



OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION

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

OFFICE USE ONLY
APPLICATION #: OPM-0348-13

OSHPD Preapproval of Manufacturer's Certification (OPM)

Type: [X] New [] Renewal [] Update to Pre-CBC 2013 OPA Number:

Manufacturer Information

Manufacturer: CHATSWORTH PRODUCTS, INC.

Manufacturer's Technical Representative: James Lawrence

Mailing Address: 3004 South Austin Ave., Georgetown, TX. 78626

Telephone: On File Email: On File

Product Information

Product Name: GlobalFrame Cabinet

Product Type: Instrumentation Cabinet

Product Model Number: GF-XA1YZ-WB, GF-XA2YZ-WB, GF-XA3YZ-WB, GF-XA4YZ-WB, GF-XA5YZ-WB, GF-XD1YZ-WB, GF-XD2YZ-WB, GF-XD3YZ-WB, GF-XD4YZ-WB, GF-XD5YZ-WB, GF-XB3YZ-WB, GF-XB4YZ-WB, GF-XB5YZ-WB, GF-XC1YZ-WB, GF-XC2YZ-WB, GF-XC3YZ-WB, GF-XC4YZ-WB, GF-XC5YZ-WB

General Description: Telecommunication Rack

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: [Signature] Date: 5/18/16

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: 909-606-7622 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): _____

OPM-0348-13

*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): _____

DATE: 08/08/2017

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: *William Staehlin* Date: 08-08-2017

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-0348-13

THIS PREAPPROVAL CONFORMS TO THE 2016 CALIFORNIA BUILDING CODE

MANUFACTURER: **CHATSWORTH PRODUCTS, INC.**
EQUIPMENT NAME: **GLOBALFRAME/TERAFRAME CABINET SERIES**

Sheet: 1 of 14
Date: 7/6/17

GENERAL NOTES

1. THIS OSHPD PREAPPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE 2016 CBC. THE DEMANDS (DESIGN FORCES) FOR USE WITH THIS OPM SHALL BE BASED ON THE 2016 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 2016 CALIFORNIA BUILDING CODE WHERE S_{ds} IS NOT GREATER THAN 1.60, 2.00, 1.00 & 1.25 SEE DETAIL FOR APPLICABILITY
4. FORCES PER ASCE 7-10 SECTION 13.3.1, EQUATIONS 13.3-1, 13.3-2 & 13.3-3,
WHERE $S_{ds} = 1.60$, $a_p = 2.5$, $I_p = 1.5$, $R_p = 6.0$, $z/h = 0$ AT CONCRETE SLAB. SEE FOLLOWING SHEETS FOR Ω .
WHERE $S_{ds} = 2.00$, $a_p = 2.5$, $I_p = 1.5$, $R_p = 6.0$, $z/h = 0$ AT CONCRETE SLAB. SEE FOLLOWING SHEETS FOR Ω .
WHERE $S_{ds} = 1.00$, $a_p = 2.5$, $I_p = 1.5$, $R_p = 6.0$, $z/h \leq 1$ AT CONCRETE SLAB ON METAL DECK. SEE FOLLOWING SHEETS FOR Ω .
WHERE $S_{ds} = 1.25$, $a_p = 2.5$, $I_p = 1.5$, $R_p = 6.0$, $z/h \leq 1$ AT CONCRETE SLAB ON METAL DECK. SEE FOLLOWING SHEETS FOR Ω .
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 DETAIL VALID FOR DEMANDS SHOWN AT ANY ELEVATION AT OR 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 2016 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 AND THIS OPM.
- 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 $6h_{ef}$ FROM THIS UNIT'S ANCHORS.



CHATSWORTH PRODUCTS, INC.

**GLOBALFRAME/TERAFRAME
CABINET SERIES**

DES. **J. ROBERSON**

JOB NO. **11-1453**

DATE **7/6/17**

SHEET

2

OF **14** 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"	Sand Light Weight	3000	Hilti Kwik Bolt TZ	ESR-1917	2"	6.75"	12"	See Detail "A"	25 FT-LB	N/A
1/2"	Normal Weight	3000	Hilti Kwik Bolt TZ	ESR-1917	2"	6"	12"	4"	40 FT-LB	1605 lb
1/2"	Normal Weight	3000	Hilti Kwik Bolt TZ	ESR-1917	3-1/4"	6"	24"	6"	40 FT-LB	2685 lb

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

C. TESTING OF EXPANSION ANCHORS PER 2016 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.

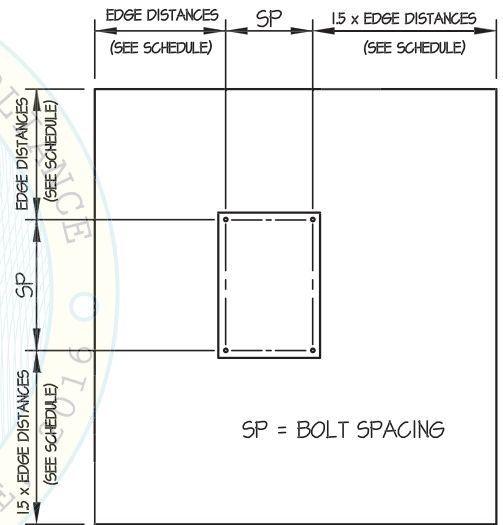
E. PROVIDE FOR FULL THREAD ENGAGEMENT OF NUT & WASHER.

11. BOLTS THROUGH CONCRETE ON METAL DECK

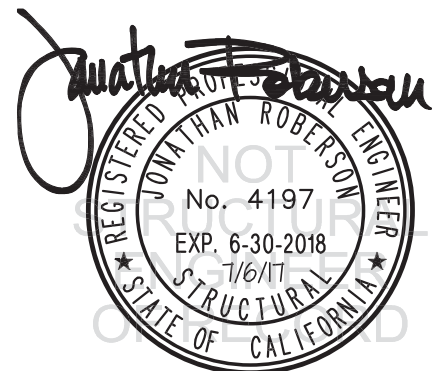
A. BOLTS SHALL BE TORQUED BY 3/4 TURN OF THE NUTS AFTER THE SNUG TIGHT (THE SNUG-TIGHT CONDITION IS DEFINED AS THE TIGHTNESS REQUIRED TO BRING THE CONNECTED PLIES INTO FIRM CONTACT) CONDITION IS ACHIEVED, UNLESS OTHERWISE NOTED.

