



DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
OFFICE OF STATEWIDE HOSPITAL PLANNING AND DEVELOPMENT

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

OFFICE USE ONLY

APPLICATION #: OPM-0110

HCAI Preapproval of Manufacturer's Certification (OPM)

Type: ☐ New ☒ Renewal/Update

Manufacturer Information

Manufacturer: Oberon Inc.

Manufacturer's Technical Representative: Rick Conklin

Mailing Address: 1315 S. Allen St Suite 410, State College, PA 16801

Telephone: (814) 867-2312

Email: rlc@oberonwireless.com

Product Information

Product Name: WIRELESS ROUTER ENCLOSURES

Product Type: Computer

Product Model Number: 102x Series, 104x Series, 105x Series, 106x Series, 107x Series, 144x Series & 305x Series

General Description: Wall & Ceiling Mounted Interior Wireless Router Enclosures

Applicant Information

Applicant Company Name: EASE LLC.

Contact Person: Tiffany Tonn

Mailing Address: 1515 FAIRVIEW AVE, STE 205, MISSOULA, MT 59801

Telephone: (406) 541-3273

Email: tiffany@easeco.com

Title: Office Assistant

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STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY





DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
OFFICE OF STATEWIDE HOSPITAL PLANNING AND DEVELOPMENT

Registered Design Professional Preparing Engineering Recommendations

Company Name: EASE LLC

Name: Jonathan Roberson

California License Number: S4197

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

Telephone: (951) 295-1892

Email: jon@EASECo.com

HCAI Special Seismic Certification Preapproval (OSP)

☐ Special Seismic Certification is preapproved under OSP

OSP Number: _____

Certification Method

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

☐ Other(s) (Please Specify): _____

*Use of criteria other than those adopted by the California Building Standards Code, 2022 (CBSC 2022) 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 2022 may be used when approved by HCAI prior to testing.

☒ Analysis

☐ Experience Data

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

HCAI Approval

Date: 4/4/2025

Name: William Staehlin

Title: Senior Structural Engineer

Condition of Approval (if applicable): _____

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**EQUIPMENT ANCHORAGE
& SEISMIC ENGINEERING**

5877 Pine Ave, Ste. 210
Chino Hills, CA. 91709
Phn: (909) 606-7622

The Department of Health Care Access and Information
PREAPPROVAL OF MANUFACTURER'S CERTIFICATION
OPM-0110

THIS PREAPPROVAL CONFORMS TO THE 2022 CALIFORNIA BUILDING CODE

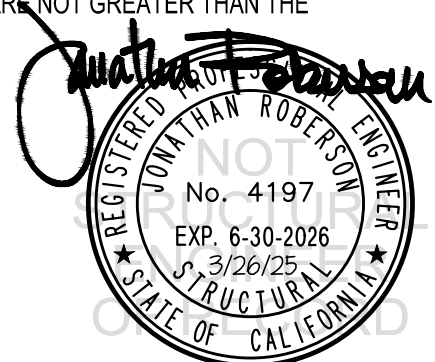
MANUFACTURER: **OBERON, INC**
EQUIPMENT NAME: **WIRELESS ENCLOSURES**

Sheet: 1 of 11

Date: 3/26/25

GENERAL NOTES

1. THIS HCAI PREAPPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE 2022 CBC. THE DEMANDS (DESIGN FORCES) FOR USE WITH THIS OPM SHALL BE BASED ON THE 2022 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 2022 CALIFORNIA BUILDING CODE.
4. FORCES PER ASCE 7-16 SECTION 13.3.1, EQUATIONS 13.3-1, 13.3-2 & 13.3-3, WHERE $S_{Ds} = 2.50$, $a_p = 1.0$, $I_p = 1.5$, $R_p = 2.5$, $z/h \leq 1$.
5. THE DETAILS IN THIS PREAPPROVAL MAY BE USED AT ANY LOCATION IN THE STATE OF CALIFORNIA, WHERE S_{Ds} IS NOT GREATER THAN 2.50.
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. CEILING SUSPENSION SYSTEM SUPPORT SHALL CONFORM TO ASTM E580. EQUIPMENT SUPPORT WITHIN SHALL CONFORM TO ASTM E580 SECTION 5.3 AND THE CALIFORNIA ELECTRICAL CODE.
10. 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 2022 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.



