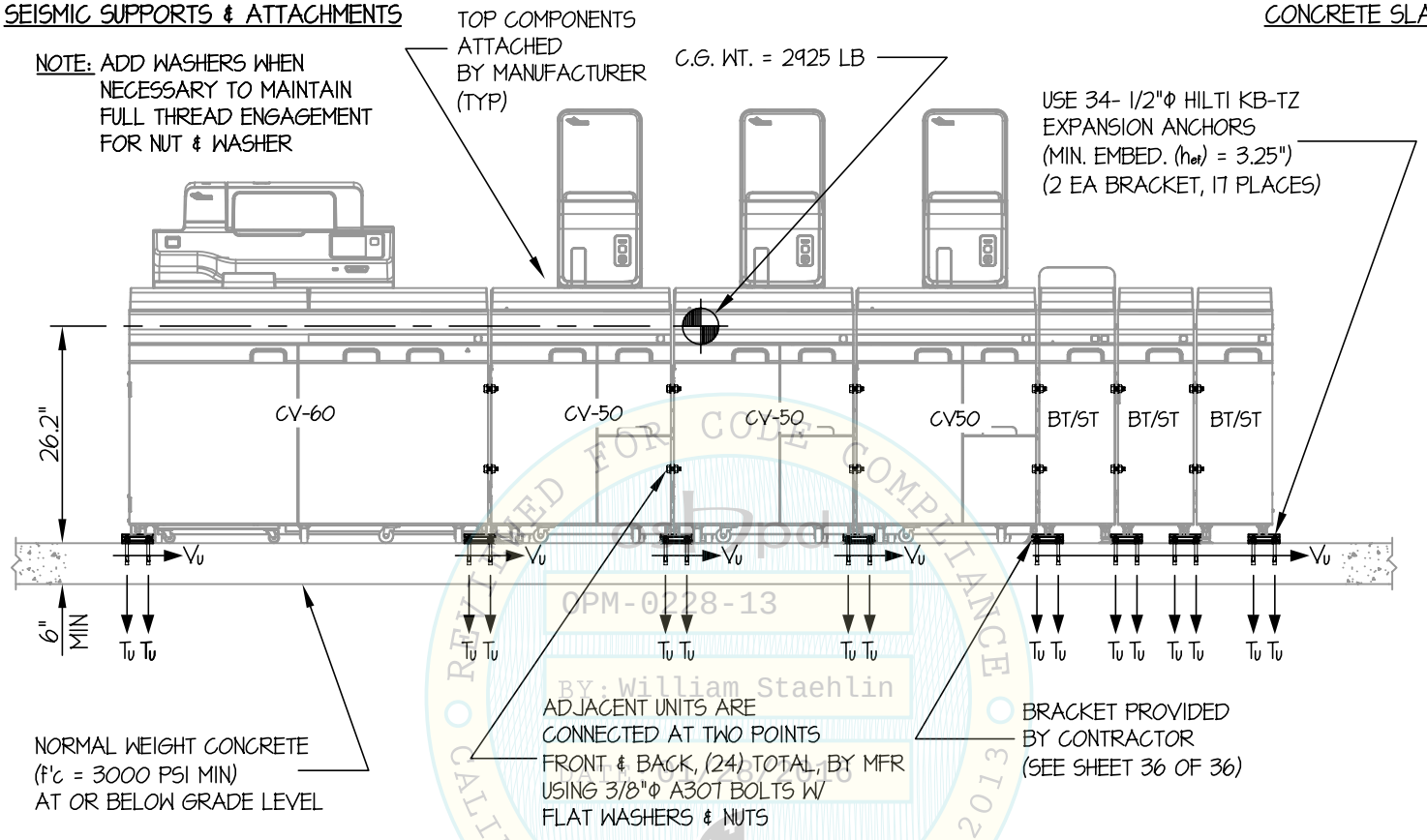
XN-9000 SERIES

DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15

SHEET 17 OF 36 SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE SLAB



Tu = 807 LB/BOLT (MAX)
Vu = 363 LB/BOLT (MAX)
(VALUES INCLUDE Ω_0)

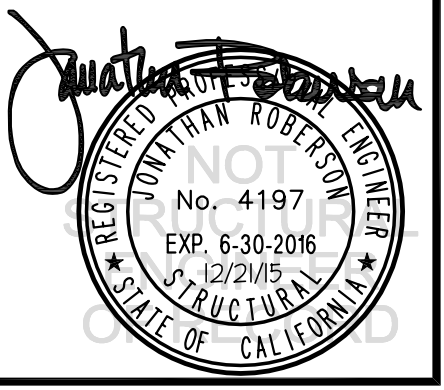
FRONT ELEVATION
(XN-9000 (STANDARD CONFIGURATION) MODEL)

NOTES:

1. FORCES ARE DETERMINED PER 2013 CALIFORNIA BUILDING CODE AND ASCE 7-10. STRENGTH DESIGN IS USED. (S_{DS} = 2.20, a_p = 1.0, I_p = 1.5, R_p = 1.5, Ω_0 = 1.5, z/h = 0)

   HORIZONTAL FORCE (Eh) = 0.99 Wp
   HORIZONTAL FORCE (Emh) = 1.49 Wp (FOR CONCRETE ANCHORAGE)
   VERTICAL FORCE (Ev) = 0.44 Wp

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. SEE GENERAL NOTES: SHEETS 1 AND 2.



SYSMEX

XN-9000 SERIES

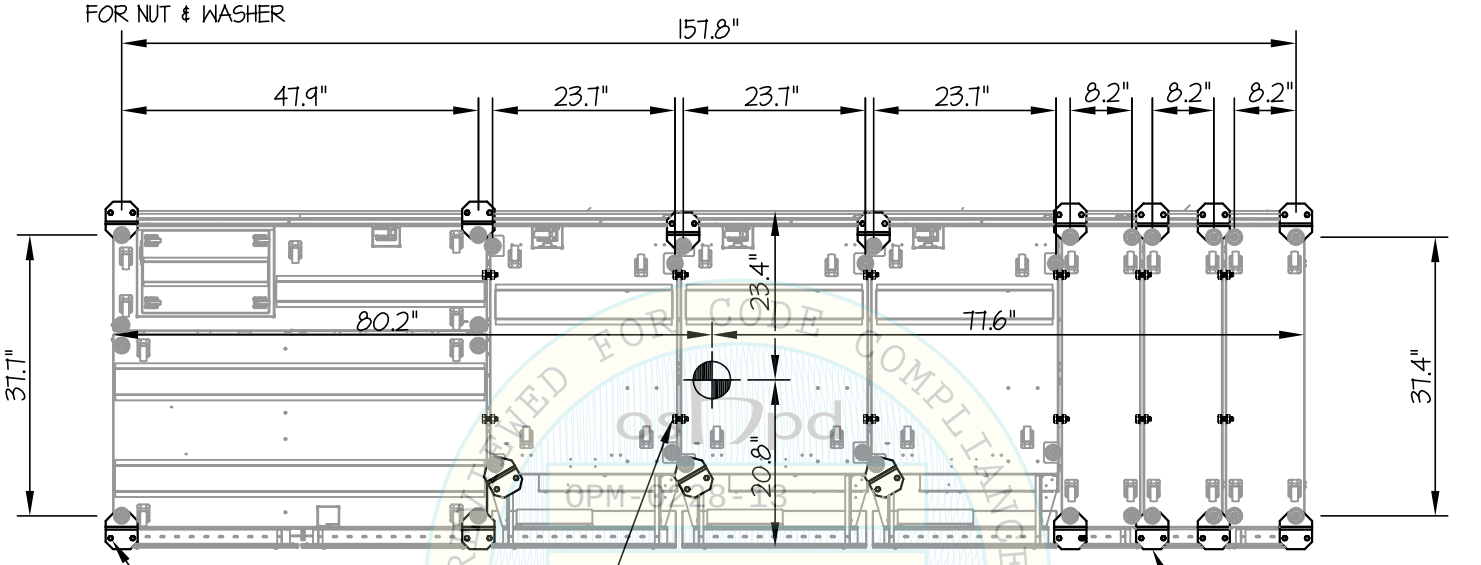
DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15

SHEET 18 OF 36 SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE SLAB

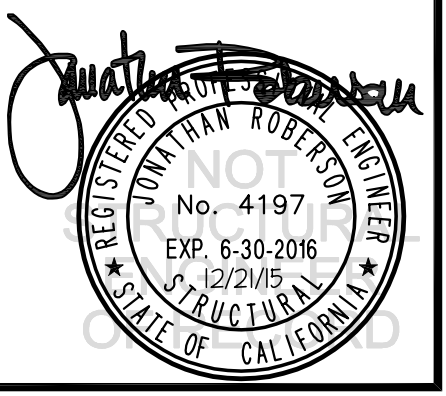
NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER



USE 34- 1/2"Φ HILTI KB-TZ EXPANSION ANCHORS (MIN. EMBED. (h_{ef}) = 3.25") (2 EA BRACKET, 17 PLACES)

ADJACENT UNITS ARE CONNECTED AT TWO POINTS FRONT & BACK, (24) TOTAL, BY MFR USING 3/8"Φ A307 BOLTS W/ FLAT WASHERS & NUTS