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.



TYPICAL CONCRETE EDGE DETAIL



CHATSWORTH PRODUCTS, INC.

GLOBALFRAME/TERAFRAME CABINET SERIES

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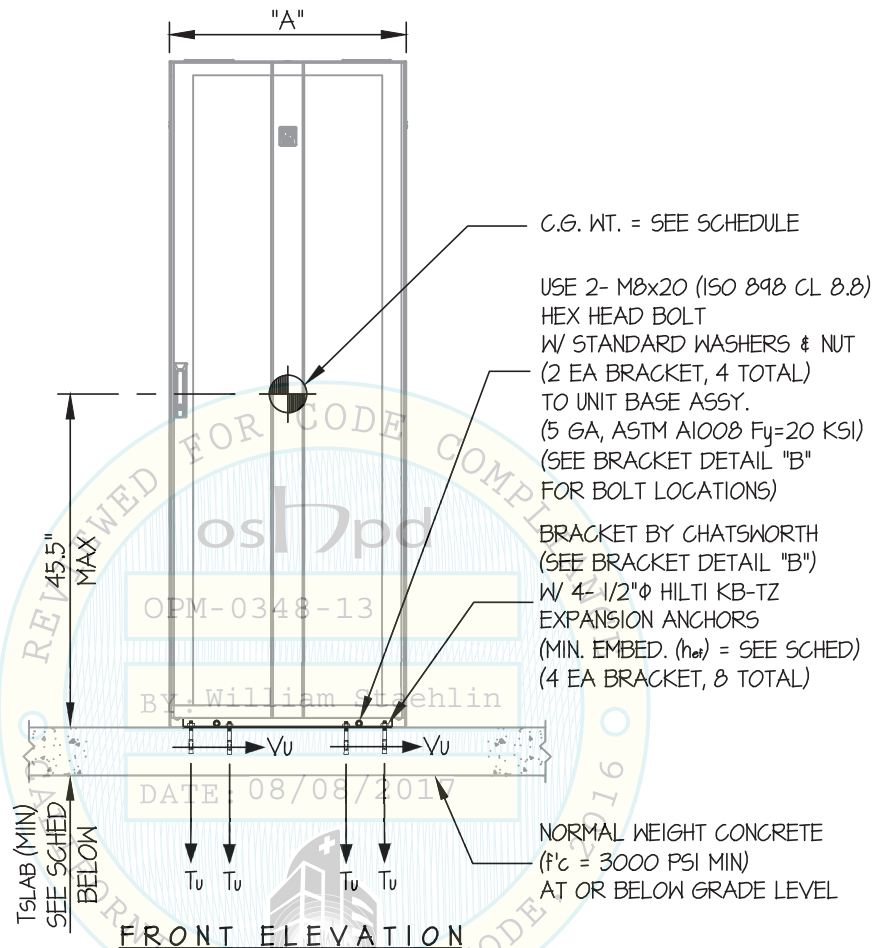
SHEET

3

OF **14** SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE SLAB



ANCHORS

MAX Sps	TYPE	DIAM	EFF EMBED	QTY	TSLAB	MAX PAYLOAD, LB
200	HILTI KB-TZ	1/2"	2"	8	4"	300
160	HILTI KB-TZ	1/2"	3.25"	8	6"	500

NOTES:

- FORCES ARE DETERMINED PER 2016 CALIFORNIA BUILDING CODE AND ASCE 7-10**
STRENGTH DESIGN IS USED. ($\alpha_p = 2.5, I_p = 1.5, R_p = 6.0, \Omega_o = 2.0, z/h = 0$)
- CENTER OF GRAVITY (C.G.) AND WEIGHT 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 AND 2.



CHATSWORTH PRODUCTS, INC.