OBERON, INC

DES. J. ROBERSON

SHEET

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JOB NO. 11-2423

WIRELESS ENCLOSURES

DATE 3/26/25

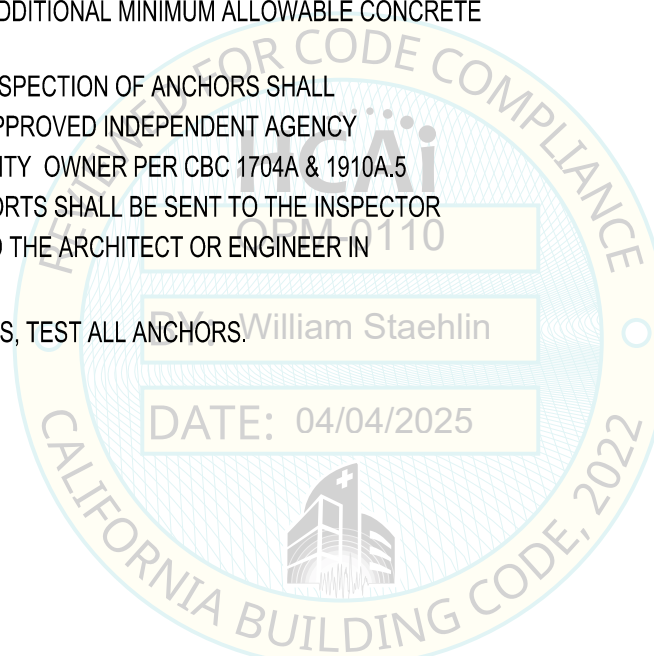
OF 11 SHEETS

11. 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 TZ2 (CARBON STEEL)	ESR-4266	2"	6.75"	12"	3.25" Over Flutes	30 FT-LB	N/A

- B. THIS PREAPPROVAL ALLOWS FOR UP TO A MAXIMUM OF 2 ADJACENT CONCRETE SLAB EDGES, 12" AWAY MINIMUM (i.e. - CORNER). SEE ADJACENT DETAIL FOR ADDITIONAL MINIMUM ALLOWABLE CONCRETE EDGE DISTANCES.
- C. TESTING AND SPECIAL INSPECTION OF ANCHORS SHALL BE PERFORMED BY AN APPROVED INDEPENDENT AGENCY EMPLOYED BY THE FACILITY OWNER PER CBC 1704A & 1910A.5 AND CAC 7-149. ALL REPORTS SHALL BE SENT TO THE INSPECTOR OF RECORD, OWNER AND THE ARCHITECT OR ENGINEER IN RESPONSIBLE CHARGE.
- (i) IF ANY ANCHOR FAILS, TEST ALL ANCHORS.



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WIRELESS ENCLOSURES

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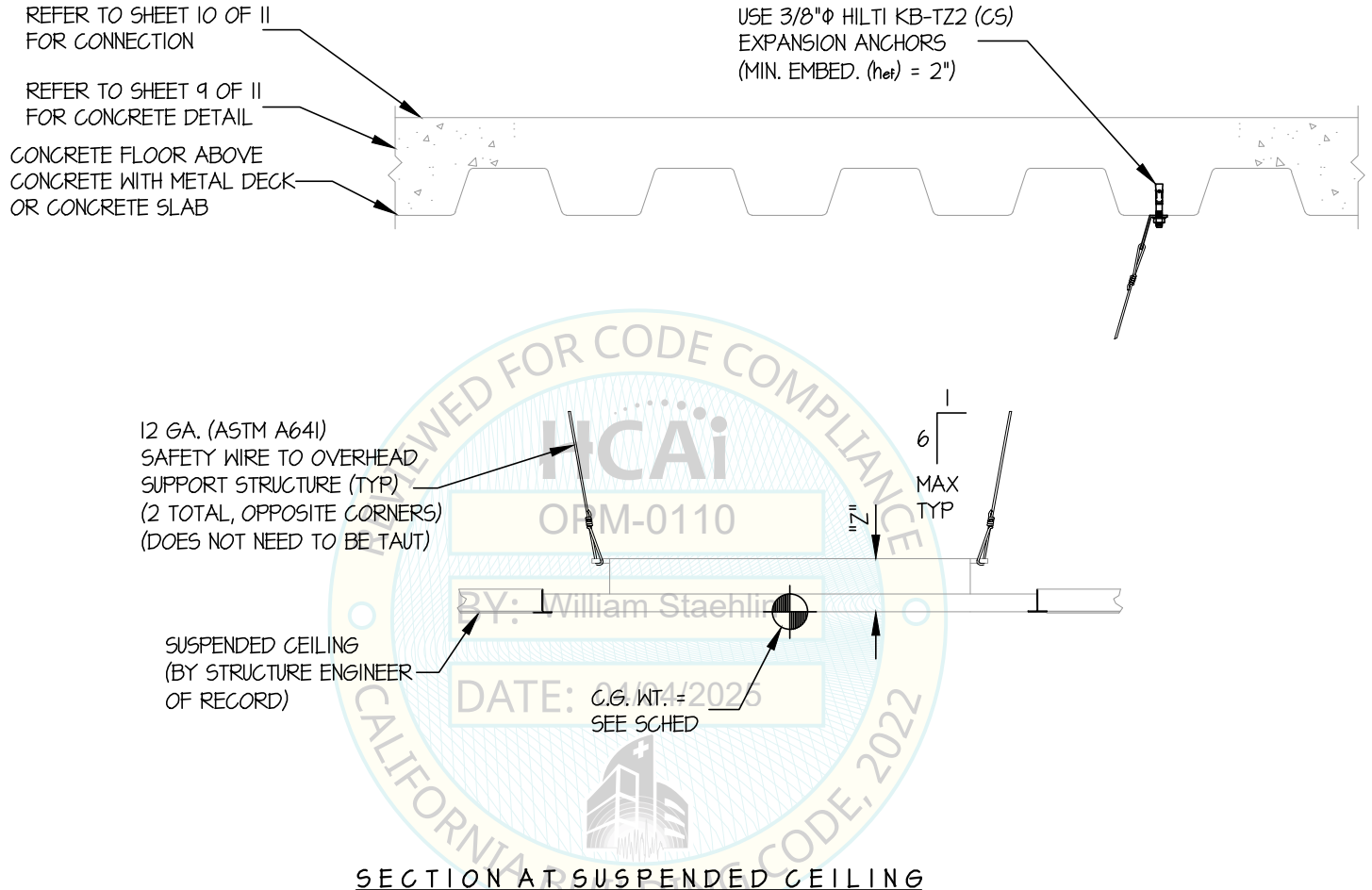
SHEET

