



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

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

OFFICE USE ONLY	
APPLICATION #:	OPM-0273-13

OSHPD Preapproval of Manufacturer's Certification (OPM)

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

Manufacturer Information

Manufacturer: Amico Clinical Solutions Corporation

Manufacturer's Technical Representative: Varun Chandan

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

Telephone: (877) 462-6426 ext 5715 Email: DVChandan@amico.com

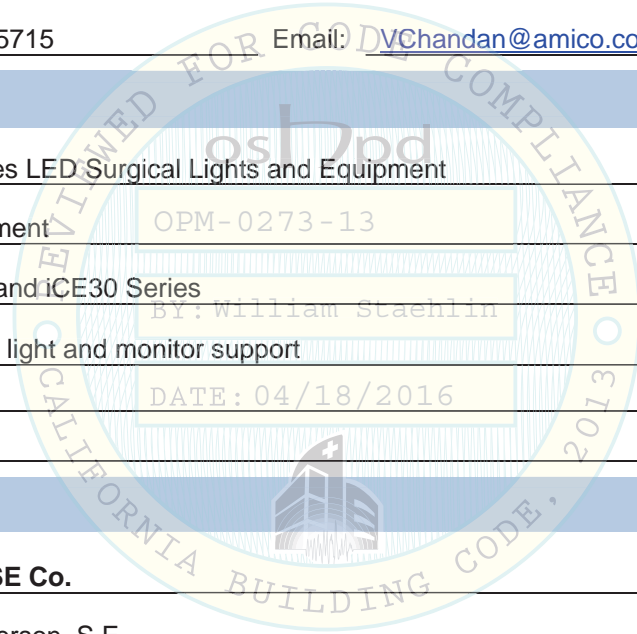
Product Information

Product Name: Amico iCE Series LED Surgical Lights and Equipment

Product Type: Cantilevered Element OPM-0273-13

Product Model Number: iCE25 and iCE30 Series

General Description: Overhead light and monitor support



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: 10/22/15

Title: Principal Engineer Company Name: EASE Co.

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





**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 (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: *William Staehlin* Date: 04-18-2016

Print Name: William Staehlin

Title: SSE

Condition of Approval (if applicable): _____

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





**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-0273-13

THIS PREAPPROVAL CONFORMS TO THE 2013 CALIFORNIA BUILDING CODE

MANUFACTURER: **AMICO CLINICAL SOLUTIONS CORPORATION** Sheet: 1 of 12
EQUIPMENT NAME: **AMICO ICE SERIES LED SURGICAL LIGHTS AND EQUIPMENT** Date: 3/24/16

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 $S_{Ds} = 2.20$, $a_p = 2.5$, $I_p = 1.5$, $R_p = 2.5$, $z/h \leq 1$.
5. THE DETAILS IN THIS PREAPPROVAL MAY BE USED AT ANY LOCATION IN THE STATE OF CALIFORNIA, WHERE SDS IS NOT GREATER THAN 2.20.
6. ALL DESIGN FORCES SHOWN ON THE DRAWINGS ARE FACTORED LOADS THAT SHALL BE USED FOR STRENGTH DESIGN.
7. THIS PREAPPROVAL COVERS ONLY THE SUPPORTS AND ATTACHMENTS OF THE EQUIPMENT TO THE STRUCTURE.
8. 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.



AMICO CLINICAL SOLUTIONS CORPORATION

DES. **J. ROBERSON**

SHEET

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**AMICO ICE SERIES LED
SURGICAL LIGHTS AND EQUIPMENT**

JOB NO. **11-1519**

DATE **3/24/16**

OF **12** 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
1/2"	Normal Weight	3000	Hilti Kwik Bolt TZ	ESR-1917	2"	6"	24"	4"	40 FT-LB	N/A
5/8"	Normal Weight	3000	Hilti Kwik Bolt TZ	ESR-1917	4"	6"	24"	6"	60 FT-LB	N/A

B. THIS PREAPPROVAL ALLOWS FOR UP TO A MAXIMUM OF 2 ADJACENT CONCRETE SLAB EDGES, 24" AWAY MINIMUM (i.e. - CORNER). SEE ADJACENT DETAIL FOR ADDITIONAL MINIMUM ALLOWABLE CONCRETE EDGE DISTANCES.

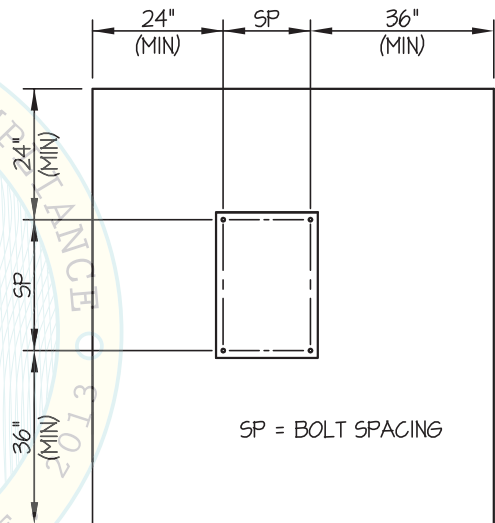
C. TESTING OF EXPANSION ANCHORS PER 2013 CBC, 1913A.7: TESTING SHALL BE DONE IN THE PRESENCE OF THE SPECIAL INSPECTOR AND A REPORT OF THE TEST RESULTS SHALL BE SUBMITTED TO OSHPD

(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.