BRACKET PROVIDED BY CONTRACTOR (SEE SHEET 36 OF 36)



SYSMEX

XN-9000 SERIES

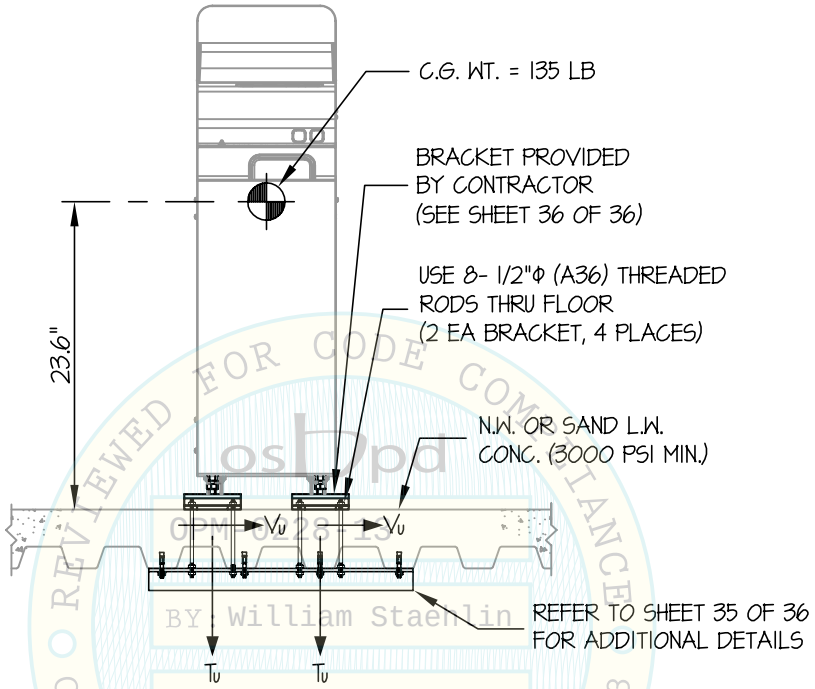
DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15

SHEET 19 OF 36 SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE SLAB ON METAL DECK

NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER



Tu = 813 LB/BOLT (MAX)
Vu = 91 LB/BOLT (MAX)
(VALUES DO NOT INCLUDE Ω_o)

FRONT ELEVATION
(XN-9000 (BT-ST) MODEL)

NOTES:

1. FORCES ARE DETERMINED PER 2013 CALIFORNIA BUILDING CODE AND ASCE 7-10. STRENGTH DESIGN IS USED. (S_{DS} = 2.20, a_p = 1.0, I_p = 1.5, R_p = 1.5, Ω_o = 1.5, $z/h \leq 1$)

   HORIZONTAL FORCE (E_h) = 2.64 W_p
   HORIZONTAL FORCE (E_{mh}) = 3.96 W_p (FOR CONCRETE ANCHORAGE)
   VERTICAL FORCE (E_v) = 0.44 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. SEE GENERAL NOTES: SHEETS 1 AND 2.

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EXP. 6-30-2016
12/21/15
STRUCTURAL
STATE OF CALIFORNIA

SYSMEX

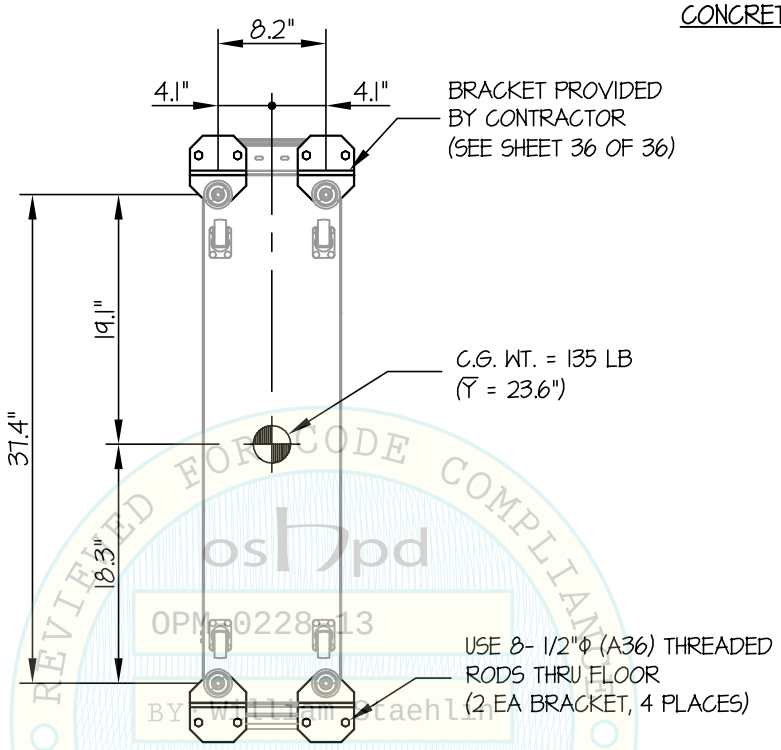
XN-9000 SERIES

DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15
SHEET 20 OF 36 SHEETS

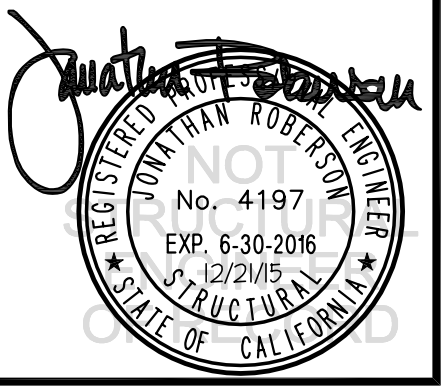
SEISMIC SUPPORTS & ATTACHMENTS

NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER

CONCRETE SLAB ON METAL DECK



PLAN AT BASE
(XN-9000 (BT-ST) MODEL)



SYSMEX

XN-9000 SERIES

DES. J. ROBERSON
JOB NO. 11-1443
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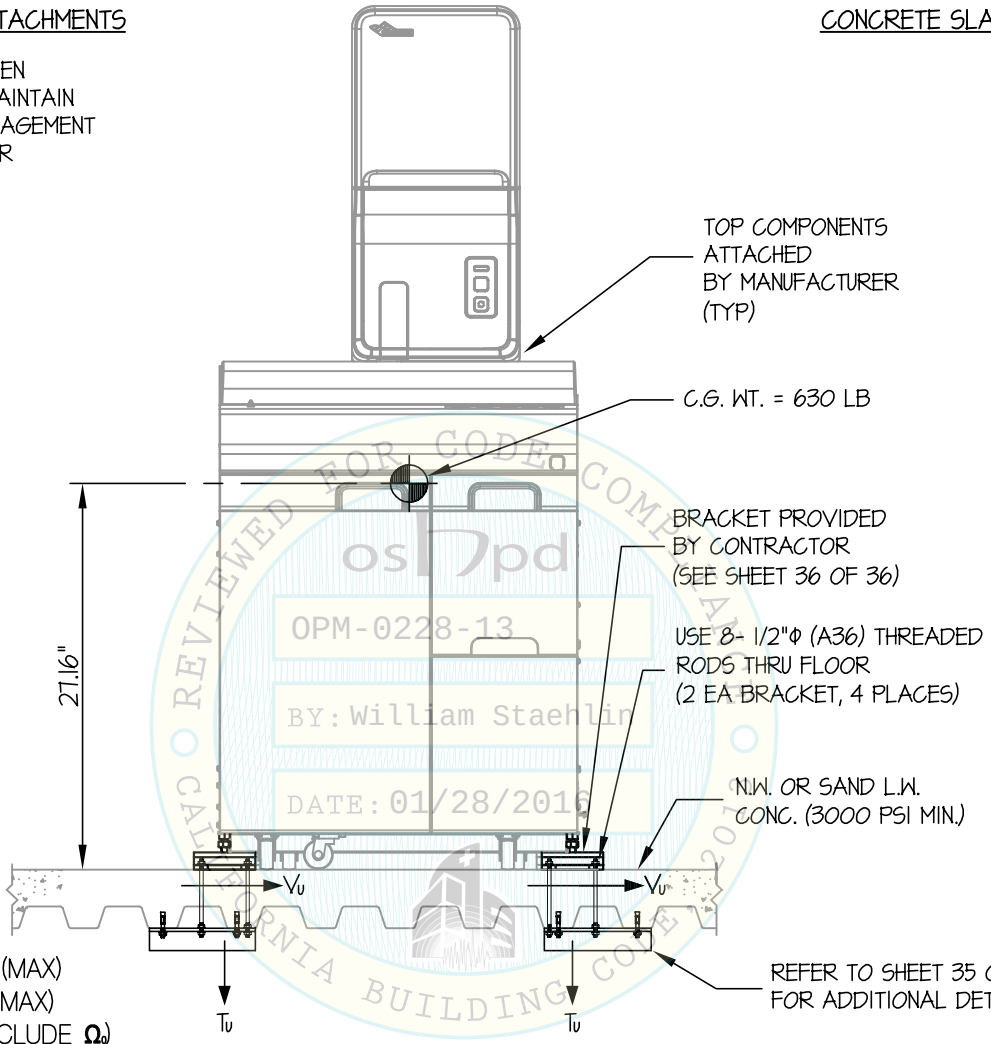
SHEET 21 OF 36 SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE SLAB ON METAL DECK

NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER



Tu = 1822 LB/BOLT (MAX)
Vu = 442 LB/BOLT (MAX)
(VALUES DO NOT INCLUDE Ω_o)

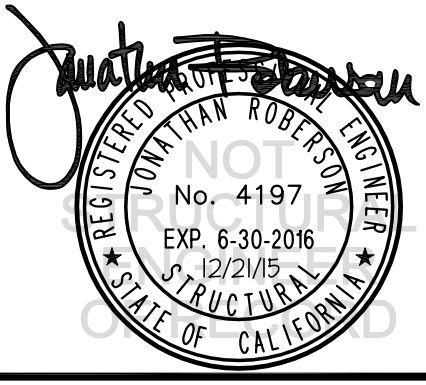
FRONT ELEVATION
(XN-9000 (CV-50) MODEL)

NOTES:

1. FORCES ARE DETERMINED PER 2013 CALIFORNIA BUILDING CODE AND ASCE 7-10. STRENGTH DESIGN IS USED. (S_{DS} = 2.20, a_p = 1.0, I_p = 1.5, R_p = 1.5, Ω_o = 1.5, z/h ≤ 1)

   HORIZONTAL FORCE (E_h) = 2.64 W_p
   HORIZONTAL FORCE (E_{mh}) = 3.96 W_p (FOR CONCRETE ANCHORAGE)
   VERTICAL FORCE (E_v) = 0.44 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. SEE GENERAL NOTES: SHEETS 1 AND 2.



SYSMEX

XN-9000 SERIES

DES. J. ROBERSON
JOB NO. 11-1443
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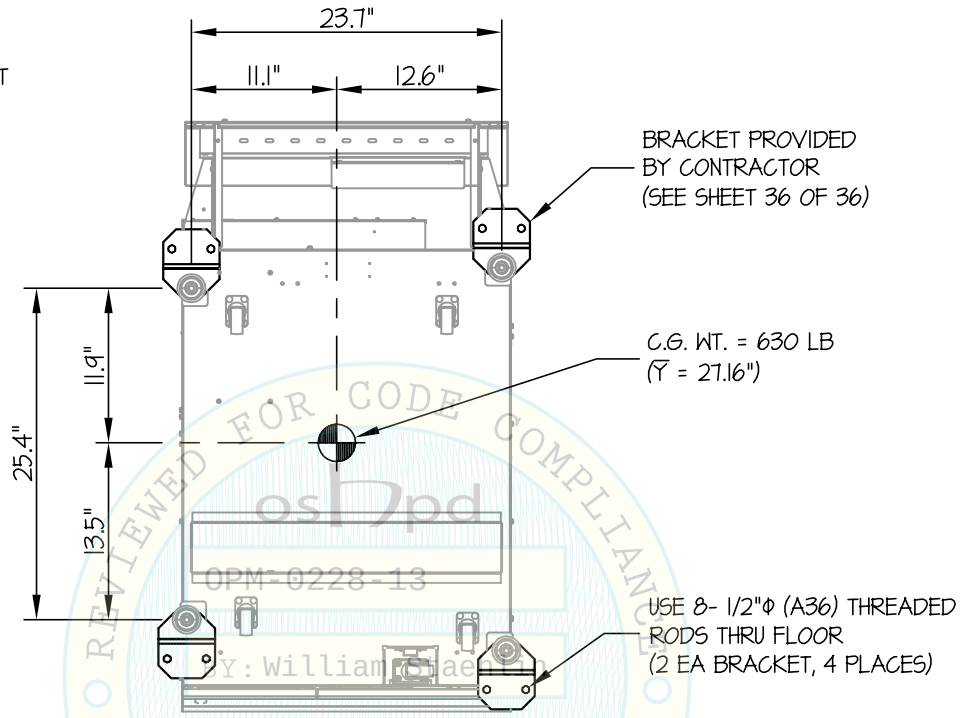
SHEET 22 OF 36 SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE SLAB ON METAL DECK

NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER



PLAN AT BASE
(XN-9000 (CV-50) MODEL)

REGISTERED PROFESSIONAL ENGINEER
JONATHAN ROBERSON
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SYSMEX

XN-9000 SERIES

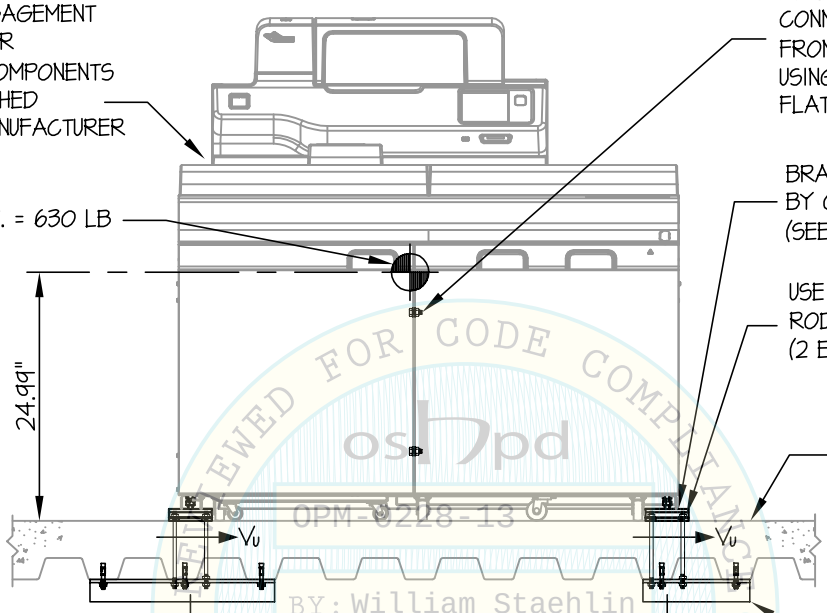
DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15

SHEET 23 OF 36 SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE SLAB ON METAL DECK

NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER



Tu = 970 LB/BOLT (MAX)
Vu = 448 LB/BOLT (MAX)
(VALUES DO NOT INCLUDE Ω_o)

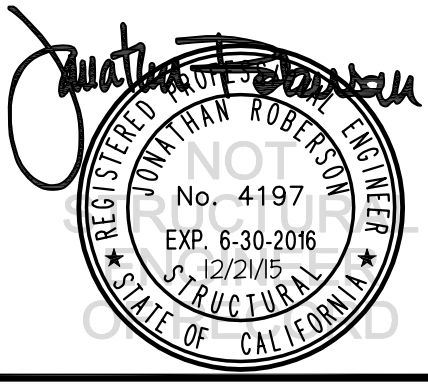
FRONT ELEVATION
(XN-9000 (CV-60) MODEL)

NOTES:

1. FORCES ARE DETERMINED PER 2013 CALIFORNIA BUILDING CODE AND ASCE 7-10. STRENGTH DESIGN IS USED. (S_{DS} = 2.20, a_p = 1.0, I_p = 1.5, R_p = 1.5, Ω_o = 1.5, z/h $\leq$ 1)

   HORIZONTAL FORCE (E_h) = 2.64 W_p
   HORIZONTAL FORCE (E_{mh}) = 3.96 W_p (FOR CONCRETE ANCHORAGE)
   VERTICAL FORCE (E_v) = 0.44 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. SEE GENERAL NOTES: SHEETS 1 AND 2.



SYSMEX

XN-9000 SERIES

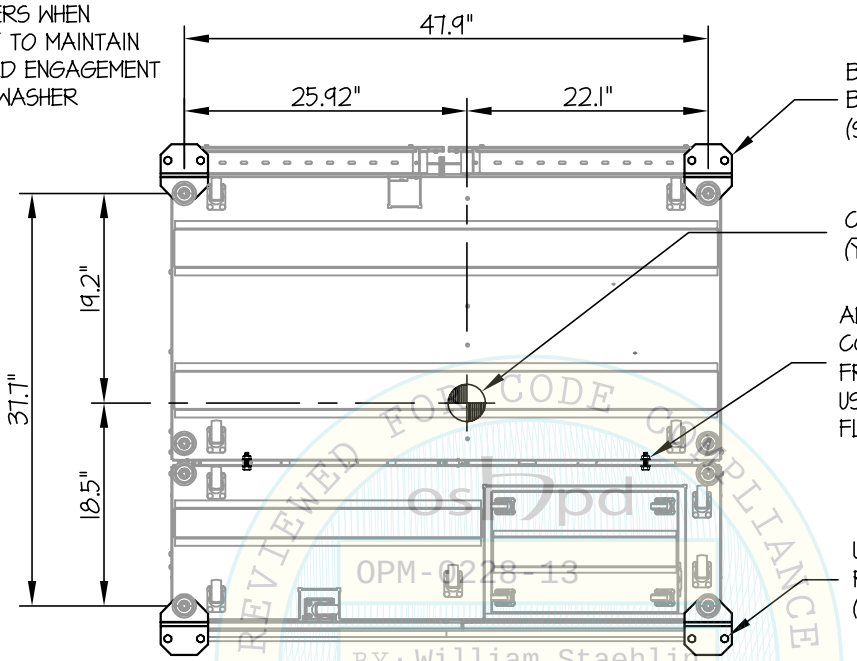
DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15