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OF **11** SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

CEILING MOUNTED



NOTES:

- FORCES ARE DETERMINED PER 2022 CALIFORNIA BUILDING CODE AND ASCE 7-16. STRENGTH DESIGN IS USED. ($S_Ds = 2.50$, $a_p = 1.0$, $I_p = 1.5$, $R_p = 2.5$, $\Omega_o = 2.0$, $z/h \leq 1$)
HORIZONTAL FORCE (E_h) = $1.80 W_p$
HORIZONTAL FORCE (E_{mh}) = $3.60 W_p$ (FOR CONCRETE ANCHORAGE)
VERTICAL FORCE (E_v) = $0.50 W_p$
- CENTER OF GRAVITY (C.G.) AND WEIGHT ARE THE GOVERNING PARAMETERS FOR DESIGN. THESE CALCULATIONS ENCOMPASS 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





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SHEET

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JOB NO. **11-2423**

WIRELESS ENCLOSURES

DATE **3/26/25**

OF **11** SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

CEILING MOUNTED

SUMMARY TABLE

SERIES	WEIGHT (lb.)	"X" (in.)	"Y" (in.)	"Z" (in.)	E _h (LB.)	E _v (LB.)	T _{u1} (VERTICAL)	T _{u2} (BRACING)	SUPPORT TYPE
1028-XX	18.0	14.00	15.84	9.10	33	9	N/A	N/A	SUSPENDED
1040-XX	4.0	18.0	2.81	3.04	8	2	N/A	N/A	SUSPENDED
1044-XX	10.0	11.50	11.0	3.05	18	5	N/A	N/A	SUSPENDED
1046-XX	13.0	13.19	13.41	3.05	24	7	N/A	N/A	SUSPENDED
1047-XX	16.0	19.12	19.34	3.05	29	8	N/A	N/A	SUSPENDED
105X-XX	20.5	13.25	12.75	4.56	30	8	N/A	N/A	SUSPENDED
1060-00 (T)	10.5	9.16	15.90	1.60	19	6	N/A	N/A	SUSPENDED
1064-00 (T)	11.0	11.16	15.92	1.68	20	6	N/A	N/A	SUSPENDED
1066-XX	11.0	9.0	17.15	1.86	20	6	N/A	N/A	SUSPENDED
1068-00	11.0	9.5	17.15	1.86	20	6	N/A	N/A	SUSPENDED
1070-XX	10.0	21.0	21.0	3.25	18	5	N/A	N/A	SUSPENDED
1072-XX	13.0	22.9	22.9	4.50	24	7	N/A	N/A	SUSPENDED
1074-XX	15.5	23.54	23.04	6.25	28	8	N/A	N/A	SUSPENDED
1076-XX	12.0	12.75	12.75	3.10	22	6	N/A	N/A	SUSPENDED
1077-XX	12.0	13.25	12.75	3.10	22	6	N/A	N/A	SUSPENDED
1440-XX	7.5	16.94	16.94	3.25	14	4	N/A	N/A	SUSPENDED
1442-XX	10.5	16.94	16.94	3.0	19	5	N/A	N/A	SUSPENDED
1443-XX	9.0	14.3	14.3	3.0	16	5	N/A	N/A	SUSPENDED
1444-XX	12.0	14.3	14.3	3.5	22	6	N/A	N/A	SUSPENDED