TYPICAL CONCRETE EDGE DETAIL



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SHEET

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AMICO ICE SERIES LED SURGICAL LIGHTS AND EQUIPMENT

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OF **12** SHEETS

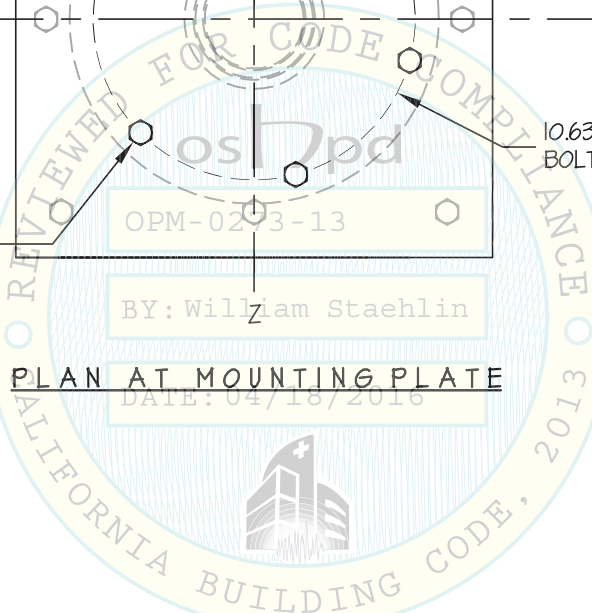
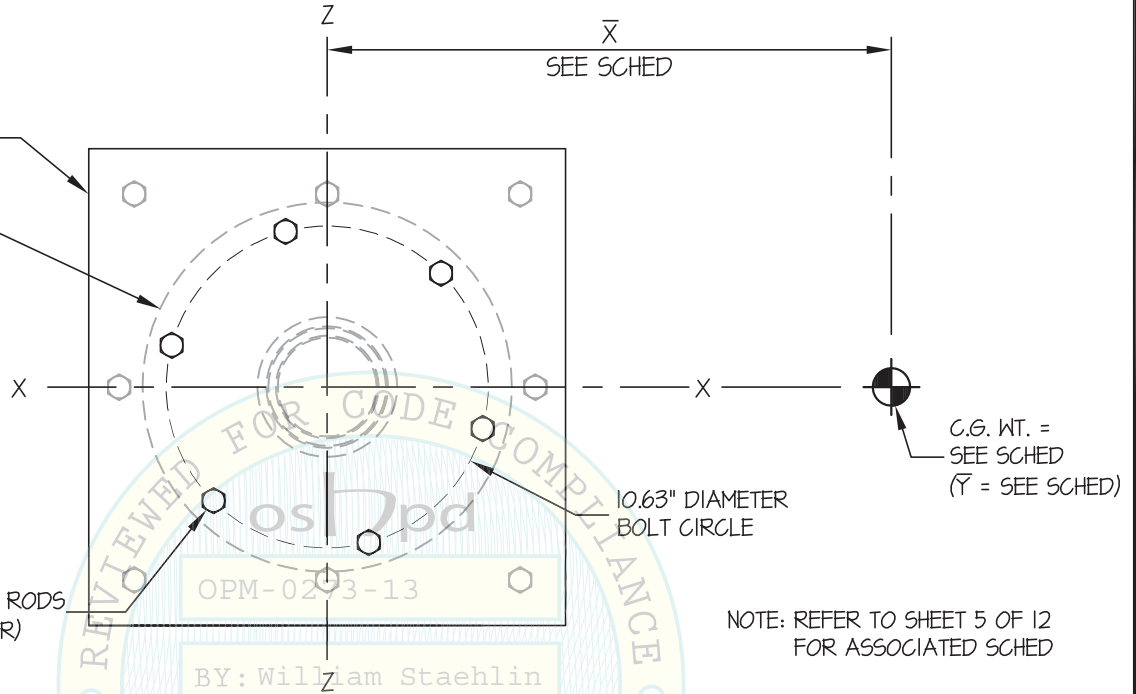
SEISMIC SUPPORTS & ATTACHMENTS

TUBE FLANGE TO MOUNTING PLATE

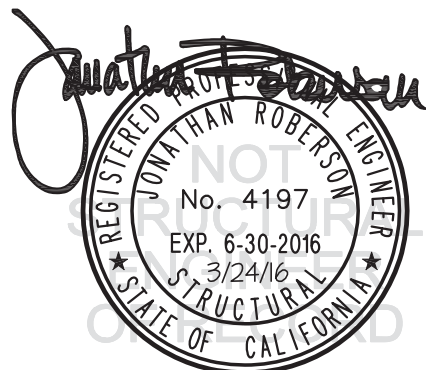
MOUNTING PLATE
(0.875" THK, CSA G40.21 44W,
F_y = 44 ksi MIN) (BY MFR)

TUBE FLANGE BELOW
(0.625" THK, ANSI 1020 GR,
F_y = 20 ksi MIN)

USE 6- M16 (GR 12.9) THREADED RODS
TO SUPPORT STRUCTURE (BY MFR)