GLOBALFRAME/TERAFRAME CABINET SERIES

DES. **J. ROBERSON**

JOB NO. **11-1453**

DATE **7/6/17**

SHEET

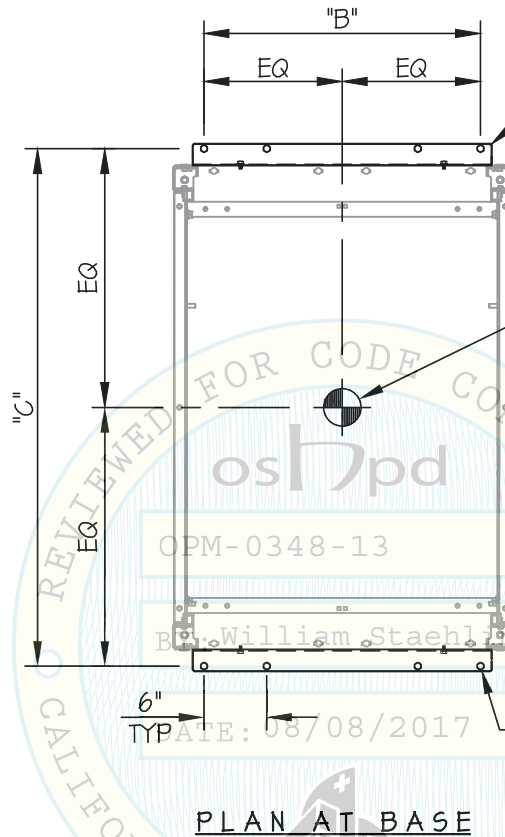
4

OF **14** SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

MAX $S_{Ds} \leq 2.00$

CONCRETE SLAB



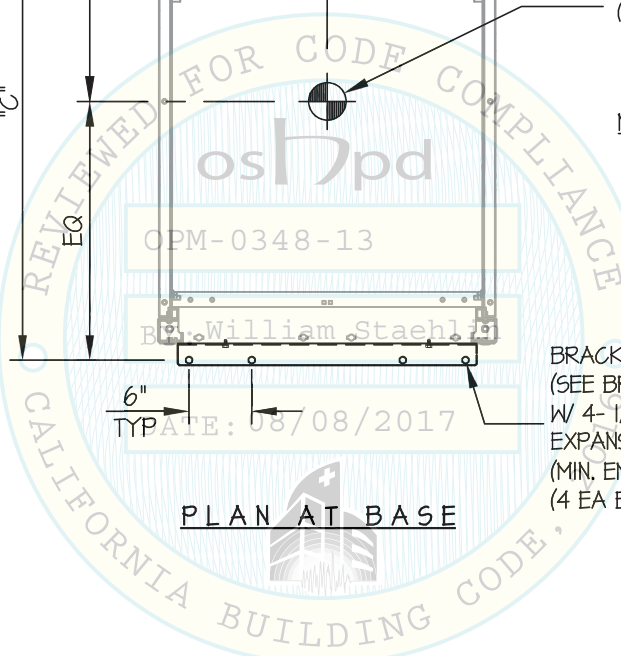
USE 2- M8x20 (ISO 898 CL 8.8)
HEX HEAD BOLT
W/ STANDARD WASHERS & NUT
(2 EA BRACKET, 4 TOTAL)
TO UNIT BASE ASSY.
(5 GA, ASTM A1008 Fy=20 KSI)
(SEE BRACKET DETAIL "B"
FOR BOLT LOCATIONS)

C.G. WT. = SEE SCHEDULE
($\bar{r} = 45.5"$ MAX)

NOTE: FOR WEIGHTS AND
DIMENSIONS, REFER TO
SCHEDULE ON NEXT SHEET

BRACKET BY CHATSWORTH
(SEE BRACKET DETAIL "B")
W/ 4- 1/2" ϕ HILTI KB-TZ
EXPANSION ANCHORS
(MIN. EMBED. (h_{req}) = 2")
(4 EA BRACKET, 8 TOTAL)

PLAN AT BASE



CHATSWORTH PRODUCTS, INC.

GLOBALFRAME/TERAFRAME CABINET SERIES

DES. **J. ROBERSON**

JOB NO. **11-1453**

DATE **7/6/17**

SHEET

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OF **14** SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

MAX Sps ≤ 2.00

CONCRETE SLAB

MODEL NUMBER	UNIT WEIGHT (lb.)	TOTAL WEIGHT (lb.)	"A" (in.)	"B" (in.)	"C" (in.)	* Tu (lb.)	* Vu (lb.)
GF-XA1YZ-WB/ FX1A-1YZW-YZW-B	265	565	23.6	18.56	34.24	987	165
GF-XA2YZ-WB/ FX1J-1YZW-YZW-B	291	591	23.6	18.56	42.11	1013	173
GF-XA3YZ-WB/ FX1L-1YZW-YZW-B	297	597	23.6	18.56	44.08	1019	175
GF-XA5YZ-WB/ FX1N-1YZW-YZW-B	304	604	23.6	18.56	46.05	1027	177
GF-XA4YZ-WB/ FX1U-1YZW-YZW-B	317	617	23.6	18.56	49.98	1043	180
GF-XD1YZ-WB/ FX2A-1YZW-YZW-B	267	567	27.6	22.5	34.24	770	166
GF-XD2YZ-WB/ FX2J-1YZW-YZW-B	293	593	27.6	22.5	42.11	785	173
GF-XD3YZ-WB/ FX2L-1YZW-YZW-B	300	600	27.6	22.5	44.08	791	176
GF-XD5YZ-WB/ FX2N-1YZW-YZW-B	306	606	27.6	22.5	46.05	795	177
GF-XD4YZ-WB/ FX2U-1YZW-YZW-B	319	619	27.6	22.5	49.98	806	181
GF-XB3YZ-WB	312	612	29.5	24.47	44.08	725	179
GF-XB5YZ-WB	319	619	29.5	24.47	46.05	730	181
GF-XB4YZ-WB	332	632	29.5	24.47	49.98	739	185
GF-XC1YZ-WB/ FX3A-1YZW-YZW-B	291	591	31.5	26.43	34.24	661	173
GF-XC2YZ-WB/ FX3J-1YZW-YZW-B	317	617	31.5	26.43	42.11	670	180
GF-XC3YZ-WB/ FX3L-1YZW-YZW-B	324	624	31.5	26.43	44.08	673	183
GF-XC5YZ-WB/ FX3N-1YZW-YZW-B	331	631	31.5	26.43	46.05	677	185
GF-XC4YZ-WB/ FX3U-1YZW-YZW-B	344	644	31.5	26.43	49.98	684	188

* VALUES INCLUDE Ω_b

NOTE: THIS TABLE REFLECTS PAYLOAD FOR ALL RACKS AT **300 LB MAX**
PLACARD WITH WEIGHT LIMIT MUST BE POSTED ON RACK PER THIS TABLE.



CHATSWORTH PRODUCTS, INC.