NOTES: 1. CG LOCATION IS CONSERVATIVELY USED AT DISTANCE "Z"

2. E_h DOES NOT INCLUDE Ω_0 FACTOR





OBERON, INC

DES. J. ROBERSON

SHEET

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JOB NO. 11-2423

DATE 3/26/25

OF 11 SHEETS

WIRELESS ENCLOSURES

SEISMIC SUPPORTS & ATTACHMENTS

CEILING MOUNTED

SUMMARY TABLE

SERIES	WEIGHT (lb.)	"X" (in.)	"Y" (in.)	"Z" (in.)	E _h (LB.)	E _v (LB.)	T _{u1} (VERTICAL)	T _{u2} (BRACING)	SUPPORT TYPE
1042-XX	6.0	11.0	11.0	3.0	11	3	6	3	RECESS MOUNT CLG
1043-XX	8.0	11.0	11.0	3.0	15	4	7	4	RECESS MOUNT CLG
1051-XX	15.0	16.0	16.0	4.56	27	8	11	7	RECESS MOUNT CLG
1053-XX	13.5	13.62	13.62	2.36	25	7	9	7	RECESS MOUNT CLG
1073-XX	11.5	21.78	21.78	3.5	21	6	8	6	RECESS MOUNT CLG
1075-XX	9.0	14.3	14.3	3.0	16	5	7	4	RECESS MOUNT CLG
3057-00	13.5	16.0	16.0	2.36	25	7	9	7	RECESS MOUNT CLG
3057-SMTBOX	7.0	13.0	16.0	2.50	13	4	7	4	RECESS MOUNT CLG
3057-SMTBOX	7.0	13.0	16.0	2.50	13	4	7	4	SURFACE MOUNT CLG

NOTES: 1. CG LOCATION IS CONSERVATIVELY USED AT DISTANCE "Z"

2. E_h DOES NOT INCLUDE Ω_0 FACTOR

BY: William Staehlin

DATE: 04/04/2025



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WIRELESS ENCLOSURES

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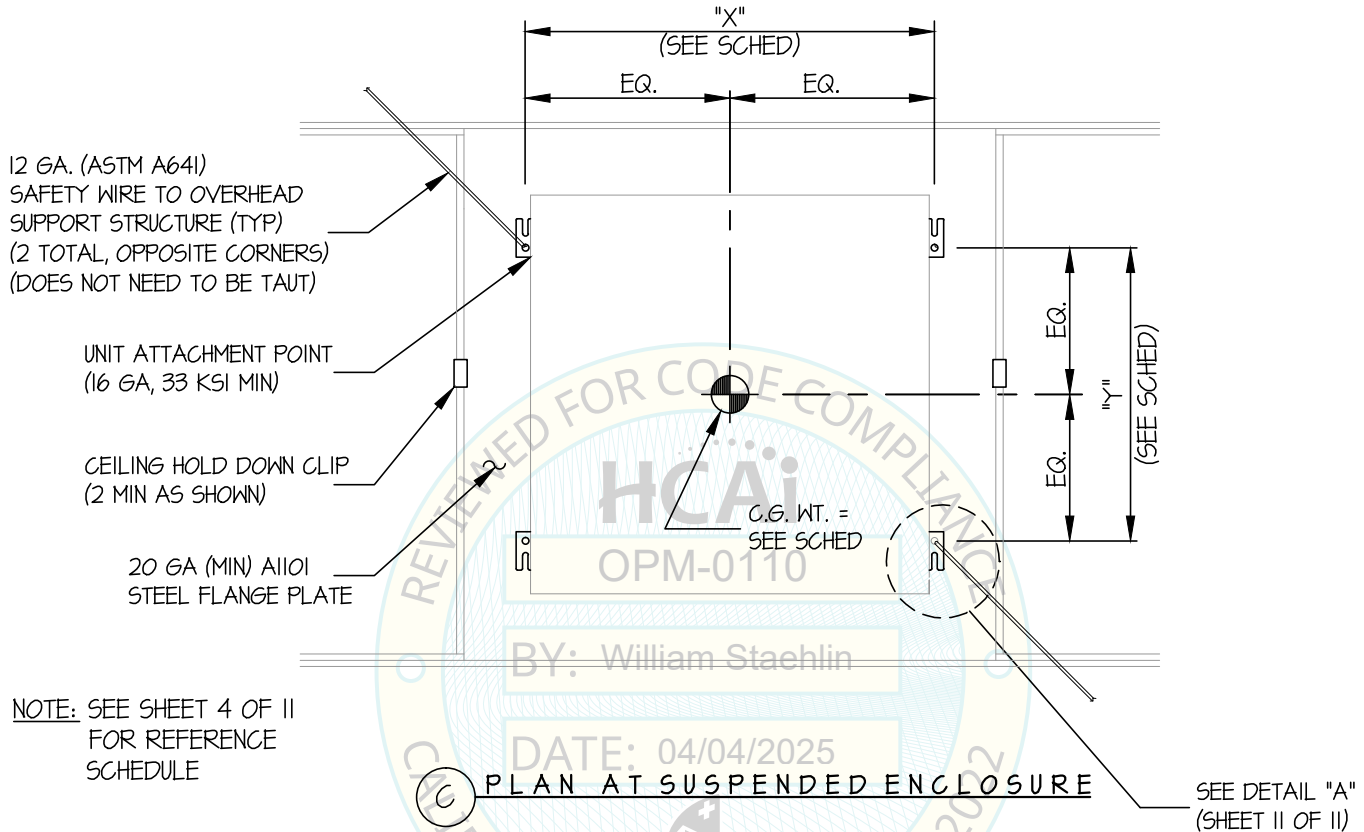
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SEISMIC SUPPORTS & ATTACHMENTS