PLAN AT MOUNTING PLATE



AMICO CLINICAL SOLUTIONS CORPORATION

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SHEET

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**AMICO ICE SERIES LED
SURGICAL LIGHTS AND EQUIPMENT**

JOB NO. **11-1519**

DATE **3/24/16**

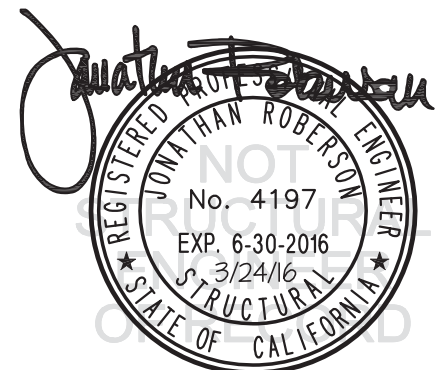
OF **12** SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

TUBE FLANGE TO MOUNTING PLATE

MODEL	TOTAL LOAD (LB.)	\bar{X} (in.)	\bar{Y} (in.)	T _u (lb.)	C _u (lb.)	V _u (lb.)	MOMENT (Mxx) (IN-LB)
LT-S-C-ICE30-6	203	26.47	26.32	3232	3161	134	29965
LT-S-C-ICE25-3	193	23.58	23.71	1651	1583	127	25580
VT-S-CN-MH1	193	23.43	23.71	1648	1580	127	25532
LT-D-C-ICE30-ICE30-66	297	34.56	35.31	3728	3624	196	58369
LT-D-C-ICE25-ICE30-36	287	32.90	33.87	3451	3350	190	53986
LT-D-C-MH1-ICE30-6	287	32.81	33.89	3450	3349	190	53967
LT-D-C-ICE25-ICE25-33	277	31.32	32.13	3167	3070	183	49478
LT-D-C-MH1-ICE25-3	277	32.23	32.15	3194	3097	183	49914
VT-S-CN-MH2	218	30.01	28.50	2266	2190	144	35327
VT-C-CN-MH2-MH2	326	38.29	37.66	4404	4290	215	69074
LT-T-C-ICE30-ICE30-ICE30-666	387	37.54	41.33	5552	5416	256	87174
LT-T-C-MH1-ICE30-ICE30-66	377	36.29	40.41	5274	5142	249	82774
VT-C-CN-MH1-MH1	276	31.15	32.16	3151	3055	182	49237
LT-D-C-MH2-ICE30-6	312	36.65	36.41	4067	3958	206	63746
LT-D-C-MH2-ICE25-3	302	35.34	34.90	3784	3678	199	59248