SHEET 24 OF 36 SHEETS

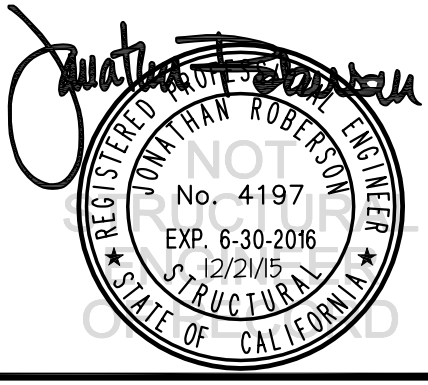
SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE SLAB ON METAL DECK

NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER



PLAN AT BASE
(XN-9000 (CV-60) MODEL)



SYSMEX

XN-9000 SERIES

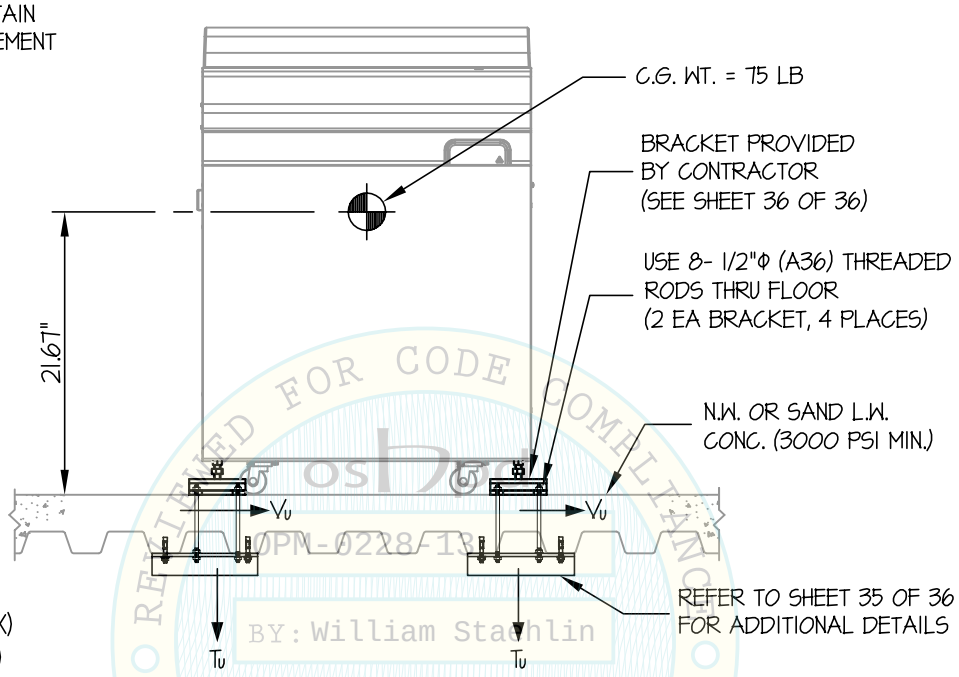
DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15

SHEET 25 OF 36 SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE SLAB ON METAL DECK

NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER



Tu = 583 LB/BOLT (MAX)
Vu = 60 LB/BOLT (MAX)
(VALUES DO NOT INCLUDE Ω_o)

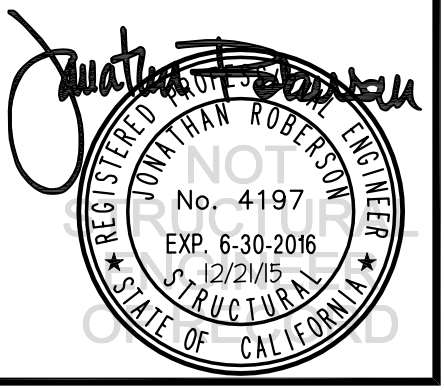
FRONT ELEVATION
(XN-9000 (CV-10) MODEL)

NOTES:

1. FORCES ARE DETERMINED PER 2013 CALIFORNIA BUILDING CODE AND ASCE 7-10. STRENGTH DESIGN IS USED. (S_{DS} = 2.20, a_p = 1.0, I_p = 1.5, R_p = 1.5, Ω_o = 1.5, z/h $\leq$ 1)

   HORIZONTAL FORCE (E_h) = 2.64 W_p
   HORIZONTAL FORCE (E_{mh}) = 3.96 W_p (FOR CONCRETE ANCHORAGE)
   VERTICAL FORCE (E_v) = 0.44 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. SEE GENERAL NOTES: SHEETS 1 AND 2.



SYSMEX

XN-9000 SERIES

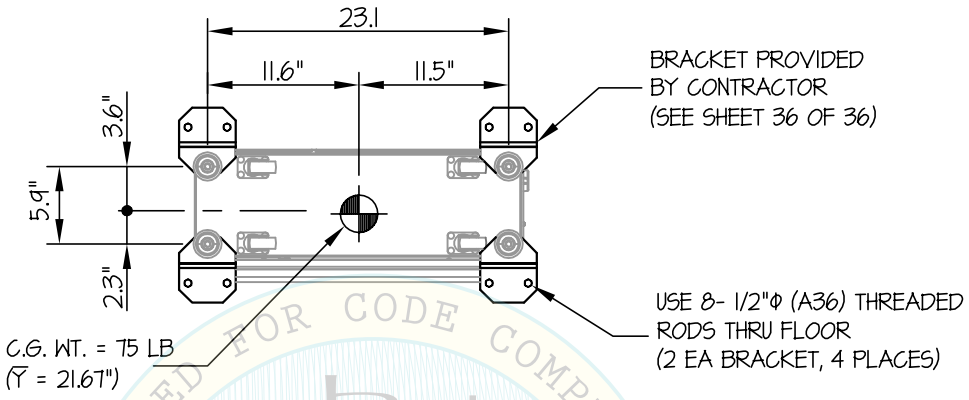
DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15

SHEET 26 OF 36 SHEETS

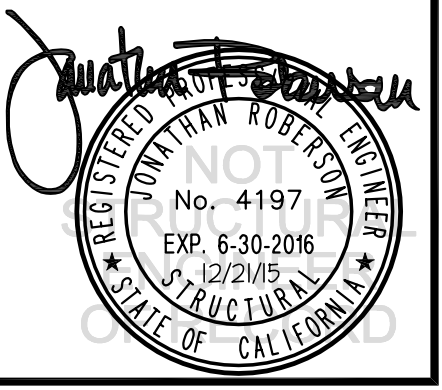
SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE SLAB ON METAL DECK

NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER



PLAN AT BASE
(XN-9000 (CV-70) MODEL)



SYSMEX

XN-9000 SERIES

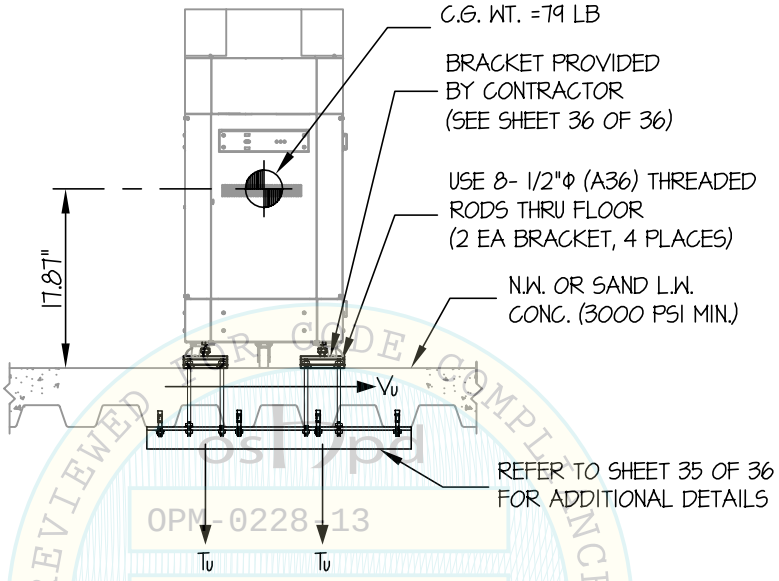
DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15

SHEET 27 OF 36 SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE SLAB ON METAL DECK

NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER



Tu = 300 LB/BOLT (MAX)
Vu = 52 LB/BOLT (MAX)
(VALUES DO NOT INCLUDE Ω_o)

FRONT ELEVATION
(XN-9000 (TU-40) MODEL)

NOTES:

1. FORCES ARE DETERMINED PER 2013 CALIFORNIA BUILDING CODE AND ASCE 7-10. STRENGTH DESIGN IS USED. (S_{DS} = 2.20, a_p = 1.0, I_p = 1.5, R_p = 1.5, Ω_o = 1.5, z/h $\leq$ 1)

   HORIZONTAL FORCE (Eh) = 2.64 Wp
   HORIZONTAL FORCE (Emh) = 3.96 Wp (FOR CONCRETE ANCHORAGE)
   VERTICAL FORCE (Ev) = 0.44 Wp

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. SEE GENERAL NOTES: SHEETS 1 AND 2.