**GLOBALFRAME/TERAFRAME
CABINET SERIES**

DES. **J. ROBERSON**

JOB NO. **11-1453**

DATE **7/6/17**

SHEET

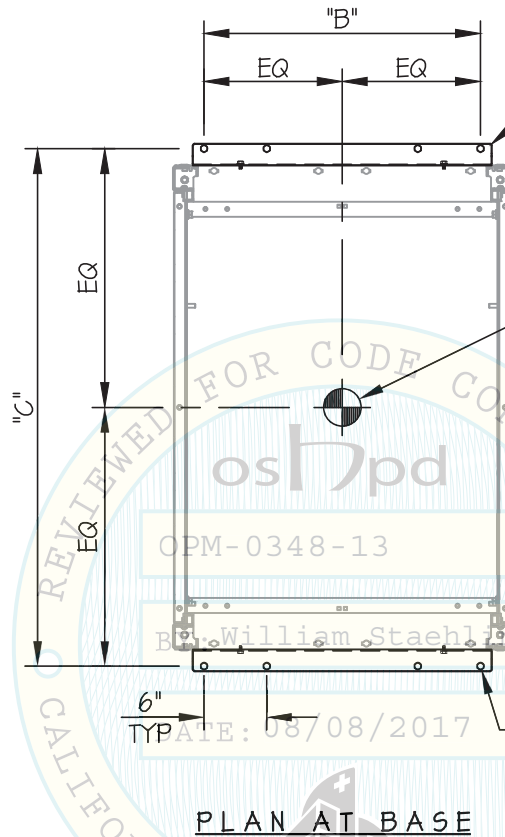
6

OF **14** SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

MAX $S_{Ds} \leq 1.60$

CONCRETE SLAB

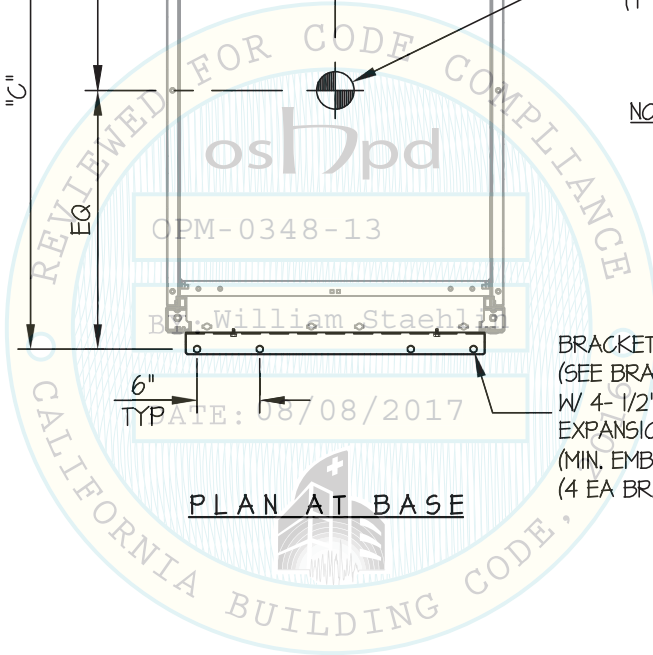


USE 2- M8x20 (ISO 898 CL 8.8)
HEX HEAD BOLT
W/ STANDARD WASHERS & NUT
(2 EA BRACKET, 4 TOTAL)
TO UNIT BASE ASSY.
(5 GA, ASTM A1008 Fy=20 KSI)
(SEE BRACKET DETAIL "B"
FOR BOLT LOCATIONS)

C.G. WT. = SEE SCHEDULE
($\bar{r} = 45.5"$ MAX)

NOTE: FOR WEIGHTS AND
DIMENSIONS, REFER TO
SCHEDULE ON NEXT SHEET

BRACKET BY CHATSWORTH
(SEE BRACKET DETAIL "B")
W/ 4- 1/2" ϕ HILTI KB-TZ
EXPANSION ANCHORS
(MIN. EMBED. (h_{req}) = 3.25")
(4 EA BRACKET, 8 TOTAL)



CHATSWORTH PRODUCTS, INC.

GLOBALFRAME/TERAFRAME CABINET SERIES

DES. **J. ROBERSON**

JOB NO. **11-1453**

DATE **7/6/17**

SHEET

7

OF **14** SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

MAX $S_{Ds} \leq 1.60$

CONCRETE SLAB

MODEL NUMBER	UNIT WEIGHT (lb.)	TOTAL WEIGHT (lb.)	"A" (in.)	"B" (in.)	"C" (in.)	* Tu (lb.)	* Vu (lb.)
GF-XA1YZ-WB/ FX1A-1YZW-YZW-B	265	765	23.6	18.56	34.24	1052	179
GF-XA2YZ-WB/ FX1J-1YZW-YZW-B	291	791	23.6	18.56	42.11	1139	185
GF-XA3YZ-WB/ FX1L-1YZW-YZW-B	297	797	23.6	18.56	44.08	1070	186
GF-XA5YZ-WB/ FX1N-1YZW-YZW-B	304	804	23.6	18.56	46.05	1076	188
GF-XA4YZ-WB/ FX1U-1YZW-YZW-B	317	817	23.6	18.56	49.98	1087	191
GF-XD1YZ-WB/ FX2A-1YZW-YZW-B	267	767	27.6	22.5	34.24	816	179
GF-XD2YZ-WB/ FX2J-1YZW-YZW-B	293	793	27.6	22.5	42.11	822	186
GF-XD3YZ-WB/ FX2L-1YZW-YZW-B	300	800	27.6	22.5	44.08	825	187
GF-XD5YZ-WB/ FX2N-1YZW-YZW-B	306	806	27.6	22.5	46.05	828	189
GF-XD4YZ-WB/ FX2U-1YZW-YZW-B	319	819	27.6	22.5	49.98	834	192
GF-XB3YZ-WB	312	812	29.5	24.47	44.08	752	190
GF-XB5YZ-WB	319	819	29.5	24.47	46.05	754	192
GF-XB4YZ-WB	332	832	29.5	24.47	49.98	759	195
GF-XC1YZ-WB/ FX3A-1YZW-YZW-B	291	791	31.5	26.43	34.24	690	185
GF-XC2YZ-WB/ FX3J-1YZW-YZW-B	317	817	31.5	26.43	42.11	691	191
GF-XC3YZ-WB/ FX3L-1YZW-YZW-B	324	824	31.5	26.43	44.08	693	193
GF-XC5YZ-WB/ FX3N-1YZW-YZW-B	331	831	31.5	26.43	46.05	695	194
GF-XC4YZ-WB/ FX3U-1YZW-YZW-B	344	844	31.5	26.43	49.98	698	197

* VALUES INCLUDE Ω_b

NOTE: THIS TABLE REFLECTS PAYLOAD FOR ALL RACKS AT **500 LB MAX**
PLACARD WITH WEIGHT LIMIT MUST BE POSTED ON RACK PER THIS TABLE.



CHATSWORTH PRODUCTS, INC.