** \bar{Y} IS MEASURED FROM CG TO BOTTOM OF MOUNTING PLATE.



AMICO CLINICAL SOLUTIONS CORPORATION

DES. **J. ROBERSON**

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**AMICO ICE SERIES LED
SURGICAL LIGHTS AND EQUIPMENT**

JOB NO. **11-1519**

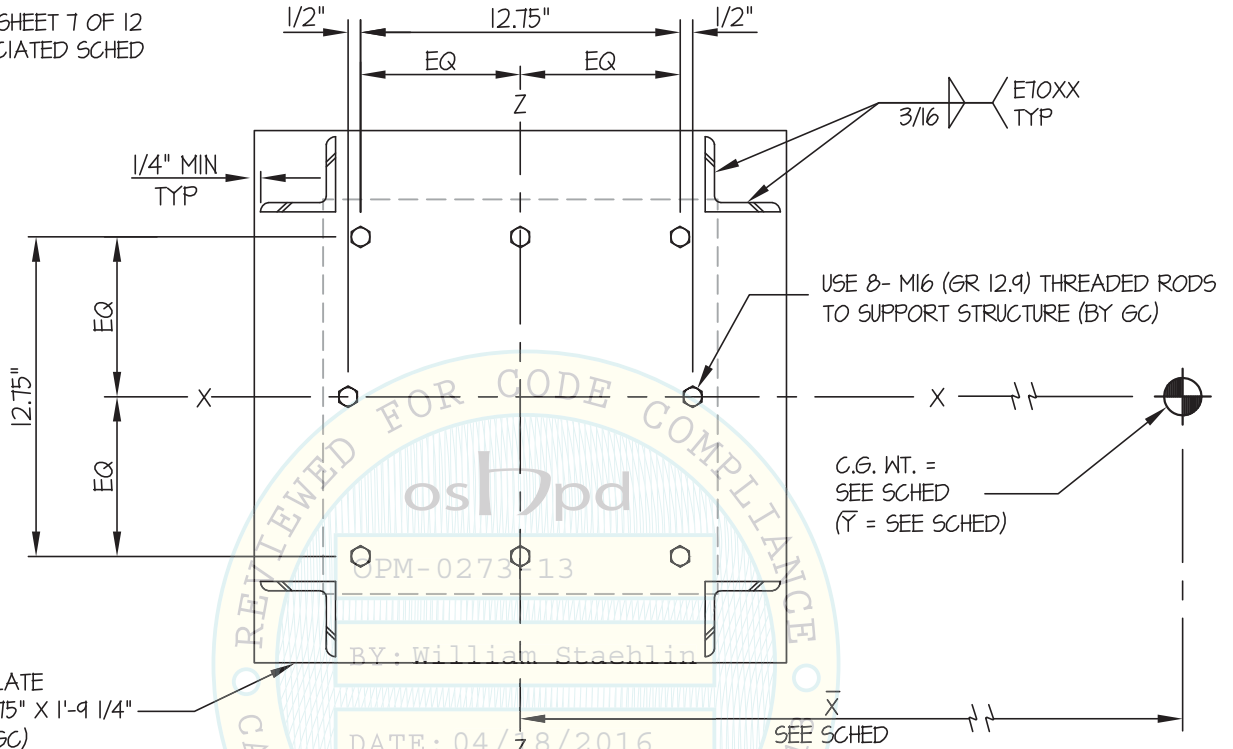
DATE **3/24/16**

OF **12** SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

MOUNTING PLATE TO STRUCTURAL SUPPORT PLATE

NOTE: REFER TO SHEET 7 OF 12
FOR ASSOCIATED SCHED



PLAN AT STRUCTURAL PLATE



AMICO CLINICAL SOLUTIONS CORPORATION

DES. **J. ROBERSON**

SHEET

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**AMICO ICE SERIES LED
SURGICAL LIGHTS AND EQUIPMENT**

JOB NO. **11-1519**

DATE **3/24/16**

OF **12** SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

MOUNTING PLATE TO STRUCTURAL SUPPORT PLATE

MODEL	TOTAL LOAD (LB.)	\bar{X} (in.)	\bar{Y} (in.) ^{**}	Tu (lb.)	Cu (lb.)	Vu (lb.)	MOMENT (Mxx) (IN-LB)
LT-S-C-ICE30-6	203	26.47	36.20	1443	1389	101	37909
LT-S-C-ICE25-3	193	23.58	33.59	1264	1213	96	33128