CEILING MOUNTED



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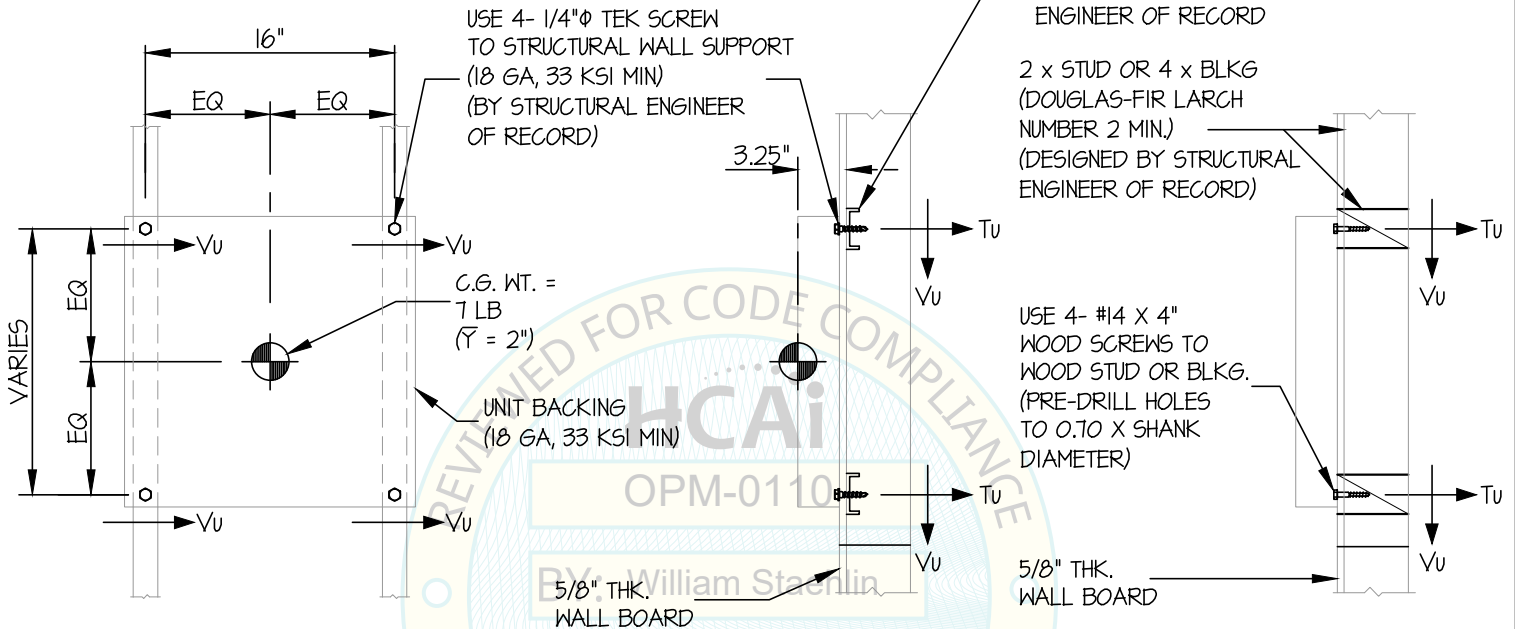
SHEET

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OF **11** SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