GLOBALFRAME/TERAFRAME CABINET SERIES

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DATE **7/6/17**

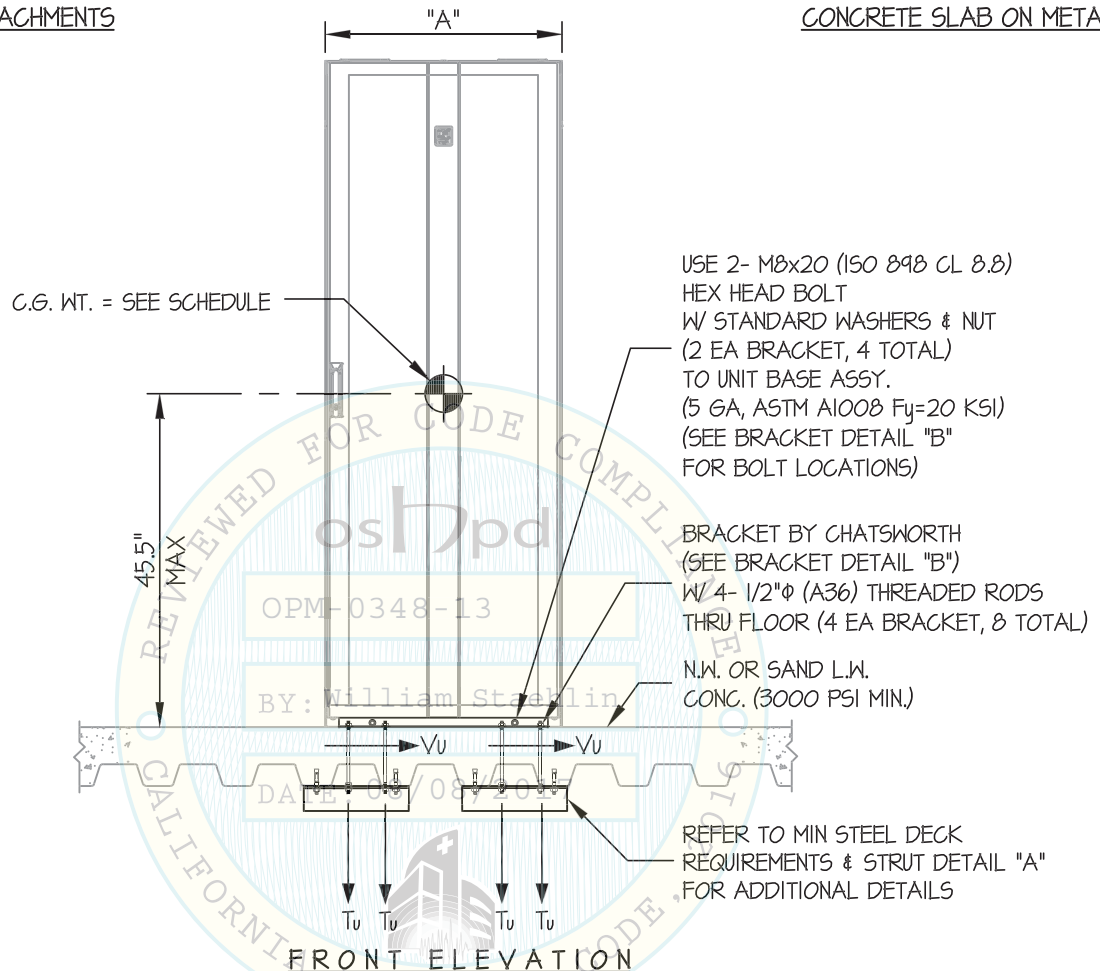
SHEET

8

OF **14** SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE SLAB ON METAL DECK



NOTES:

1. FORCES ARE DETERMINED PER 2016 CALIFORNIA BUILDING CODE AND ASCE 7-10.

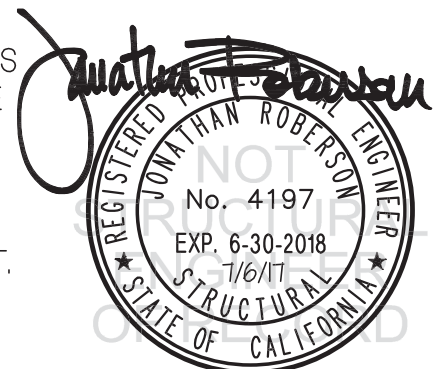
STRENGTH DESIGN IS USED. ($\alpha_p = 2.5$, $l_p = 1.5$, $R_p = 6.0$, $\Omega_o = 2.0$, $z/h \leq 1$)

Sds	1.00	1.25
HORIZONTAL FORCE (Eh)	0.75 Wp	0.94 Wp
HORIZONTAL FORCE (Emh)	1.50 Wp	1.88 Wp
VERTICAL FORCE (Ev)	0.20 Wp	0.25 Wp
MAX PAYLOAD	500 LB	300 LB

($E_{mh} = E_h \times \Omega_o$; FOR CONCRETE ANCHORAGE)

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.



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**GLOBALFRAME/TERAFRAME
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SHEET