VT-S-CN-MH1	193	23.43	33.59	1262	1211	96	33081
LT-D-C-ICE30-ICE30-66	297	34.56	45.19	2647	2569	147	69988
LT-D-C-ICE25-ICE30-36	287	32.90	43.75	2466	2391	142	65140
LT-D-C-MH1-ICE30-6	287	32.81	43.77	2468	2393	142	65200
LT-D-C-ICE25-ICE25-33	277	31.32	42.01	2286	2213	137	60317
LT-D-C-MH1-ICE25-3	277	32.23	42.03	2302	2229	137	60752
VT-S-CN-MH2	218	30.01	38.38	1665	1608	108	43854
VT-C-CN-MH2-MH2	326	38.29	47.54	3091	3005	161	81829
LT-T-C-ICE30-ICE30-ICE30-666	387	37.54	51.21	3858	3756	192	102320
LT-T-C-MH1-ICE30-ICE30-66	377	36.29	50.29	3681	3583	187	97525
VT-C-CN-MH1-MH1	276	31.15	42.04	3058	2986	137	81218
LT-D-C-MH2-ICE30-6	312	36.65	46.29	2871	2789	155	75957
LT-D-C-MH2-ICE25-3	302	35.34	44.78	2688	2609	150	71064

** Y IS MEASURED FROM CG TO BOTTOM OF STRUCTURAL PLATE.



AMICO CLINICAL SOLUTIONS CORPORATION

DES. **J. ROBERSON**

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AMICO ICE SERIES LED SURGICAL LIGHTS AND EQUIPMENT

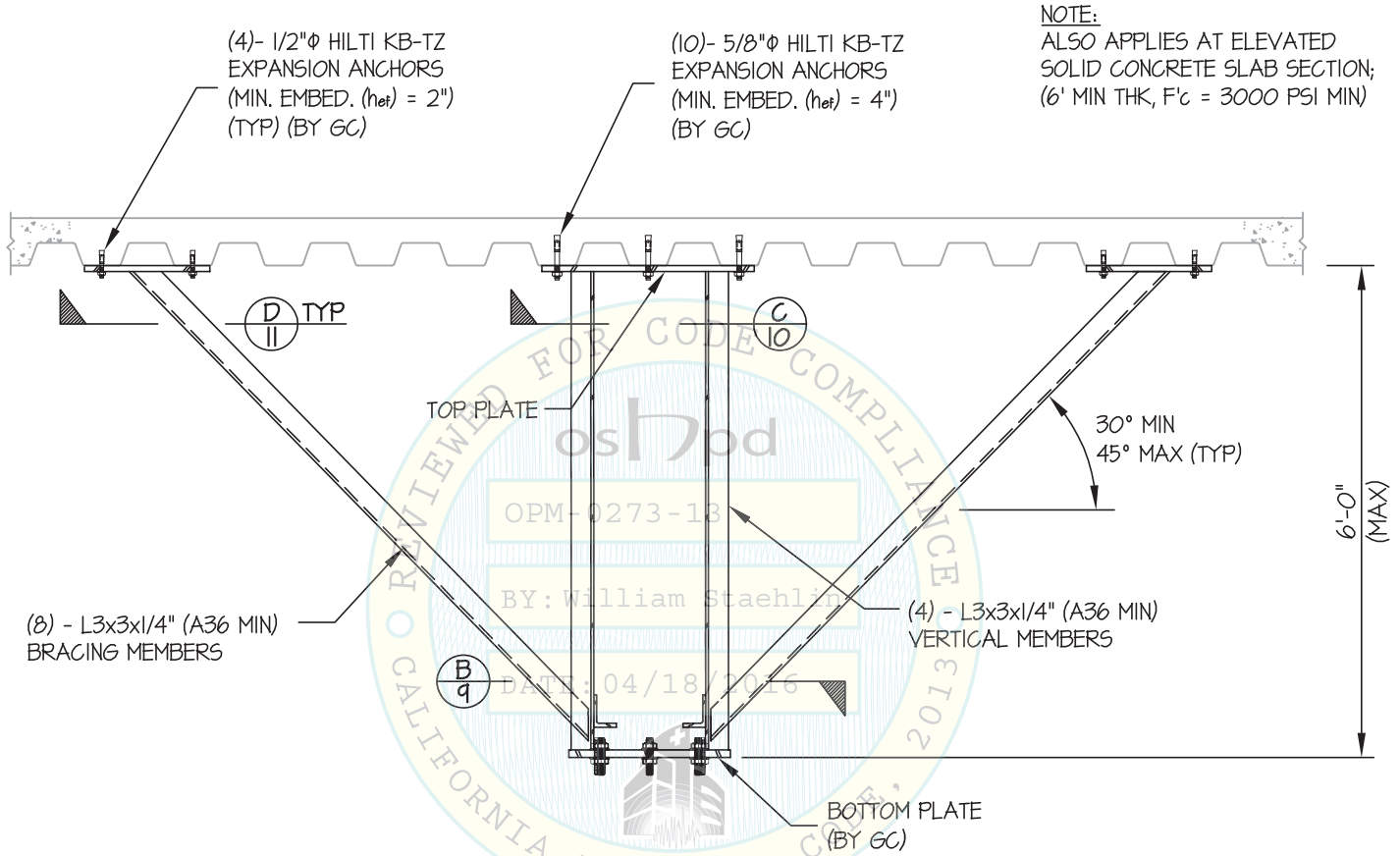
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DATE **3/24/16**