WALL MOUNTED



NOTE: USE BLOCKING WHERE REQUIRED (SEE WALL SECTIONS)

FRONT ELEVATION
(SURFACE WALL MOUNT)

STEEL STUD
WALL SECTION

WOOD STUD
WALL SECTION



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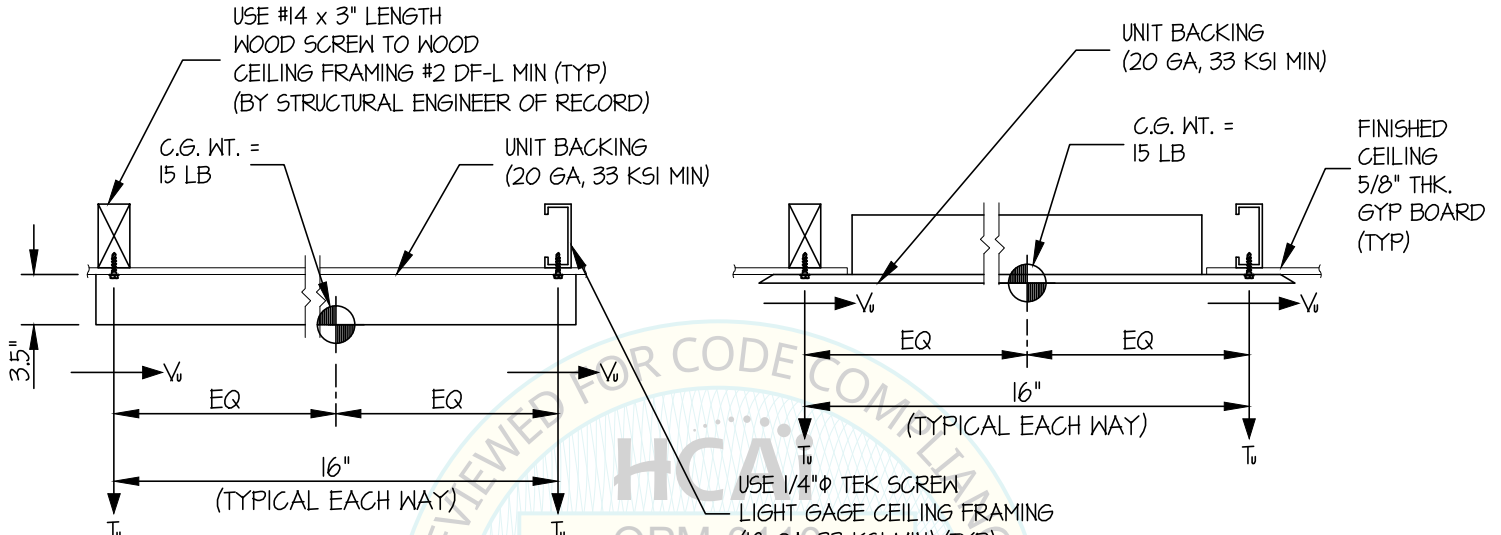
SHEET

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OF **11** SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

CEILING MOUNTED



CEILING SECTION

(SURFACE MOUNT)

3057-SMTBOX w/ 3057-00

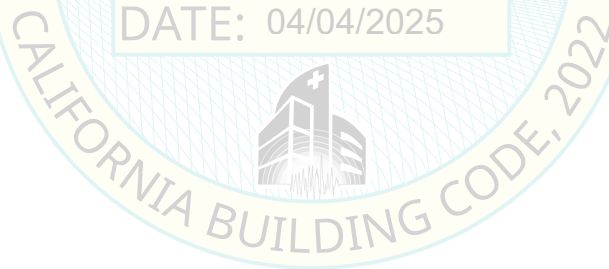
CEILING SECTION

(RECESS MOUNT)

