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

OFFICE USE ONLY
APPLICATION #: OPM-0115-13

OSHPD Preapproval of Manufacturer's Certification (OPM)

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

Manufacturer Information

Manufacturer: Panduit Corporation

Manufacturer's Technical Representative: Nathan Gleghorn

Mailing Address: 412 Rockwell Court, Burr Ridge, Illinois 60527

Telephone: 708-532-1800 x84249 Email: NAGL@panduit.com

Product Information

Product Name: PanZone Wireless Access Point Enclosures

Product Type: Equipment enclosure.

Product Model Number: PZWC35I, PZWC35IE, PZWC35, PZWC35E, PZWA125, PZWA135, PZWWB

General Description: Wall and ceiling mounted enclosures for wireless access point equipment.

Applicant Information

Applicant Company Name: Panduit Corporation

Contact Person: Robert Fritz

Mailing Address: 412 Rockwell Court, Burr Ridge, Illinois 60527

Telephone: 708-532-1800 x84346 Email: RLFR@panduit.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: Robert L Fritz Date: 06/04/2014

Title: Senior Manager Engineering Company Name: Panduit Corporation

OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION

Registered Design Professional Preparing Engineering Recommendations

Company Name: Degenkolb Engineers

Name: Adrian M. Nacamuli California License Number: S 4857

Mailing Address: 1300 Clay Street, 9th Floor, Oakland, California 94612

Telephone: 510-250-1216 Email: nacamuli@degenkolb.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 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: November 07, 2014

Print Name: Jeffrey Y. Kikumoto

Title: Senior Structural Engineer

Condition of Approval (if applicable):

OSHPD ANCHORAGE PRE-APPROVAL OF MANUFACTURER'S CERTIFICATION (OPM)

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San Francisco, CA 94104
415.392.6952 *Phone*
415.981.3157 *Fax*
www.degenkolb.com

REGISTERED PROFESSIONAL ENGINEER
ADRIAN M. NACAMULI
No. 4857
Exp. 9-30-15
STRUCTURAL
STATE OF CALIFORNIA

PANDUIT PANZONE WIRELESS ACCESS POINT ENCLOSURE

MODELS PZWC35I, PZWC35IE, PZWC35, PZWC35E, PZWA125, PZWA135, PZWWB

GENERAL NOTES

1. THIS OSHPD PREAPPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE CBC 2013. THE DEMAND (DESIGN FORCES) FOR USE WITH THIS OPM SHALL BE BASED ON THE CBC 2013.

2. PRE-APPROVED DESIGN AND MATERIALS CONFORM WITH THE 2013 EDITION OF THE CALIFORNIA BUILDING CODE. DETAILS WITHIN THIS APPROVAL MAY BE USED ANYWHERE IN THE STATE OF CALIFORNIA WHERE $S_{DS} \leq 2.5$.

3. SEISMIC FORCES ON EQUIPMENT DETERMINED PER THE 2013 CBC & ASCE 7-10. ALL LOADS BELOW ARE FACTORED LOADS THAT SHALL BE USED FOR STRENGTH DESIGN. ADJUST FOR ALLOWABLE STRESS DESIGN (ASD) USING LOAD COMBINATIONS OF ASCE 7-10 12.4.2.3 AS REQUIRED.

4. EQUIPMENT MAY BE MOUNTED AT ANY FLOOR, ANY METAL STUD WALL, CONCRETE WALL OR ELEVATED SLAB THAT MEET THE REQUIREMENTS OF THIS DOCUMENT.

ELEVATED SLAB MINIMUM REQUIREMENTS	
CONCRETE ON METAL DECK f'c ≥ 3000 PSI NORMAL OR SAND LIGHT-WEIGHT CONCRETE SEE PAGE 4 FOR MINIMUM STEEL DECK REQUIREMENTS	CONCRETE SLAB THICKNESS ≥ 4" f'c ≥ 3000 PSI NORMAL OR SAND LIGHT-WEIGHT CONCRETE PROVIDE 12" MIN DISTANCE TO ANY OPENINGS, THE EDGE OF SLAB OR OTHER ATTACHMENTS TO SLAB