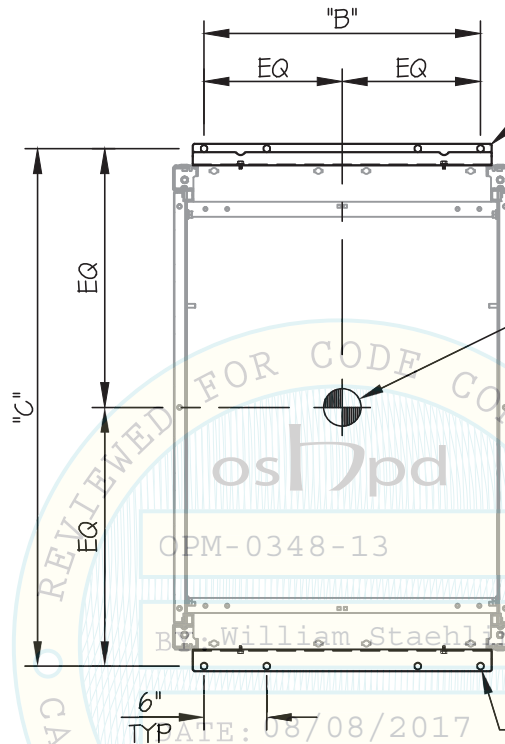
9

OF **14** SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

MAX $S_{ps} \leq 1.00$

CONCRETE SLAB ON METAL DECK



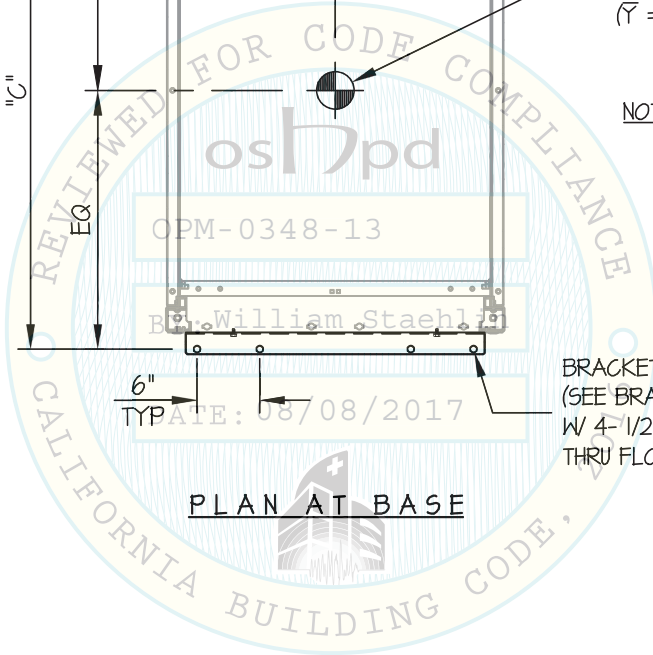
USE 2- M8x20 (ISO 898 CL 8.8)
HEX HEAD BOLT
W/ STANDARD WASHERS & NUT
(2 EA BRACKET, 4 TOTAL)
TO UNIT BASE ASSY.
(5 GA, ASTM A1008 Fy=20 KSI)
(SEE BRACKET DETAIL "B"
FOR BOLT LOCATIONS)

C.G. WT. = SEE SCHEDULE
(\bar{Y} = 45.5" MAX)

NOTE: FOR WEIGHTS AND
DIMENSIONS, REFER TO
SCHEDULE ON NEXT SHEET

BRACKET BY CHATSWORTH
(SEE BRACKET DETAIL "B")
W/ 4- 1/2"φ (A36) THREADED RODS
THRU FLOOR (4 EA BRACKET, 8 TOTAL)

PLAN AT BASE



CHATSWORTH PRODUCTS, INC.

GLOBALFRAME/TERAFRAME CABINET SERIES

DES. **J. ROBERSON**

JOB NO. **11-1453**

DATE **7/6/17**

SHEET

10

OF **14** SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

MAX Sps ≤ 1.00

CONCRETE SLAB ON METAL DECK

MODEL NUMBER	UNIT WEIGHT (lb.)	LOADED WEIGHT (lb.)	"A" (in.)	"B" (in.)	"C" (in.)	* Tu (lb.)	* Vu (lb.)
GF-XA1YZ-WB/ FX1A-1YZW-YZW-B	265	765	23.6	18.56	34.24	510	93
GF-XA2YZ-WB/ FX1J-1YZW-YZW-B	291	791	23.6	18.56	42.11	516	96
GF-XA3YZ-WB/ FX1L-1YZW-YZW-B	297	797	23.6	18.56	44.08	518	97
GF-XA5YZ-WB/ FX1N-1YZW-YZW-B	304	804	23.6	18.56	46.05	520	98
GF-XA4YZ-WB/ FX1U-1YZW-YZW-B	317	817	23.6	18.56	49.98	525	100
GF-XD1YZ-WB/ FX2A-1YZW-YZW-B	267	767	27.6	22.5	34.24	387	93
GF-XD2YZ-WB/ FX2J-1YZW-YZW-B	293	793	27.6	22.5	42.11	389	97
GF-XD3YZ-WB/ FX2L-1YZW-YZW-B	300	800	27.6	22.5	44.08	390	98
GF-XD5YZ-WB/ FX2N-1YZW-YZW-B	306	806	27.6	22.5	46.05	391	98
GF-XD4YZ-WB/ FX2U-1YZW-YZW-B	319	819	27.6	22.5	49.98	394	100
GF-XB3YZ-WB	312	812	29.5	24.47	44.08	351	99
GF-XB5YZ-WB	319	819	29.5	24.47	46.05	352	100
GF-XB4YZ-WB	332	832	29.5	24.47	49.98	354	101
GF-XC1YZ-WB/ FX3A-1YZW-YZW-B	291	791	31.5	26.43	34.24	320	96
GF-XC2YZ-WB/ FX3J-1YZW-YZW-B	317	817	31.5	26.43	42.11	319	100
GF-XC3YZ-WB/ FX3L-1YZW-YZW-B	324	824	31.5	26.43	44.08	320	100
GF-XC5YZ-WB/ FX3N-1YZW-YZW-B	331	831	31.5	26.43	46.05	320	101
GF-XC4YZ-WB/ FX3U-1YZW-YZW-B	344	844	31.5	26.43	49.98	322	103

* VALUES DO NOT INCLUDE Ω .

NOTE: THIS TABLE REFLECTS PAYLOAD FOR ALL RACKS AT **500 LB MAX**
PLACARD WITH WEIGHT LIMIT MUST BE POSTED ON RACK PER THIS TABLE.



CHATSWORTH PRODUCTS, INC.