104X-XX, 105X-XX, 107X-XX & 3057-XX

BY: William Staehlin

DATE: 04/04/2025



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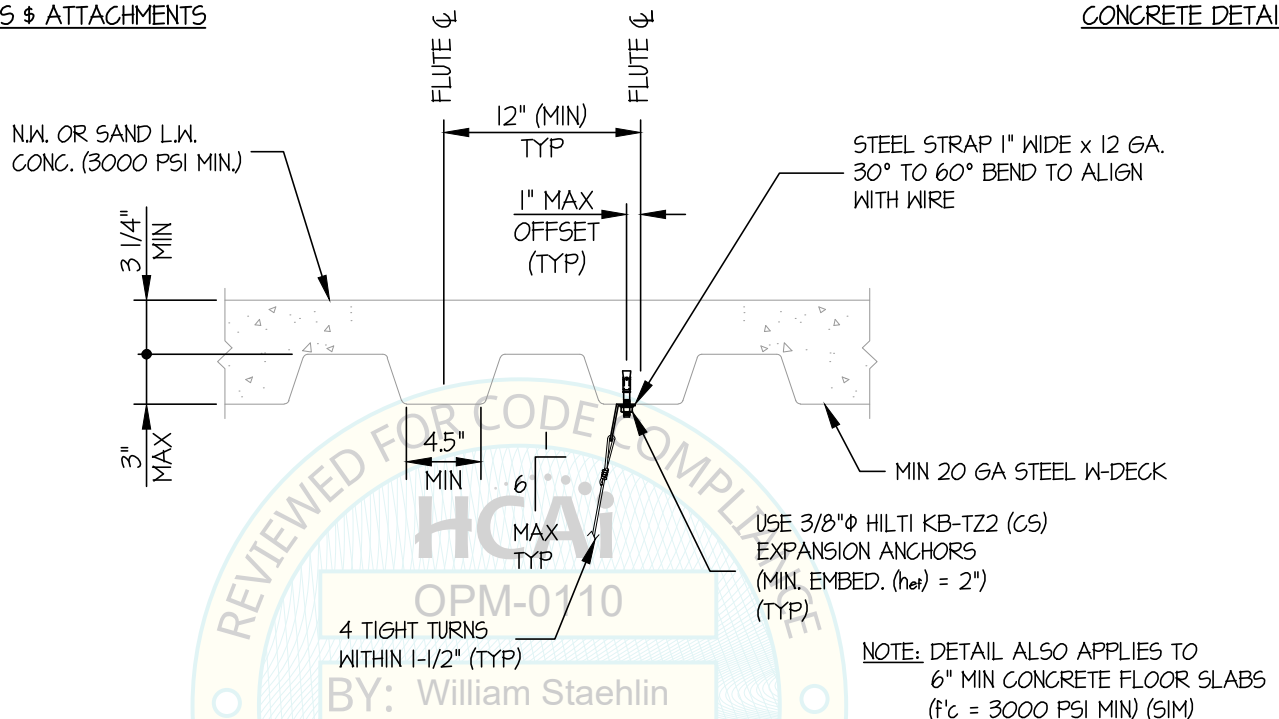
SHEET

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OF **11** SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE DETAIL



NOTES:

SAFETY WIRE DETAIL AT FLOOR ABOVE

- "HANGER WIRE" SHALL CONFORM WITH GALVANIZED SOFT ANNEALED MILD STEEL WIRE AS DEFINED IN ASTM A641 (CLASS 1 COATING) WITH 70 KSI MINIMUM TENSILE STRENGTH.
- 4 TWISTS OF WIRE WITHIN 15" DEVELOPS THE ALLOWABLE LOAD FOR THE WIRE.

ATTACHMENT OF HANGER AND BRACING WIRES:

- FASTEN #12 HANGER WIRES WITH NOT LESS THAN THREE (3) TIGHT TURN 1 INCH. HANGER WIRE LOOPS SHALL BE TIGHTLY WRAPPED AND SHARPLY BENT TO PREVENT ANY VERTICAL MOVEMENT OR ROTATION OF THE MEMBER WITHIN THE LOOPS.
- FASTEN #12 BRACING WIRES WITH FOUR (4) TIGHT TURNS. MAKE ALL TIGHT TURNS WITHIN A DISTANCE OF 1 1/2 INCHES.
- HANGER OR BRACING WIRE ANCHORED TO THE STRUCTURE SHOULD BE INSTALLED IN SUCH A MANNER THAT THE DIRECTION OF THE ANCHOR ALIGNS AS CLOSELY AS POSSIBLE WITH THE DIRECTION OF THE WIRE.
- SEPARATE ALL CEILING HANGER AND BRACING WIRES AT LEAST SIX (6) INCHES FROM ALL UN-BRACED DUCTS, PIPES, CONDUIT, ETC.
- HANGER WIRES SHALL NOT BE ATTACHED TO OR BEND AROUND INTERFERING MATERIAL OR EQUIPMENT. PROVIDE TRAPEZE OR OTHER SUPPLEMENTARY SUPPORT MEMBERS AT OBSTRUCTIONS TO TYPICAL HANGER SPACING. PROVIDE ADDITIONAL HANGERS, STRUTS OR BRACES AS REQUIRED AT ALL CEILING BREAKS, SOFFITS OR DISCONTINUOUS AREAS.