OF **12** SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

BRACING DETAILS



A
B ELEVATION AT STRUCTURAL BRACING SYSTEM

Jonathan Roberson
REGISTERED PROFESSIONAL ENGINEER
No. 4197
EXP. 6-30-2016
3/24/16
STATE OF CALIFORNIA

AMICO CLINICAL SOLUTIONS CORPORATION

DES. **J. ROBERSON**

SHEET

9

**AMICO ICE SERIES LED
SURGICAL LIGHTS AND EQUIPMENT**

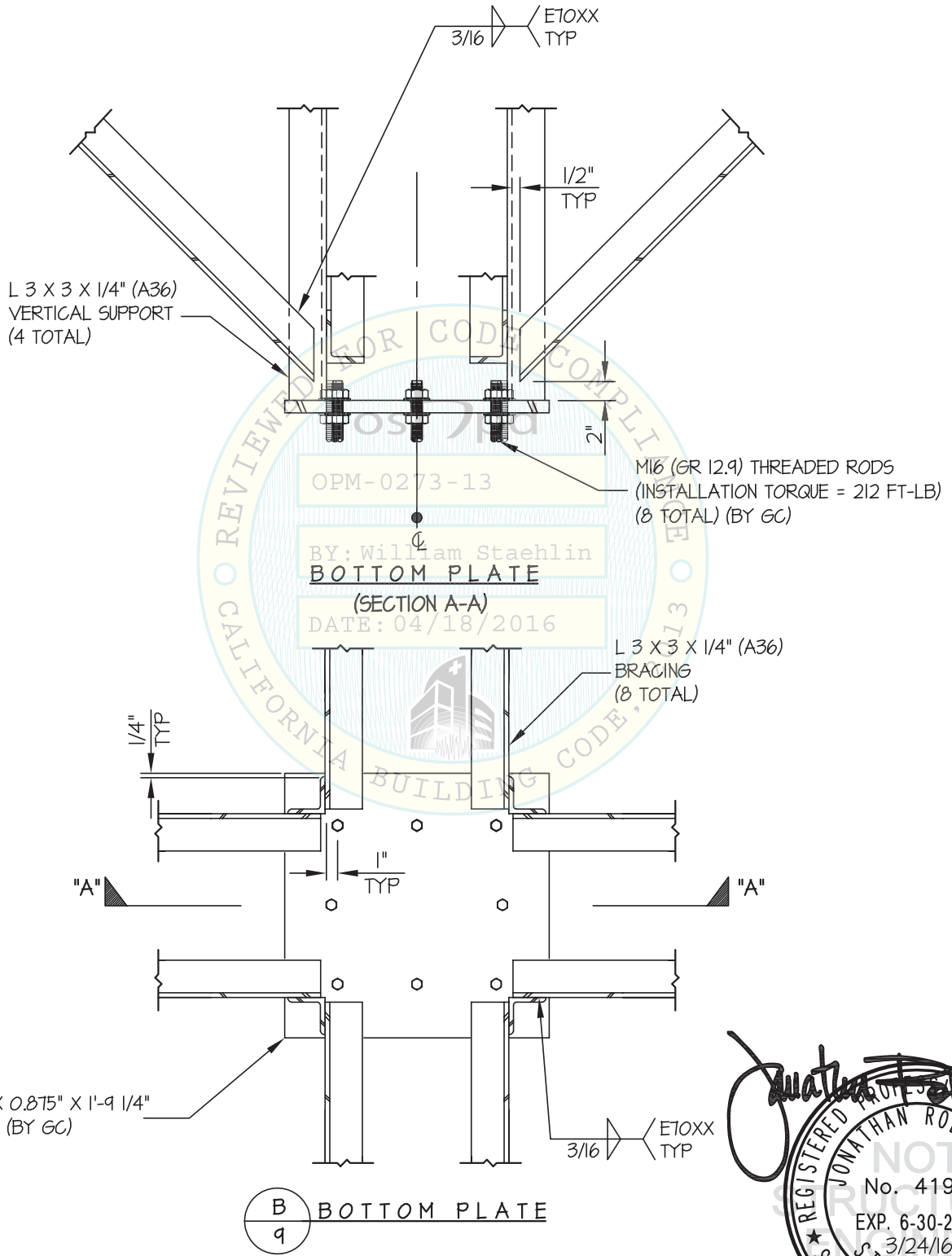
JOB NO. **11-1519**

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OF **12** SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

BRACING DETAILS



AMICO CLINICAL SOLUTIONS CORPORATION

DES. **J. ROBERSON**

SHEET

10

**AMICO ICE SERIES LED
SURGICAL LIGHTS AND EQUIPMENT**

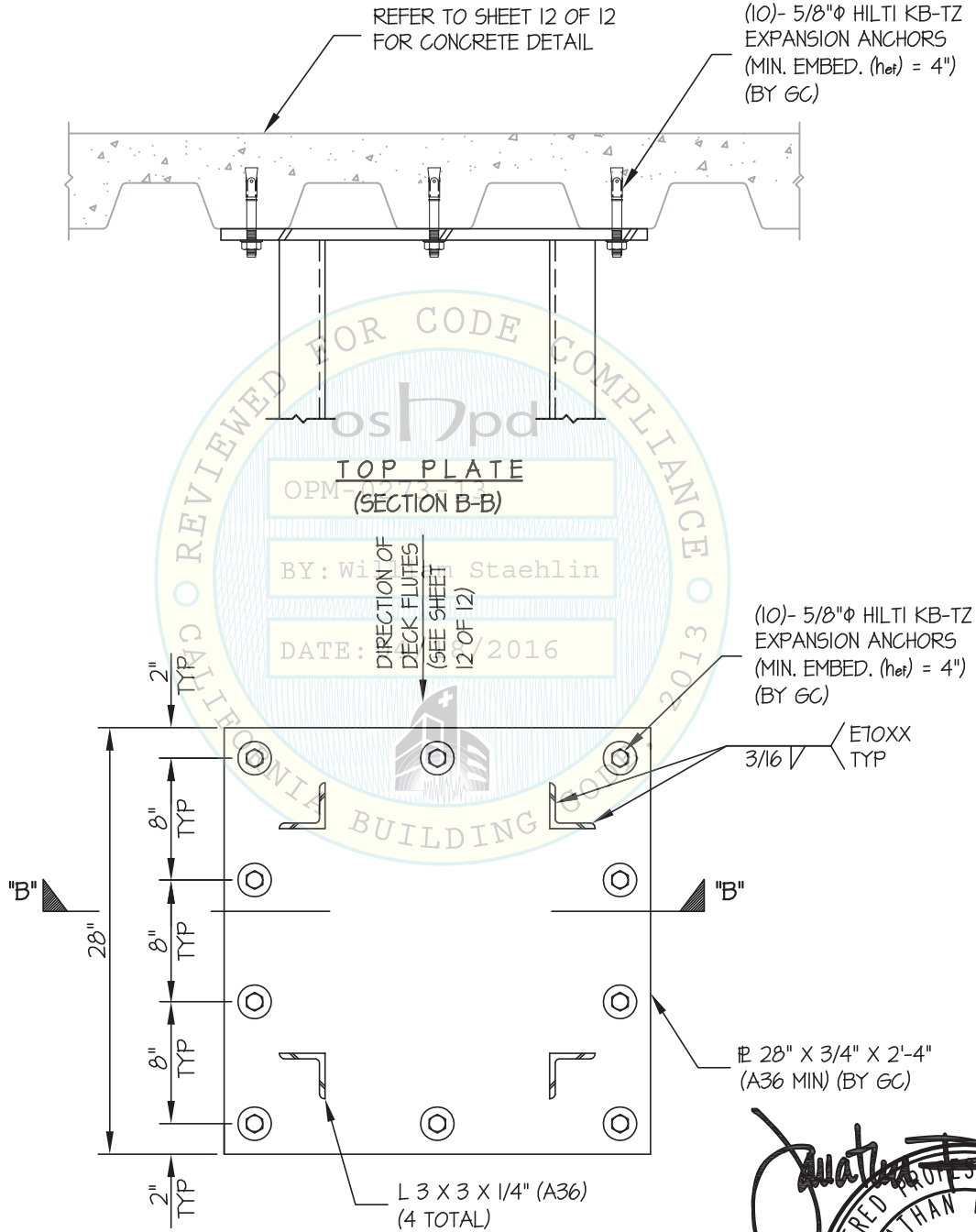
JOB NO. **11-1519**

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SEISMIC SUPPORTS & ATTACHMENTS