REGISTERED PROFESSIONAL ENGINEER
JONATHAN ROBERSON
No. 4197
EXP. 6-30-2016
12/21/15
STRUCTURAL
STATE OF CALIFORNIA

SYSMEX

XN-9000 SERIES

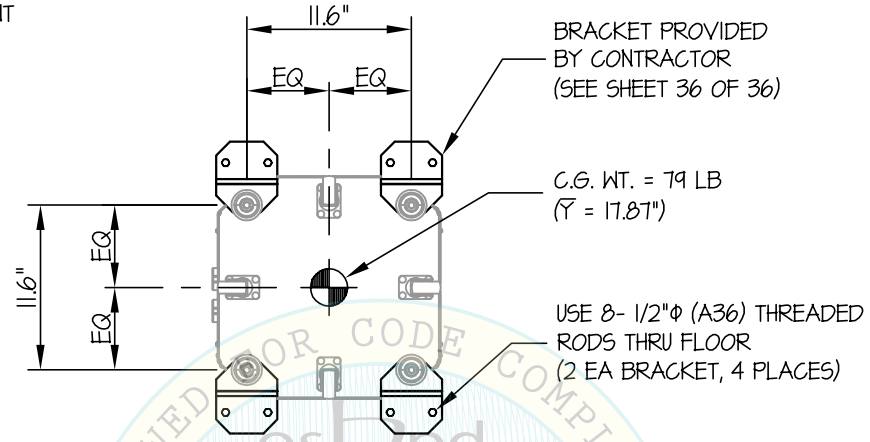
DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15

SHEET 28 OF 36 SHEETS

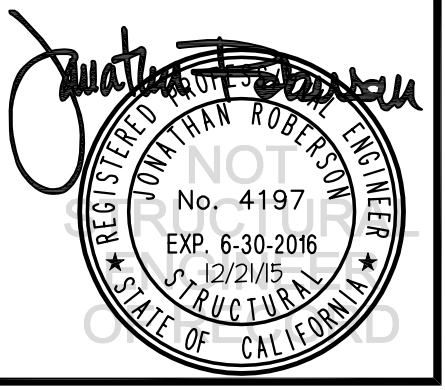
SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE SLAB ON METAL DECK

NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER



PLAN AT BASE
(XN-9000 (TU-40) MODEL)



SYSMEX

XN-9000 SERIES

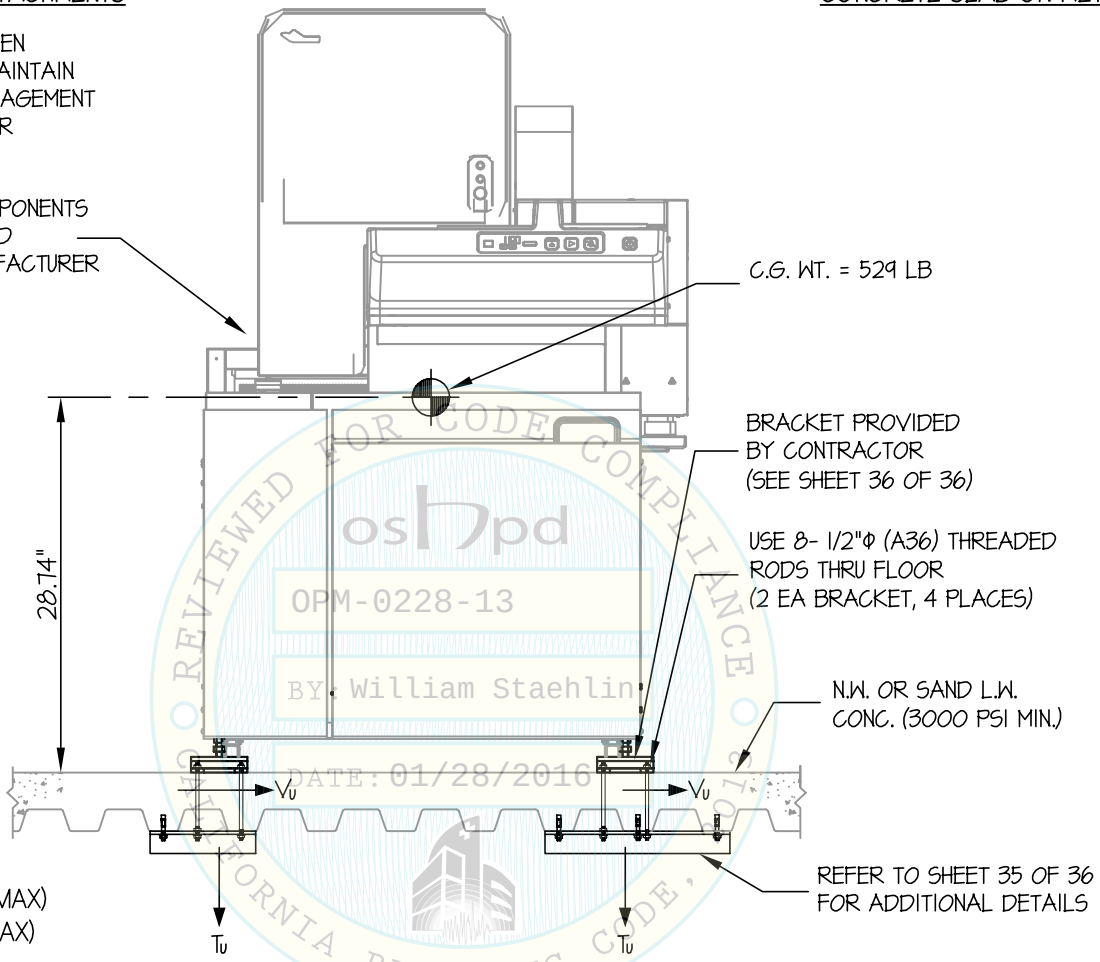
DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15

SHEET 29 OF 36 SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE SLAB ON METAL DECK

NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER



Tu = 1227 LB/BOLT (MAX)
Vu = 391 LB/BOLT (MAX)
(VALUES INCLUDE Ω_0)

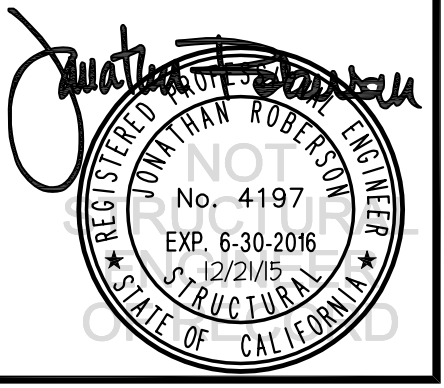
FRONT ELEVATION
(XN-9000 (WG-84) MODEL)

NOTES:

1. FORCES ARE DETERMINED PER 2013 CALIFORNIA BUILDING CODE AND ASCE 7-10. STRENGTH DESIGN IS USED. (S_{DS} = 2.20, a_p = 1.0, I_p = 1.5, R_p = 1.5, Ω_0 = 1.5, z/h ≤ 1)

   HORIZONTAL FORCE (Eh) = 2.64 Wp
   HORIZONTAL FORCE (Emh) = 3.96 Wp (FOR CONCRETE ANCHORAGE)
   VERTICAL FORCE (Ev) = 0.44 Wp

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. SEE GENERAL NOTES: SHEETS 1 AND 2.



SYSMEX

XN-9000 SERIES

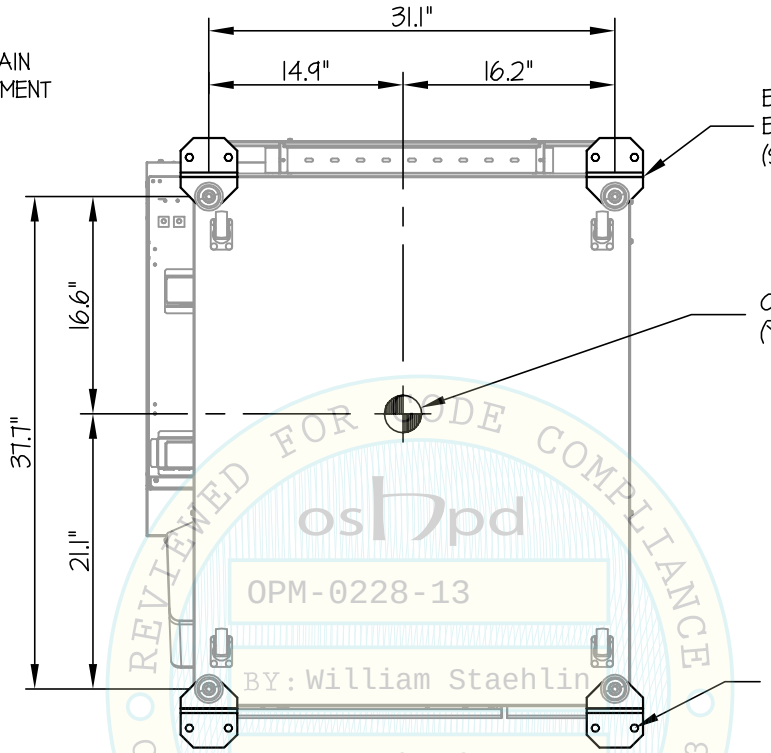
DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15

SHEET 30 OF 36 SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE SLAB ON METAL DECK

NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER



PLAN AT BASE
(XN-9000 (WG-84) MODEL)