5. THE FACTORS USED TO CALCULATE THE SEISMIC DEMANDS ARE THE FOLLOWING:

a. S_{DS}= 2.5, ap = 2.5, Rp = 6.0, Ip = 1.5, Ωo = 2.5, z/h ≤ 1

i. Fp = 1.87 Wp
ii. Ev = 0.50 Wp
iii. Ωo*Fp, = 4.69 Wp (FOR ANCHORAGE TO CONCRETE ONLY)

6. THE STRUCTURAL ENGINEER-OF-RECORD (S.E.O.R.) OR PRINCIPAL-IN-CHARGE OF A PROJECT SPECIFIC SITE IS RESPONSIBLE FOR THE FOLLOWING:

a. VERIFY THAT THE ANCHORS ARE A MINIMUM 12" FROM ANY OPENINGS OR EDGES.

b. VERIFY THAT THE ANCHORS ARE AN ADEQUATE DISTANCE FROM ANY NEW OR EXISTING ANCHORS.

c. DESIGN ANY SUPPLEMENTARY MEMBERS TO WHICH THE UNIT IS ATTACHED, TO SUPPORT WEIGHTS AND FORCES SHOWN. VERIFY THE ADEQUACY OF ANY EXISTING MEMBERS AND THEIR ATTACHMENTS FOR THE FORCES EXERTED ON THEM BY THE UNIT IN ADDITION TO ALL OTHER LOADS AND FORCES.

d. VERIFY THE ADEQUACY OF ANY EXISTING MEMBERS AND THEIR ATTACHMENTS TO WHICH THE UNIT IS ANCHORED TO.

e. VERIFY THAT THE INSTALLATION IS IN CONFORMANCE WITH THE 2013 CBC AND WITH THE DETAILS SHOWN IN THIS PRE-APPROVAL. VERIFY THAT THE EQUIPMENT'S ACTUAL WEIGHT, CG LOCATION, ANCHOR LOCATIONS, DETAILS AND THE MATERIAL AND GAGE OF THE UNIT WHERE ATTACHMENTS ARE MADE AGREE WITH THE INFORMATION SHOWN IN THIS PRE-APPROVAL.

7. THE ANCHORAGE HAS BEEN EVALUATED FOR THE WORST CASE LOADING PER THE 2013 CBC. STRUCTURAL ENGINEER-OF-RECORD (S.E.O.R.) OR PRINCIPAL-IN-CHARGE OF A SITE SPECIFIC PROJECT SHALL EVALUATE THE ATTACHMENT FOR CONDITIONS THAT VARY FROM THIS PRE-APPROVAL.

8. THIS OPM COVERS ONLY THE SUPPORTS AND ATTACHMENTS OF THE UNIT TO THE BUILDING'S STRUCTURE.

9. EXPANSION OR WEDGE ANCHORS INTO CONCRETE: HILTI KB-TZ (ICC ESR-1917). INSTALL ANCHORS IN ACCORDANCE WITH THE ICC REPORT AND MANUFACTURER'S RECOMMENDATIONS. TEST AT LEAST 50% OF ANCHORS NO SOONER THAN 24 HOURS AFTER INSTALLATIONS. TESTS SHALL BE CONDUCTED IN THE PRESENCE OF THE SPECIAL INSPECTOR AND A REPORT OF THE TEST RESULTS SHALL BE SUBMITTED TO OSHPD.
TEST PER ONE OF THE FOLLOWING METHODS:

a. DIRECT PULL TENSION TEST. ANCHOR IS ACCEPTABLE IF NO MOVEMENT IS OBSERVED FOR A MINIMUM OF 15 SECONDS AT THE TEST LOAD GIVEN IN TABLE ON THE NEXT PAGE. MOVEMENT MAY BE DETERMINED WHEN THE WASHER UNDER THE NUT BECOMES LOOSE.

b. TORQUE WRENCH TEST: TEST ANCHORS TO THE REQUIRED TORQUE LOAD GIVEN IN TABLE BELOW WITHIN THE LIMIT OF ONE-HALF TURN OF THE NUT.