BRACING DETAILS



C TOP PLATE
10



AMICO CLINICAL SOLUTIONS CORPORATION

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11

**AMICO ICE SERIES LED
SURGICAL LIGHTS AND EQUIPMENT**

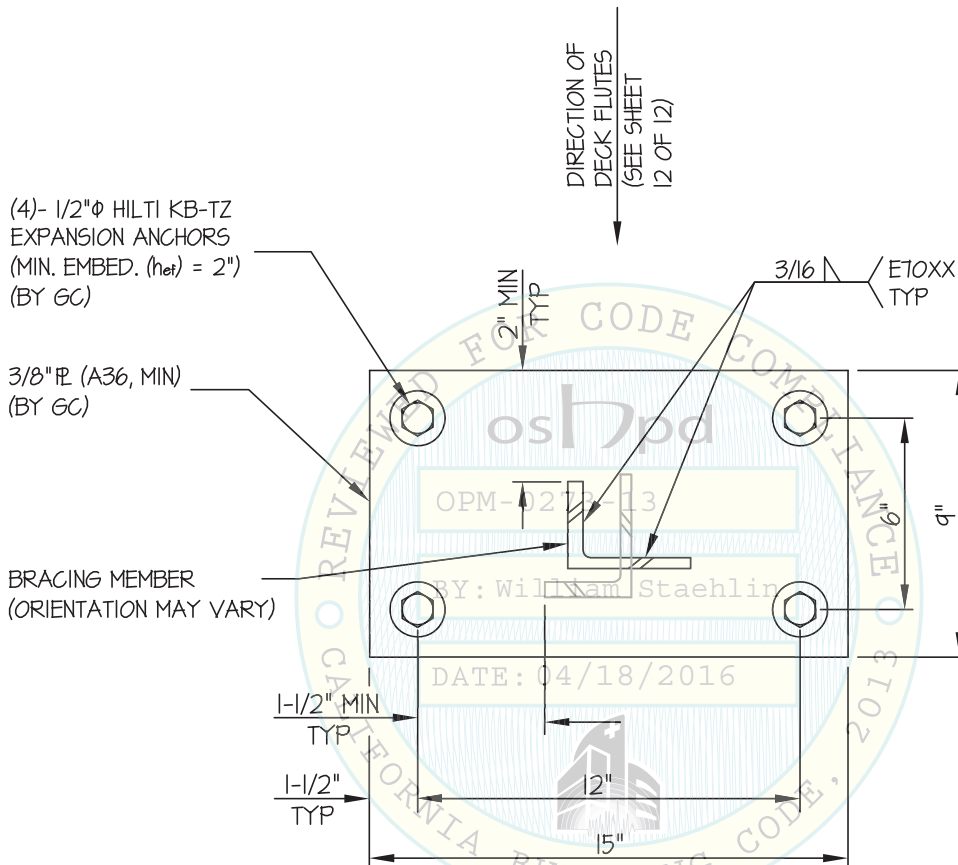
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SEISMIC SUPPORTS & ATTACHMENTS