REGISTERED PROFESSIONAL ENGINEER
JONATHAN ROBERSON
No. 4197
EXP. 6-30-2016
12/21/15
STRUCTURAL
STATE OF CALIFORNIA

SYSMEX

XN-9000 SERIES

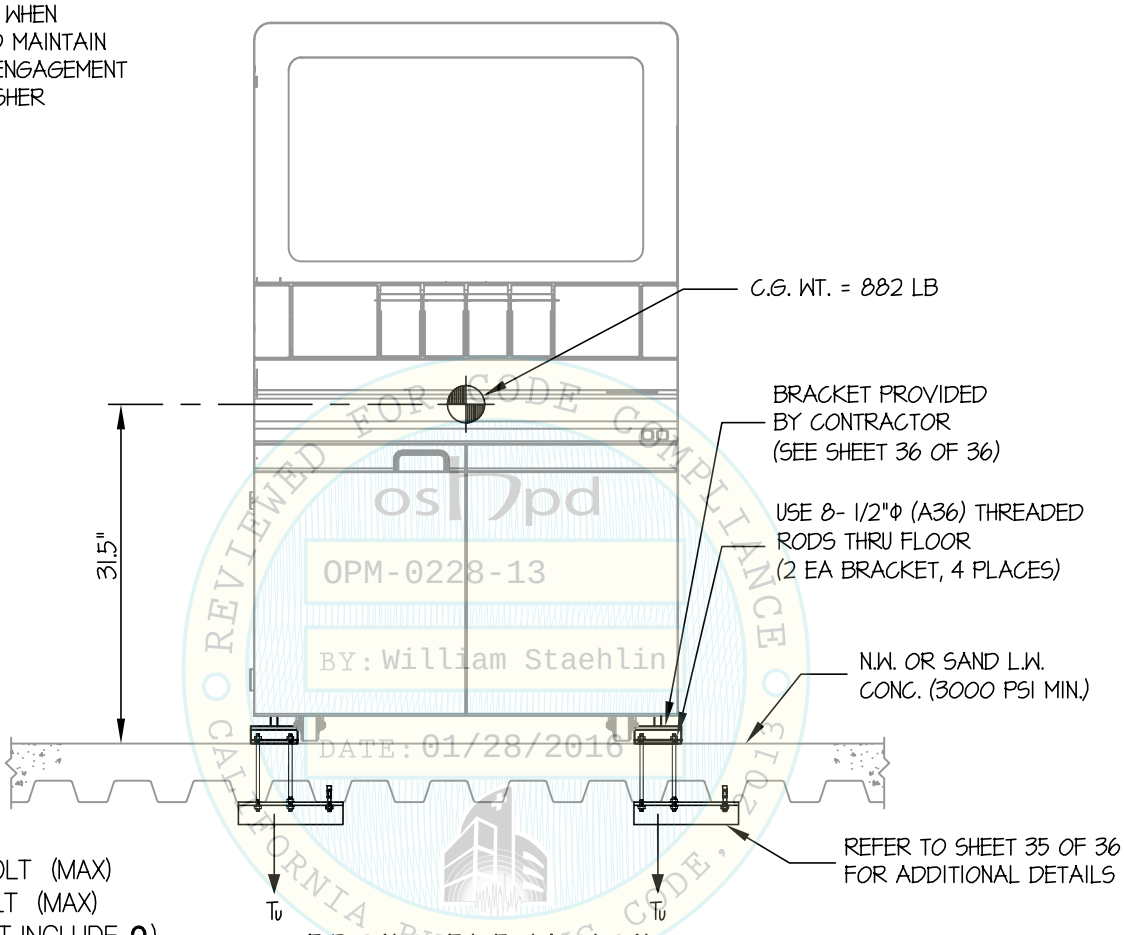
DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15

SHEET 31 OF 36 SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE SLAB ON METAL DECK

NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER



Tu = 2043 LB/BOLT (MAX)
Vu = 707 LB/BOLT (MAX)
(VALUES DO NOT INCLUDE Ω_0)

FRONT ELEVATION
(XN-9000 (TS-10) MODEL)

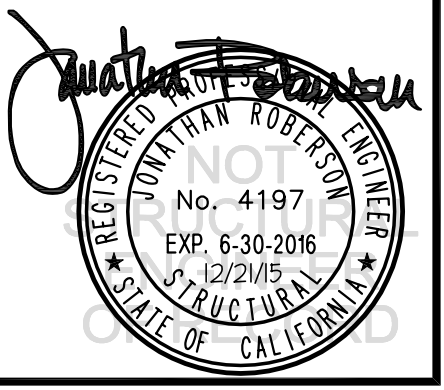
NOTES:

1. FORCES ARE DETERMINED PER 2013 CALIFORNIA BUILDING CODE AND ASCE 7-10. STRENGTH DESIGN IS USED. (S_{DS} = 2.20, a_p = 1.0, I_p = 1.5, R_p = 1.5, Ω_0 = 1.5, $z/h \leq 1$)

   HORIZONTAL FORCE (E_h) = 2.64 W_p
   HORIZONTAL FORCE (E_{mh}) = 3.96 W_p (FOR CONCRETE ANCHORAGE)
   VERTICAL FORCE (E_v) = 0.44 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.



SYSMEX

XN-9000 SERIES

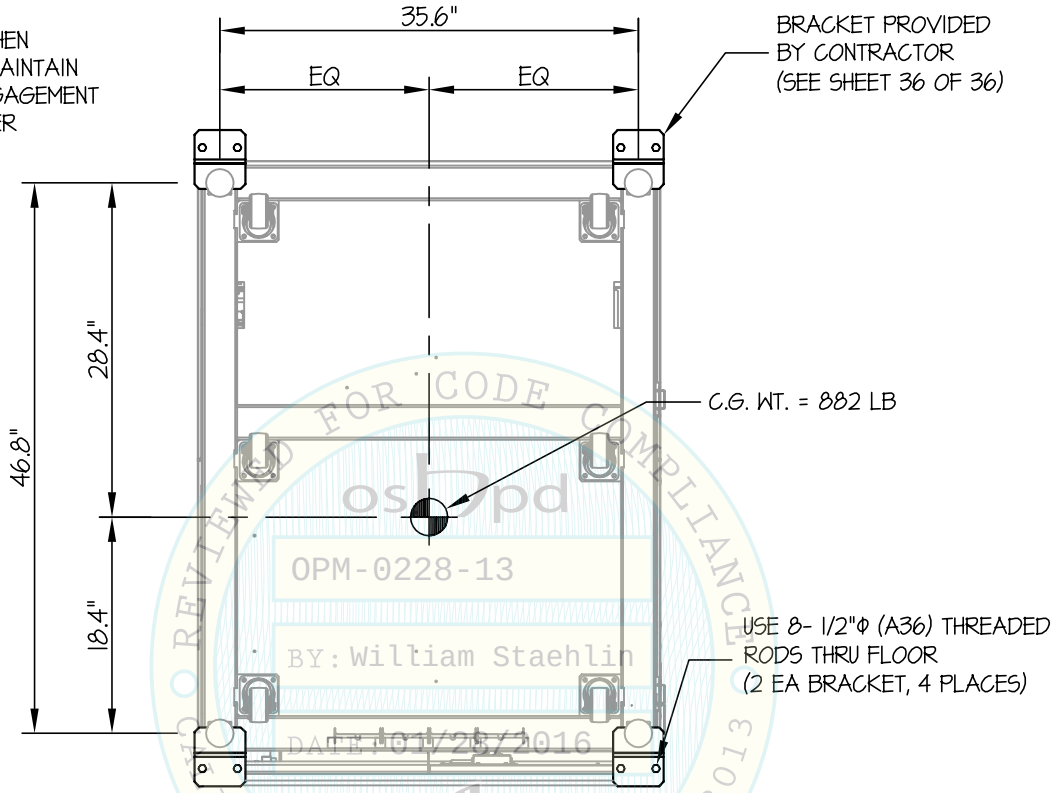
DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15

SHEET 32 OF 36 SHEETS

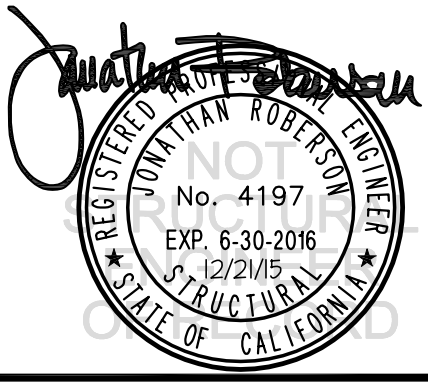
SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE SLAB ON METAL DECK

NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER



PLAN AT BASE
(XN-9000 (TS-10) MODEL)