GLOBALFRAME/TERAFRAME CABINET SERIES

DES. **J. ROBERSON**

JOB NO. **11-1453**

DATE **7/6/17**

SHEET

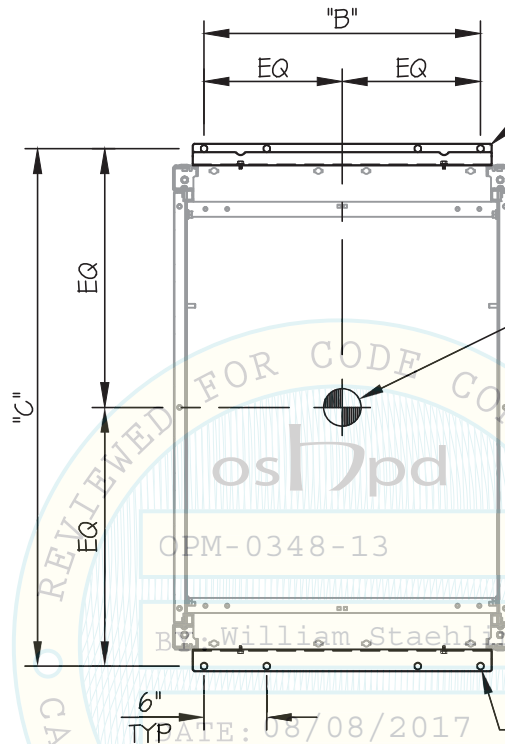
11

OF **14** SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

MAX Sps ≤ 1.25

CONCRETE SLAB ON METAL DECK



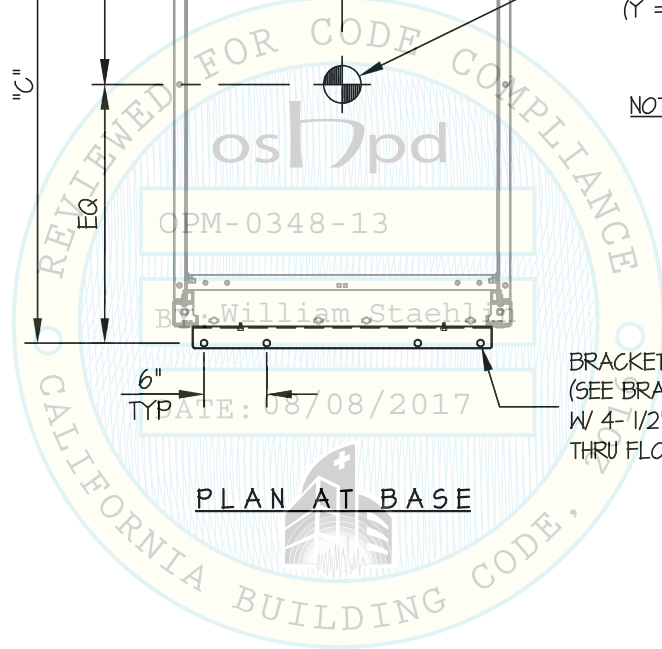
USE 2- M8x20 (ISO 898 CL 8.8)
HEX HEAD BOLT
W/ STANDARD WASHERS & NUT
(2 EA BRACKET, 4 TOTAL)
TO UNIT BASE ASSY.
(5 GA, ASTM A1008 Fy=20 KSI)
(SEE BRACKET DETAIL "B"
FOR BOLT LOCATIONS)

C.G. WT. = SEE SCHEDULE
(\bar{Y} = 45.5" MAX)

NOTE: FOR WEIGHTS AND
DIMENSIONS, REFER TO
SCHEDULE ON NEXT SHEET

BRACKET BY CHATSWORTH
(SEE BRACKET DETAIL "B")
W/ 4- 1/2"φ (A36) THREADED RODS
THRU FLOOR (4 EA BRACKET, 8 TOTAL)

PLAN AT BASE



CHATSWORTH PRODUCTS, INC.

DES. **J. ROBERSON**

SHEET

12

GLOBALFRAME/TERAFRAME CABINET SERIES

JOB NO. **11-1453**

DATE **7/6/17**

OF **14** SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

MAX Sps ≤ 1.25

CONCRETE SLAB ON METAL DECK

MODEL NUMBER	UNIT WEIGHT (lb.)	LOADED WEIGHT (lb.)	"A" (in.)	"B" (in.)	"C" (in.)	* Tu (lb.)	* Vu (lb.)
GF-XA1YZ-WB/ FX1A-1YZW-YZW-B	265	565	23.6	18.56	34.24	488	86
GF-XA2YZ-WB/ FX1J-1YZW-YZW-B	291	591	23.6	18.56	42.11	500	90
GF-XA3YZ-WB/ FX1L-1YZW-YZW-B	297	597	23.6	18.56	44.08	503	91
GF-XA5YZ-WB/ FX1N-1YZW-YZW-B	304	604	23.6	18.56	46.05	507	92
GF-XA4YZ-WB/ FX1U-1YZW-YZW-B	317	617	23.6	18.56	49.98	515	94
GF-XD1YZ-WB/ FX2A-1YZW-YZW-B	267	567	27.6	22.5	34.24	374	87
GF-XD2YZ-WB/ FX2J-1YZW-YZW-B	293	593	27.6	22.5	42.11	381	91
GF-XD3YZ-WB/ FX2L-1YZW-YZW-B	300	600	27.6	22.5	44.08	384	92
GF-XD5YZ-WB/ FX2N-1YZW-YZW-B	306	606	27.6	22.5	46.05	386	93
GF-XD4YZ-WB/ FX2U-1YZW-YZW-B	319	619	27.6	22.5	49.98	391	95
GF-XB3YZ-WB	312	612	29.5	24.47	44.08	349	93
GF-XB5YZ-WB	319	619	29.5	24.47	46.05	351	95
GF-XB4YZ-WB	332	632	29.5	24.47	49.98	355	97
GF-XC1YZ-WB/ FX3A-1YZW-YZW-B	291	591	31.5	26.43	34.24	317	90
GF-XC2YZ-WB/ FX3J-1YZW-YZW-B	317	617	31.5	26.43	42.11	320	94
GF-XC3YZ-WB/ FX3L-1YZW-YZW-B	324	624	31.5	26.43	44.08	321	95
GF-XC5YZ-WB/ FX3N-1YZW-YZW-B	331	631	31.5	26.43	46.05	323	96
GF-XC4YZ-WB/ FX3U-1YZW-YZW-B	344	644	31.5	26.43	49.98	326	98

* VALUES DO NOT INCLUDE Ω_2

NOTE: THIS TABLE REFLECTS PAYLOAD FOR ALL RACKS AT **300 LB MAX**
PLACARD WITH WEIGHT LIMIT MUST BE POSTED ON RACK PER THIS TABLE.



CHATSWORTH PRODUCTS, INC.