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REGISTERED PROFESSIONAL ENGINEER
ADRIAN M. NACAMULI
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PANDUIT PANZONE WIRELESS ACCESS POINT ENCLOSURE

MODELS PZWC35I, PZWC35IE, PZWC35, PZWC35E, PZWA125, PZWA135, PZWWB

GENERAL NOTES

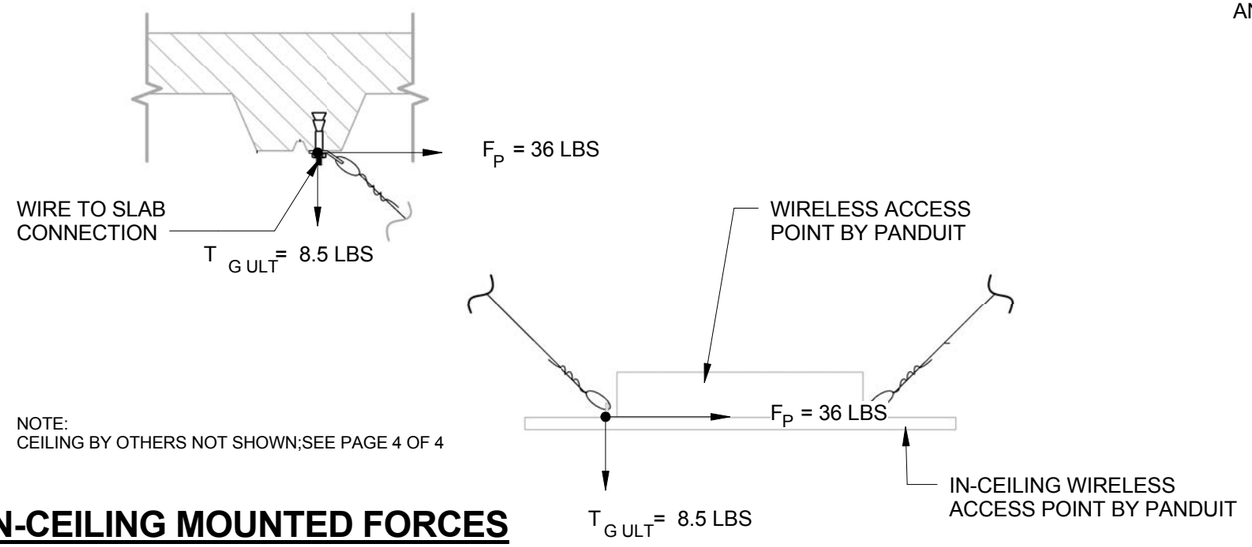
ANCHOR TEST LOAD VALUES (IN NORMAL OR SAND LIGHT WEIGHT CONCRETE)			
ANCHOR DIAMETER (IN)	TENSION LOAD (LBS)	TORQUE LOAD (FT-LB)	MINIMUM EDGE DISTANCE
3/8"	600	25	12"

10. IF ANY ANCHOR FAILS DURING TESTING, UNIT MUST BE MOVED SO THAT NO ANCHOR IS WITHIN 12" OF AN ABANDONED ANCHOR.

11. CONTRACTOR MUST VERIFY ANCHOR SPACING TO ADJACENT EQUIPMENT ANCHORS IS TO BE GREATER THAN 12".

12. ALL MISCELLANEOUS STEEL SHALL CONFORM TO THE FOLLOWING, UNLESS OTHERWISE NOTED:

LIGHT GAGE STEEL — ASTM 568 FY ≥ 33 KSI
WIRE — SOFT ANNEALED MILD STEEL WIRE ASTM A641 (CLASS 1 COATING)