SYSMEX

XN-9000 SERIES

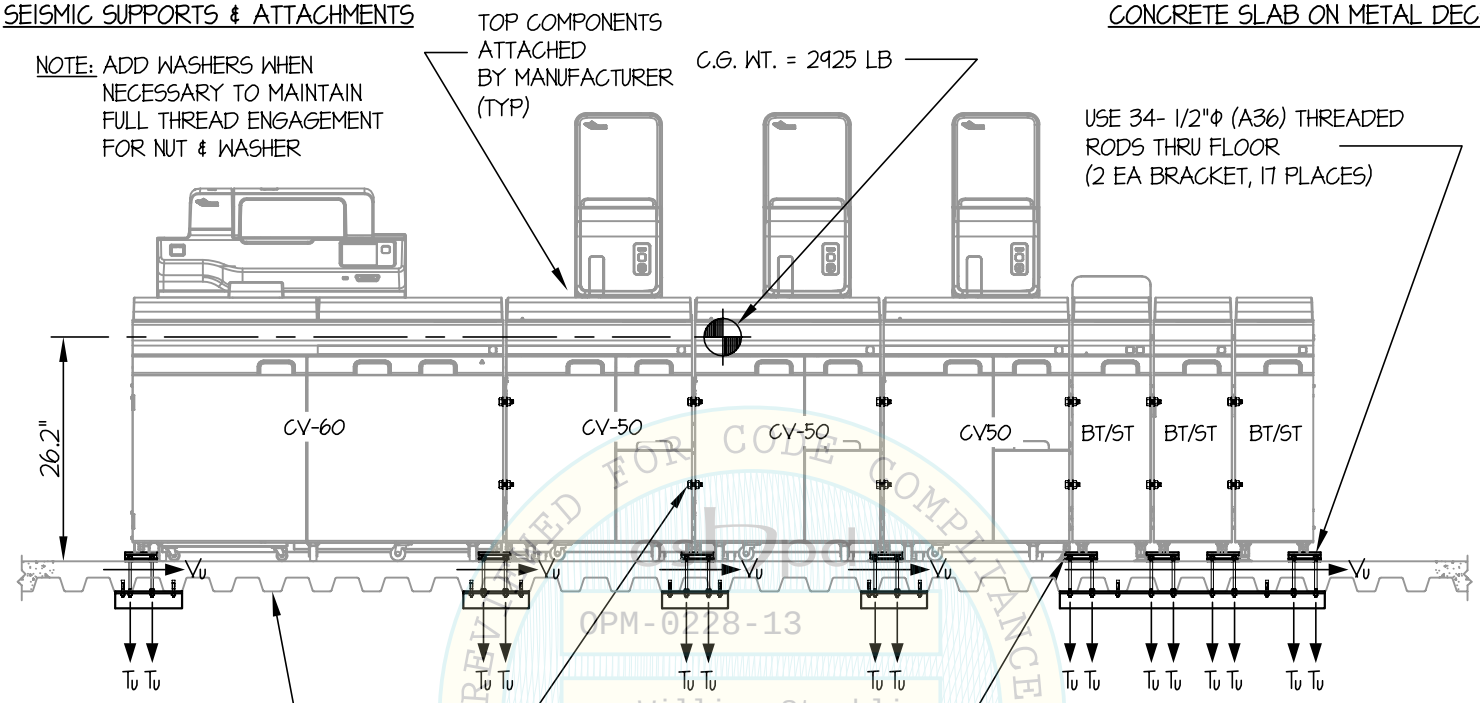
DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15

SHEET 33 OF 36 SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE SLAB ON METAL DECK

NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER



Tu = 1523 LB/BOLT (MAX)
Vu = 644 LB/BOLT (MAX)
(VALUES DO NOT INCLUDE Ω_o)

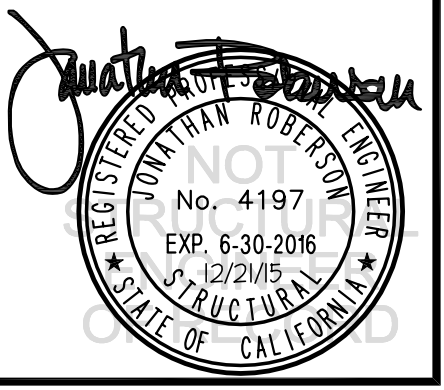
FRONT ELEVATION
(XN-9000 (STANDARD CONFIGURATION) MODEL)

NOTES:

1. FORCES ARE DETERMINED PER 2013 CALIFORNIA BUILDING CODE AND ASCE 7-10. STRENGTH DESIGN IS USED. (S_{DS} = 2.20, a_p = 1.0, I_p = 1.5, R_p = 1.5, Ω_o = 1.5, z/h $\leq$ 1)

   HORIZONTAL FORCE (Eh) = 2.64 Wp
   HORIZONTAL FORCE (Emh) = 3.96 Wp (FOR CONCRETE ANCHORAGE)
   VERTICAL FORCE (Ev) = 0.44 Wp

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. SEE GENERAL NOTES: SHEETS 1 AND 2.



SYSMEX

XN-9000 SERIES

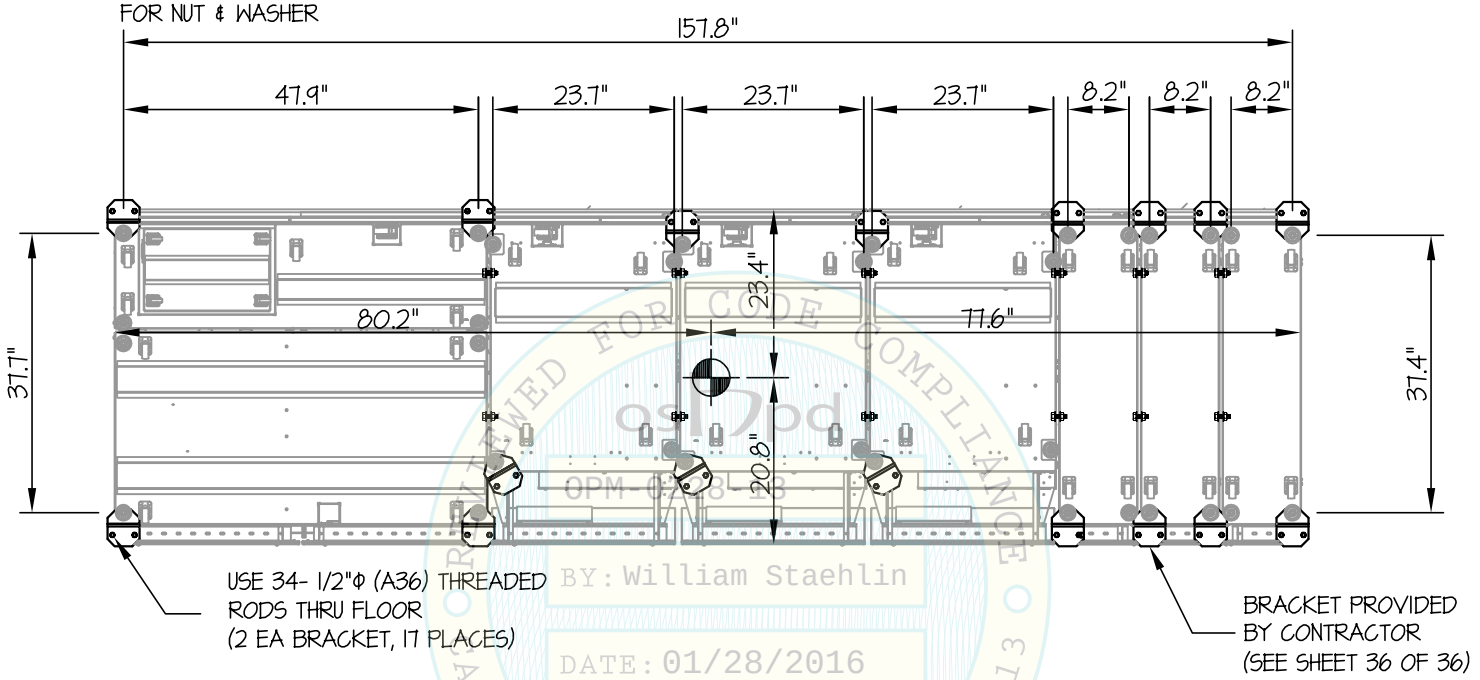
DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15

SHEET 34 OF 36 SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

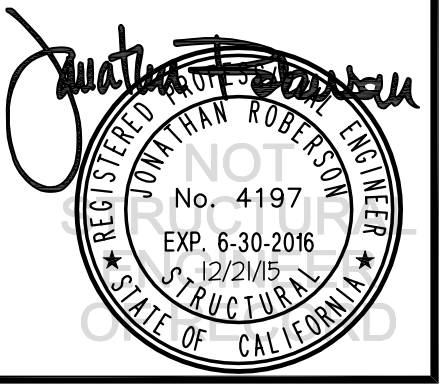
CONCRETE SLAB ON METAL DECK

NOTE: ADD WASHERS WHEN NECESSARY TO MAINTAIN FULL THREAD ENGAGEMENT FOR NUT & WASHER



PLAN AT BASE

(XN-9000 (STANDARD CONFIGURATION MODEL))