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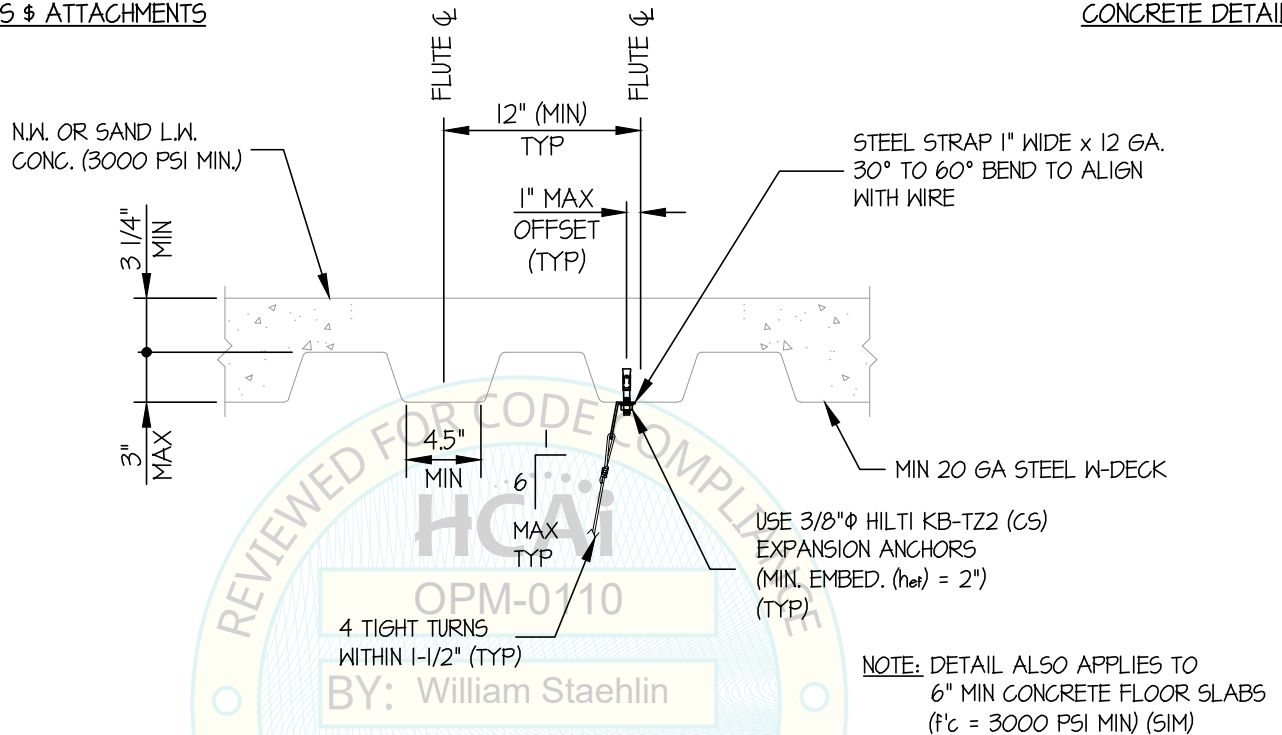
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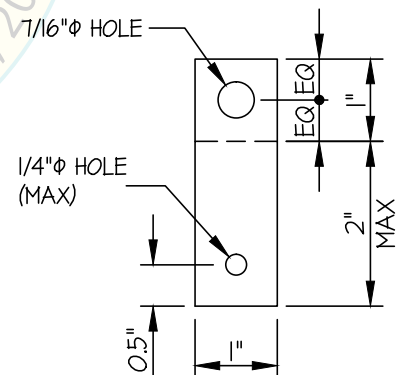
SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE DETAIL



SAFETY WIRE DETAIL AT FLOOR ABOVE

DATE: 04/04/2025



12 GA (A1008) STEEL STRAP



OBERON, INC

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SHEET

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OF 11 SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

EQUIPMENT DETAIL

12GA SAFETY WIRE
(DOES NOT NEED TO BE TAUT)MOUNTING TAB
(16 GA, 5052 ALUM, 28 KSI MIN
OR 16 GA, A653 STL 37 KSI MIN)

ALUMINUM TAB:

102x SERIES
106x SERIES
1071 SERIES

STEEL TAB:

104X SERIES
105X SERIES
144X SERIESDETAIL "B"
(TAB CONNECTION)

BY: William Staehlin

DATE: 04/04/2025

NOTE: PROVIDE 4 TIGHT TURNS
IN 1.5" AT WIRE CONNECTION (TYP.)MOUNTING CLIP
(10 GA, A1011 STEEL, F_y=28 KSI MIN)
(2 - 1/4"Φ TOG-L-LOC, 0.40" MIN BUTTON DIA)
(4 TOTAL)12GA SAFETY WIRE
(DOES NOT NEED TO BE TAUT)RELATED MODELS
107x SERIESDETAIL "A"
(HORIZONTAL CLIP SUPPORT)