GLOBALFRAME/TERAFRAME CABINET SERIES

DES. **J. ROBERSON**

JOB NO. **11-1453**

DATE **7/6/17**

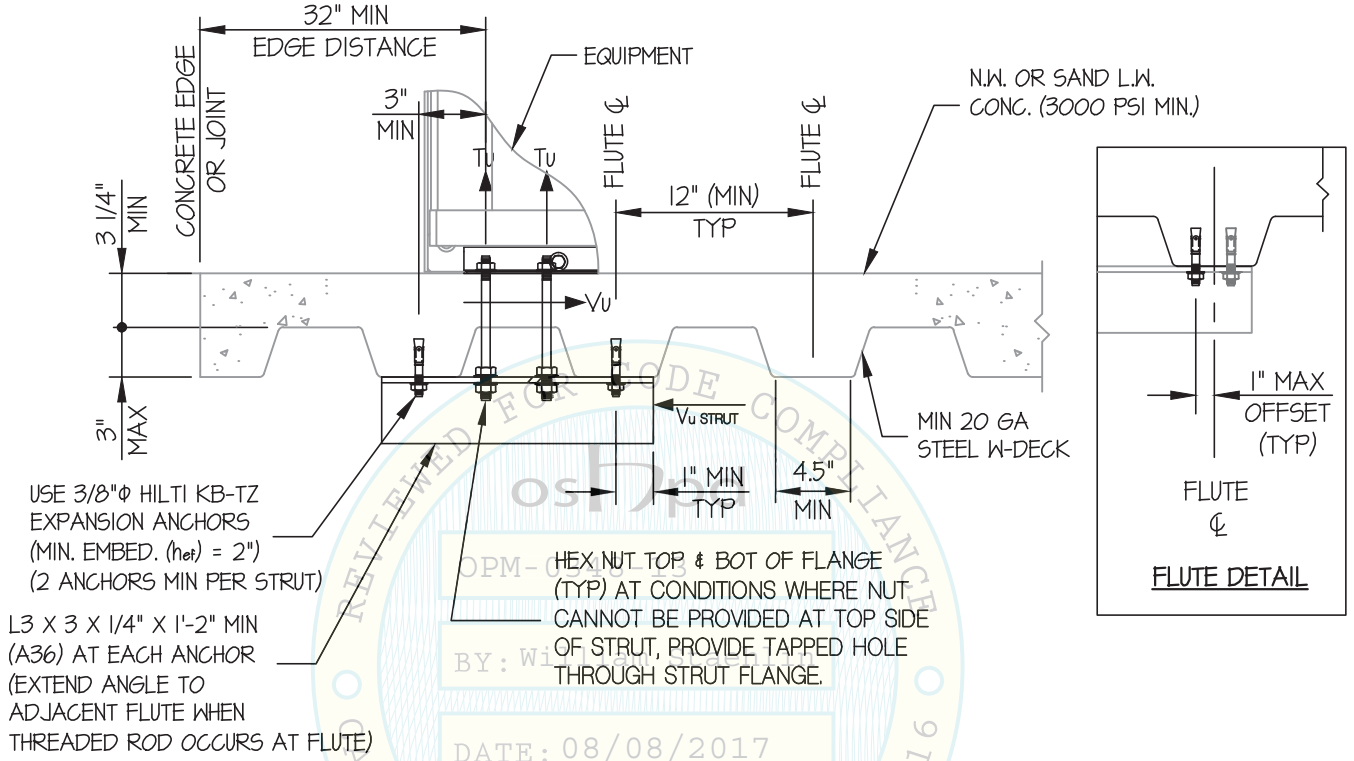
SHEET

13

OF **14** SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE DETAILS



MIN STEEL DECK REQUIREMENTS AND STRUT DETAIL (A)



CHATSWORTH PRODUCTS, INC.

DES. **J. ROBERSON**

SHEET

14

GLOBALFRAME/TERAFRAME CABINET SERIES

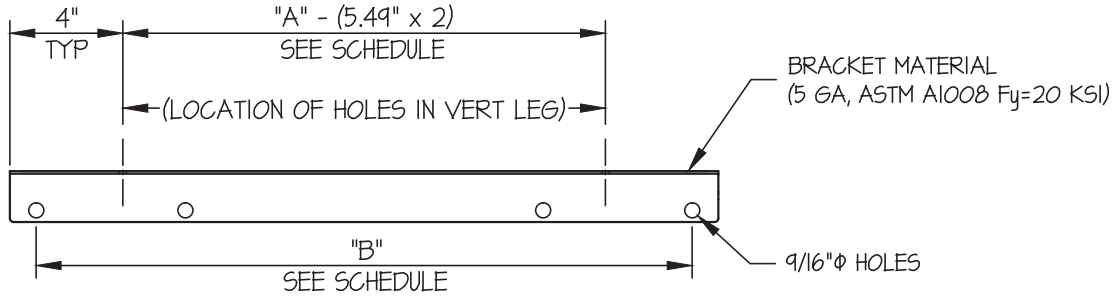
JOB NO. **11-1453**

DATE **7/6/17**

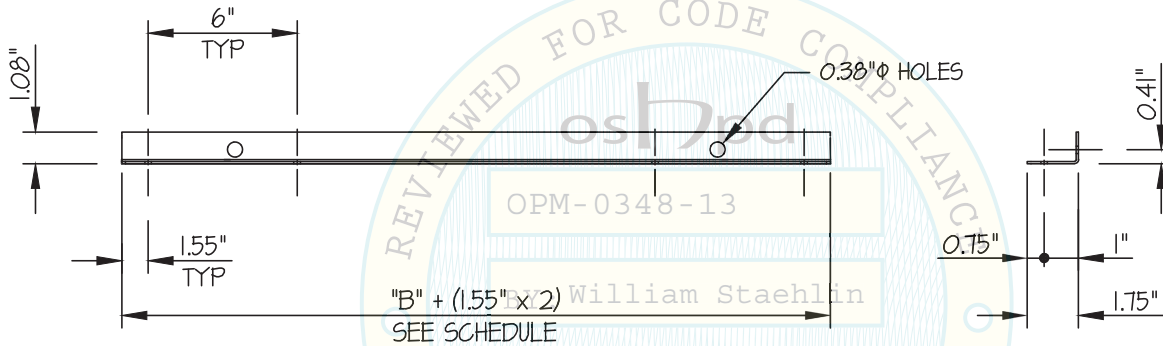
OF **14** SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

BRACKET DETAILS



PLAN



FRONT

SIDE

BRACKET DETAIL (B)