SYSMEX

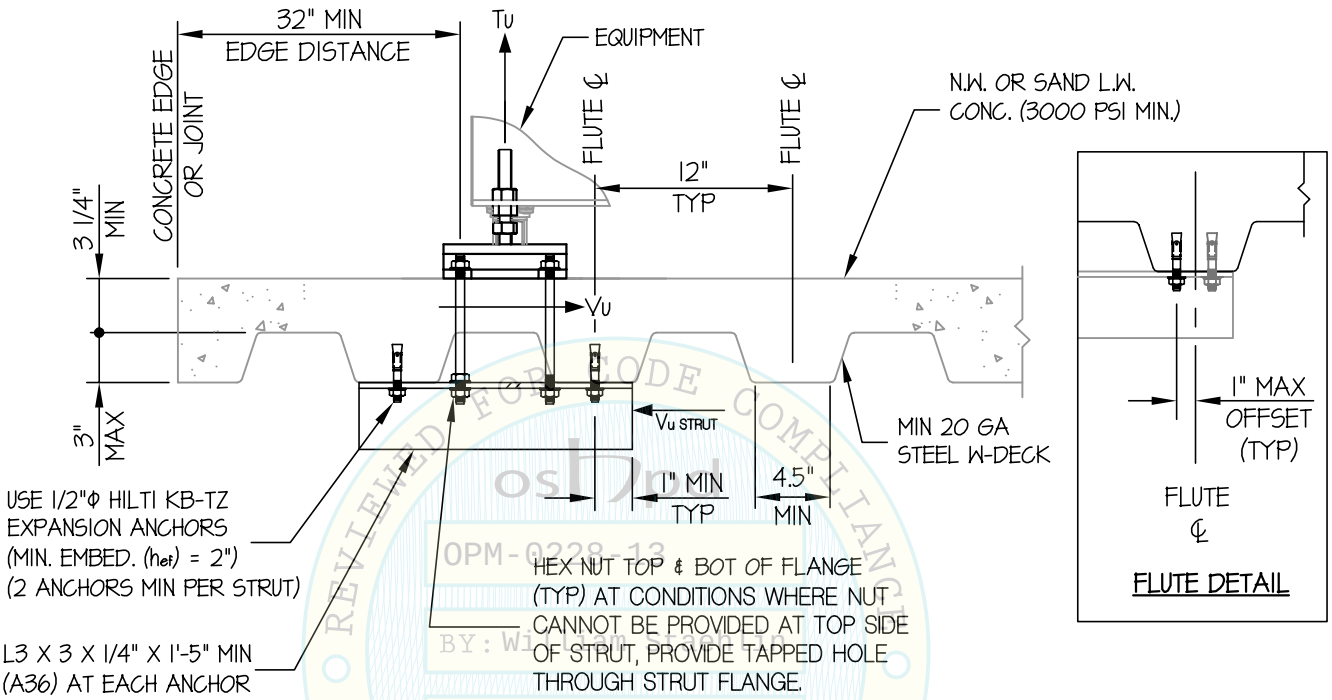
XN-9000 SERIES

DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15

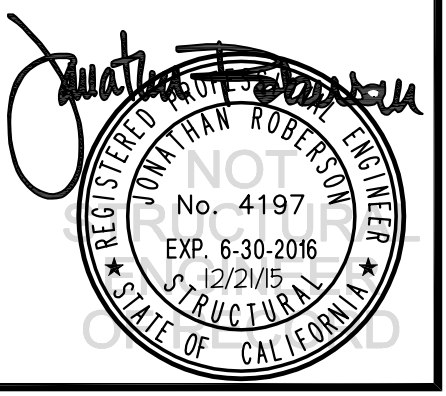
SHEET 35 OF 36 SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE SLAB ON METAL DECK



MIN STEEL DECK REQUIREMENTS AND STRUT DETAIL



SYSMEX

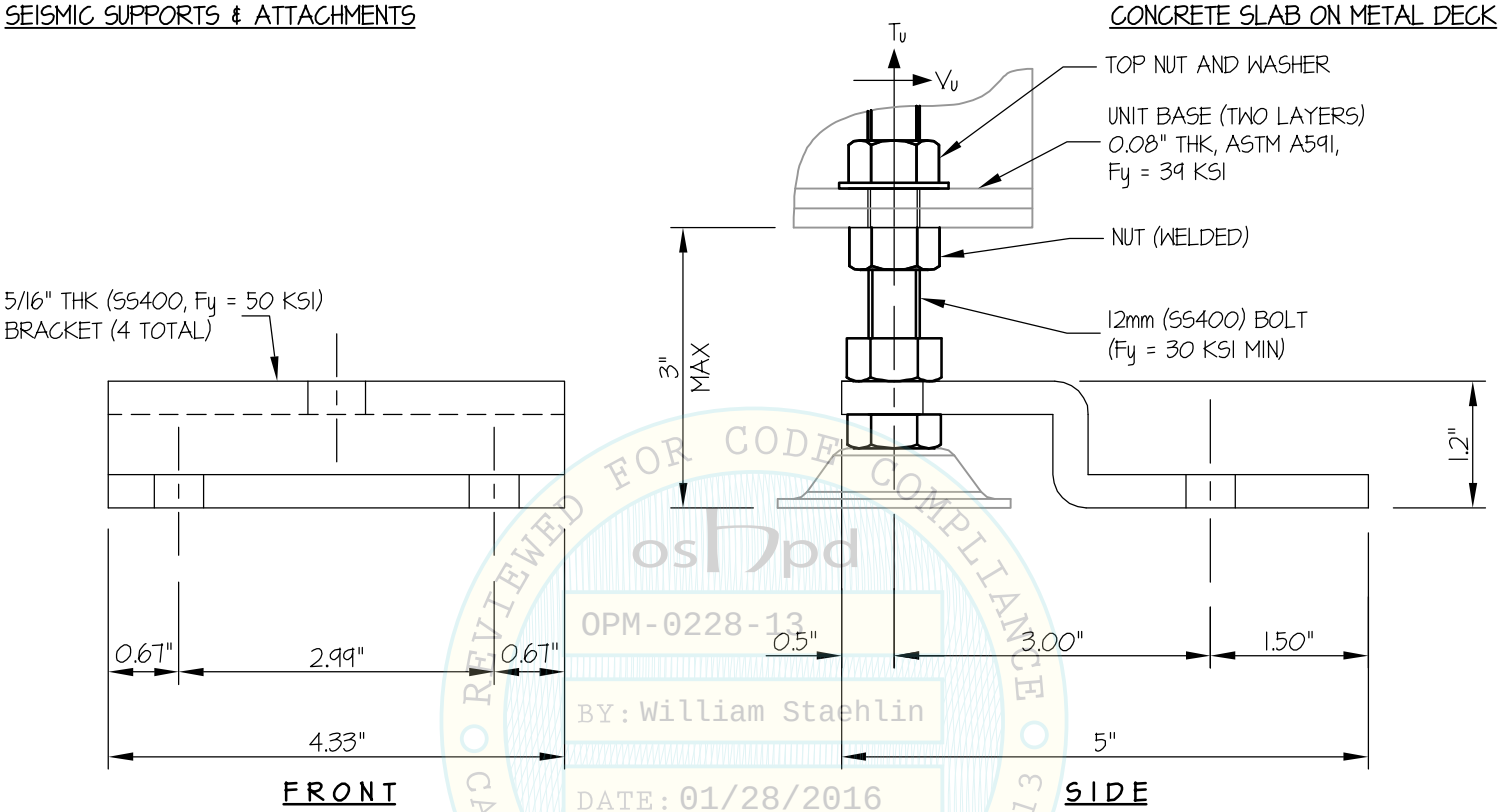
XN-9000 SERIES

DES. J. ROBERSON
JOB NO. 11-1443
DATE 12/21/15

SHEET 36 OF 36 SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

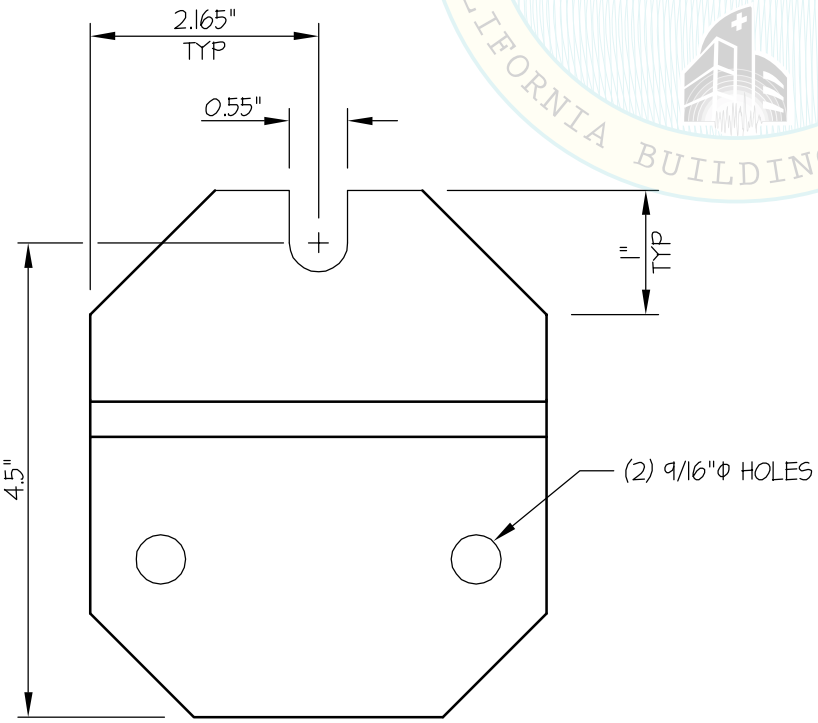
CONCRETE SLAB ON METAL DECK



FRONT

SIDE

NOTE: TO BE PROVIDED BY SYSMEX



PLAN AT BRACKET