NOTE:
CEILING BY OTHERS NOT SHOWN;SEE PAGE 4 OF 4

IN-CEILING MOUNTED FORCES

13. SHEET METAL SCREWS SHALL HAVE A HEX HEAD AND SHALL COMPLY WITH ICC-ES ESR-1976

14. THE FOLLOWING TABLE DIAGRAMS SHOW THE MOST CRITICAL FORCES USED FOR THE DESIGN OF SUPPORTS AND ATTACHMENTS.

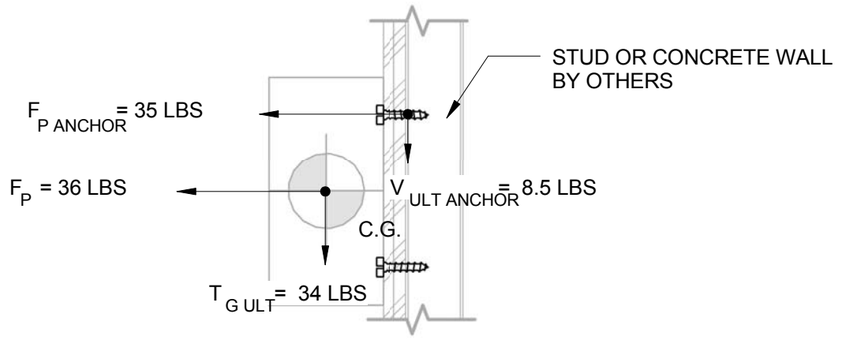
15. THESE FORCES ARE CALCULATED FOR THE MOST CRITICAL OF ALL OF THE COMPONENTS. NONE OF THE FORCES SHOWN BELOW HAVE BEEN AMPLIFIED BY Ωo.

16. ANCHORS INTO CONCRETE HAVE BEEN DESIGNED TO SUSTAIN Ωo AMPLIFIED LOAD COMBINATIONS AS REQUIRED BY ASCE 7-10.

17.THE MAXIMUM WEIGHT OF THE ASSEMBLY SHALL BE EQUAL OR LESS THAN 20 LBS

18. SUPPORTS AND ATTACHMENTS OF THESE COMPONENTS ARE EXEMPT FROM THE REQUIREMENTS OF ASCE 7-10, CHAPTER 13 PER CBC 1616A.1.18

19. WHEN INSTALLING DRILLED-IN ANCHORS IN EXISTING NON-PRESTRESSED REINFORCED CONCRETE, USE CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE EXISTING REINFORCING BARS. WHEN INSTALLING THEM INTO EXISTING PRESTRESSED CONCRETE (PRE- OR POST-TENSIONED) LOCATE THE PRESTRESSED TENDONS BY USING A NON-DESTRUCTIVE METHOD PRIOR TO INSTALLATION. EXERCISE EXTREME CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE TENDONS DURING INSTALLATION. MAINTAIN A MINIMUM CLEARANCE OF ONE INCH BETWEEN THE REINFORCEMENT AND THE DRILLED-IN ANCHOR.