BRACING DETAILS



Jonathan Roberson

REGISTERED PROFESSIONAL ENGINEER
JONATHAN ROBERSON
No. 4197
EXP. 6-30-2016
3/24/16
STRUCTURAL
STATE OF CALIFORNIA

AMICO CLINICAL SOLUTIONS CORPORATION

DES. **J. ROBERSON**

SHEET

12

AMICO ICE SERIES LED SURGICAL LIGHTS AND EQUIPMENT

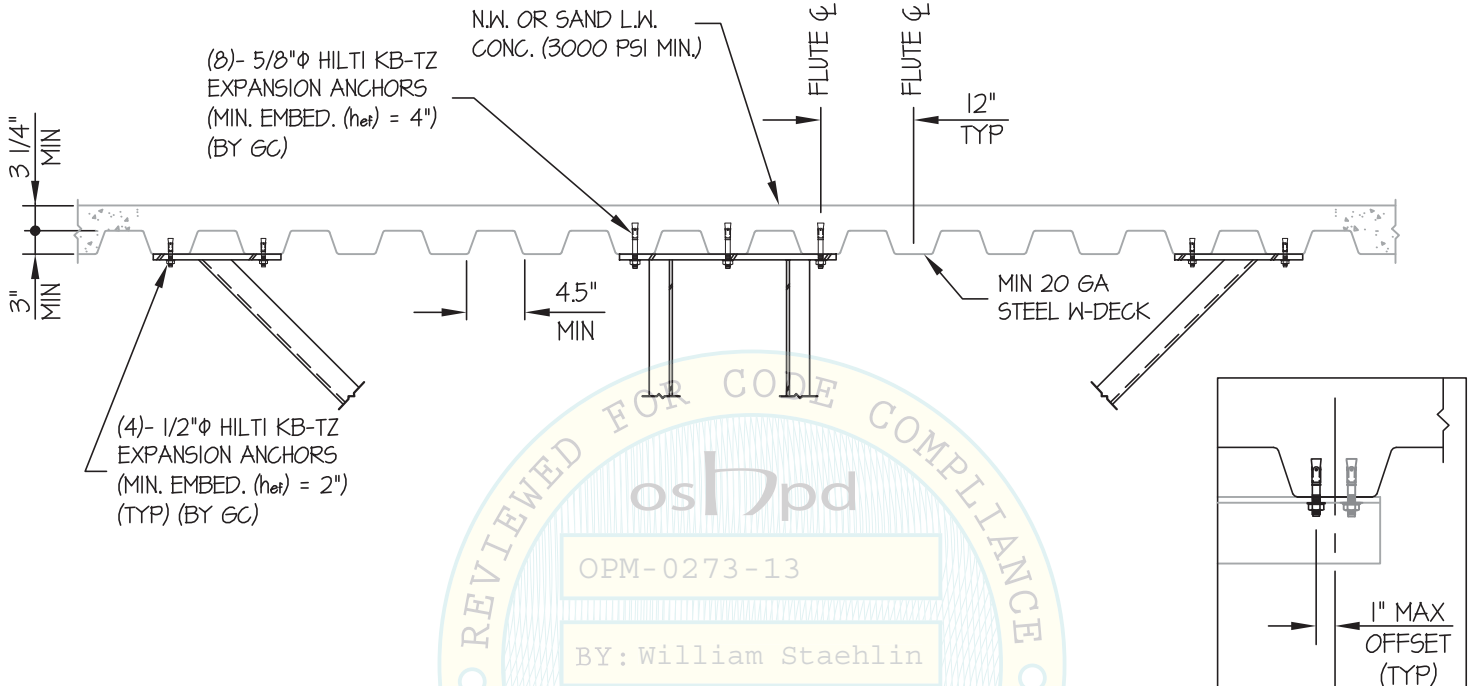
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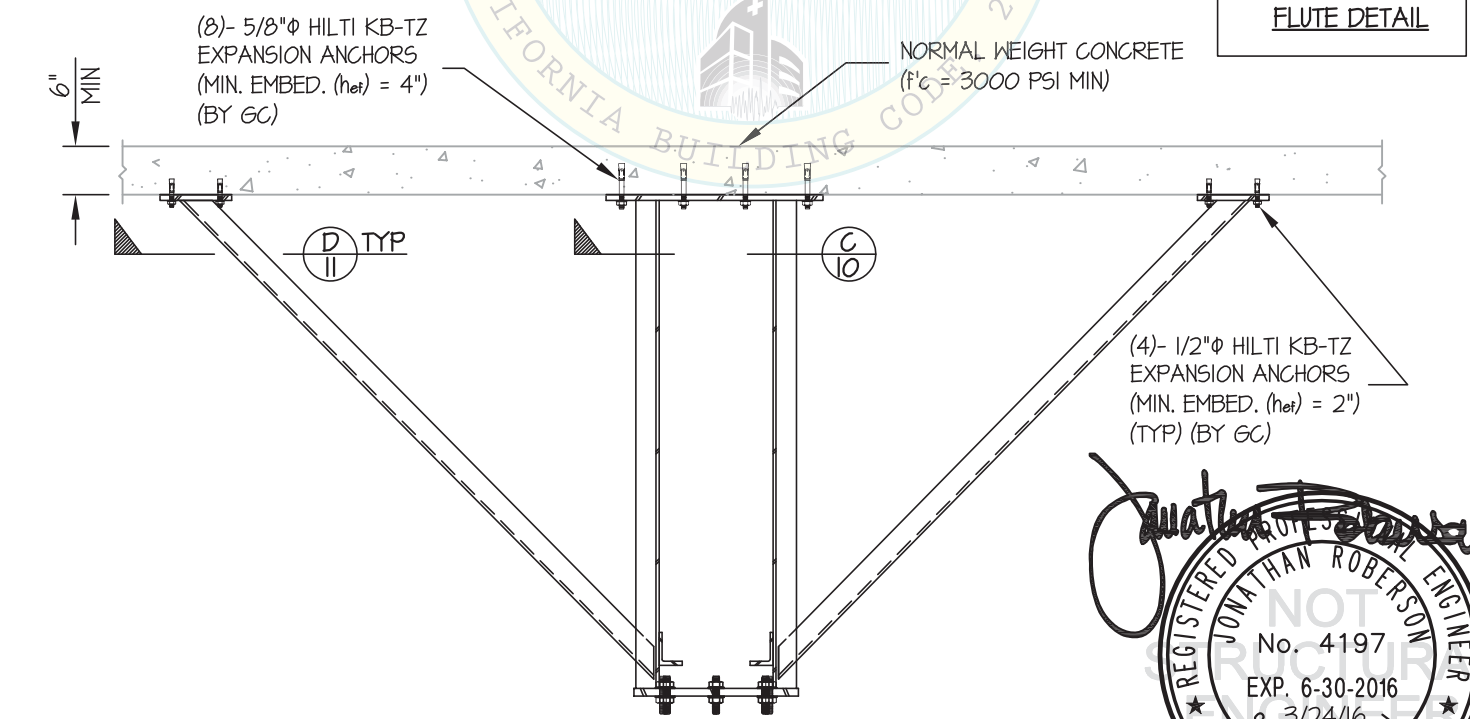
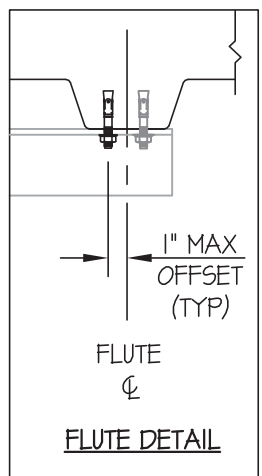
OF **12** SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

BRACING DETAILS



E SECTION AT CONCRETE OVER METAL DECK
12



F SECTION CONCRETE SLAB OPTION
12