WALL MOUNTED FORCES

DEGENKOLB ENGINEERS
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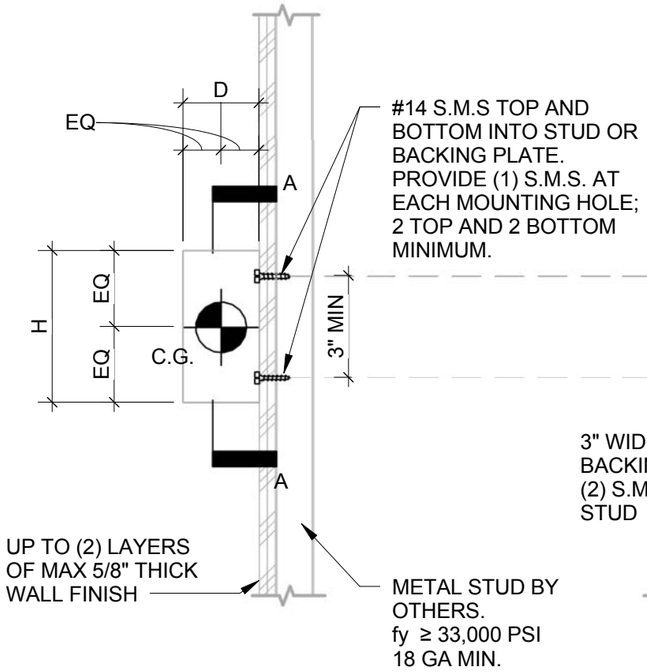
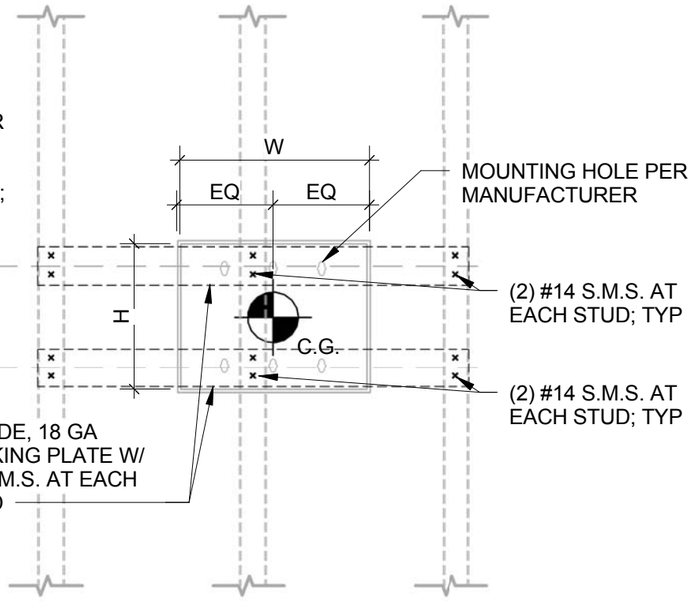
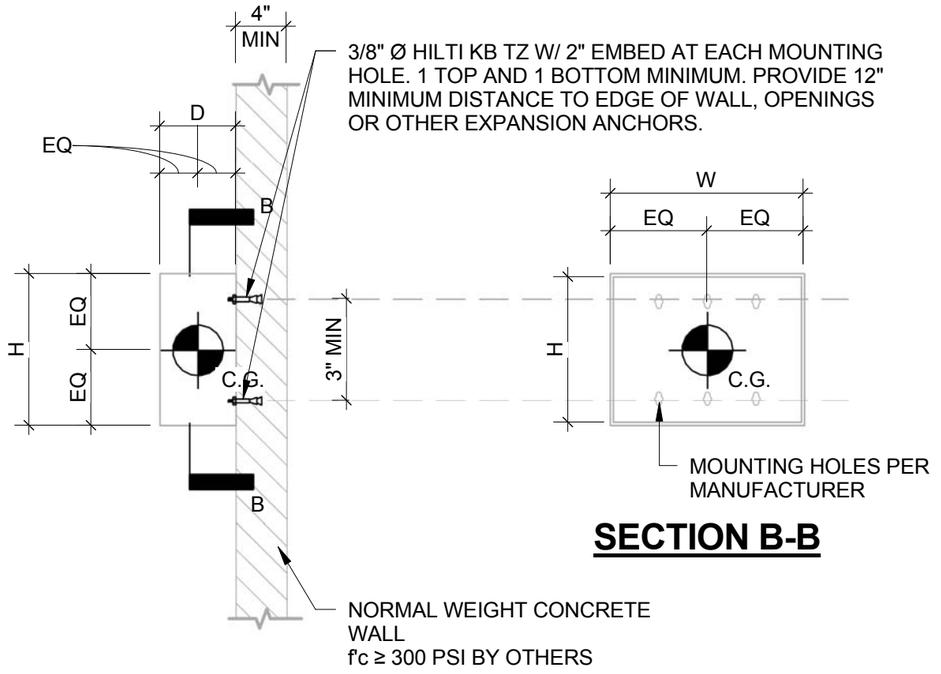


SIDE VIEW WHEN ATTACHED TO STUD WALL



SECTION A-A



SECTION B-B

SIDE VIEW WHEN ATTACHED TO CONCRETE WALL

NOTES:

1. THE MAXIMUM WEIGHT OF THE ASSEMBLY (ENCLOSURE SELF-WEIGHT AND CONTENTS) SHALL BE LESS THAN OR EQUAL TO 20 LBS.
2. SUPPORTS AND ATTACHMENTS OF THESE COMPONENTS ARE EXEMPT FROM THE REQUIREMENTS OF ASCE 7-10, CHAPTER 13 PER CBC 1616A.1.18.

PART NUMBER	MOUNT TYPE	DEPTH "D" (IN)	HEIGHT "H" (IN)	WIDTH "W" (IN)	SELF-WEIGHT (LBS)
PZWC35	WALL AND CEILING	3.0	13.7	12.0	4.8
PZWC35E	WALL AND CEILING	3.0	13.0	12.0	4.8
PZWA125	WALL AND CEILING	4.5	12.0	12.0	3.5
PZWA135	WALL AND CEILING	4.5	12.0	12.0	3.5
PZWWB	WALL	4.0	16.0	15.0	7.0
PZWC35I	CEILING	3.0	23.8	23.8	12.2
PZWC35IE	CEILING	3.0	23.8	23.8	12.2

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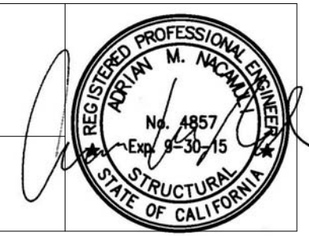

PANDUIT PANZONE WIRELESS ACCESS POINT ENCLOSURE

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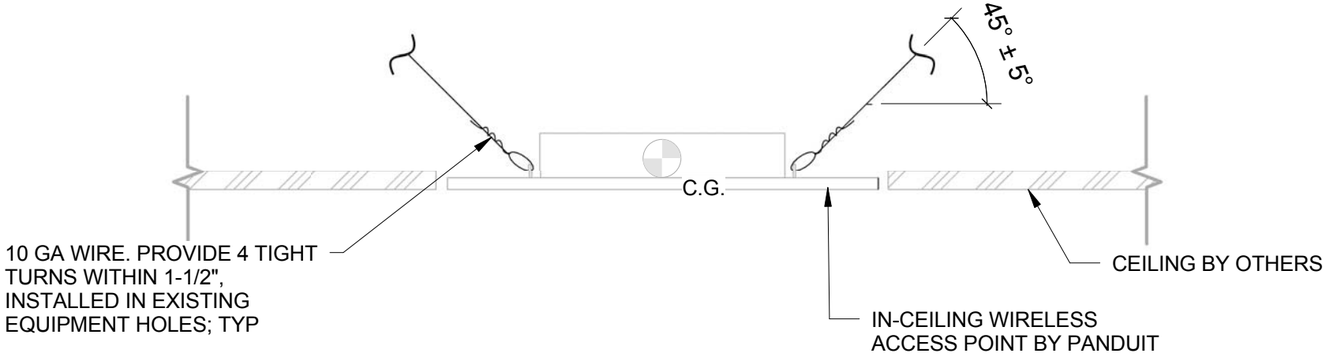
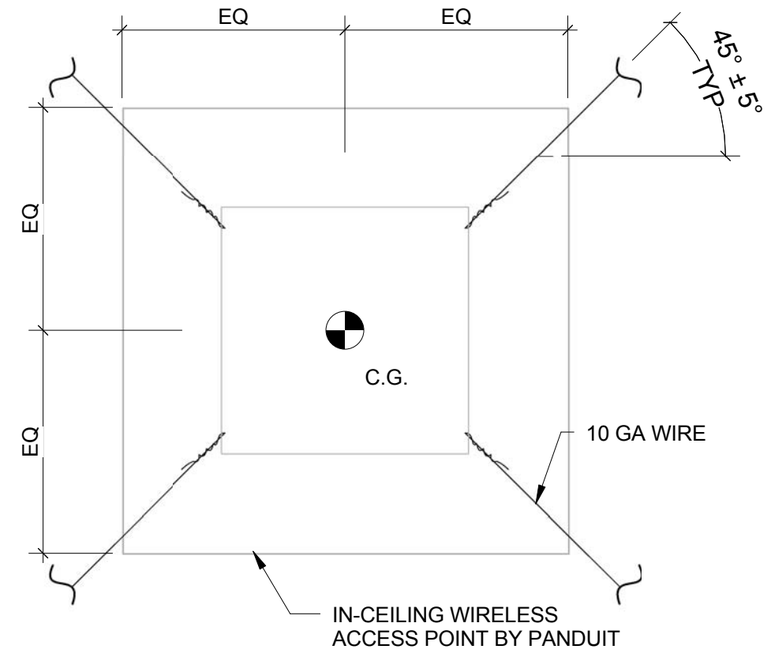
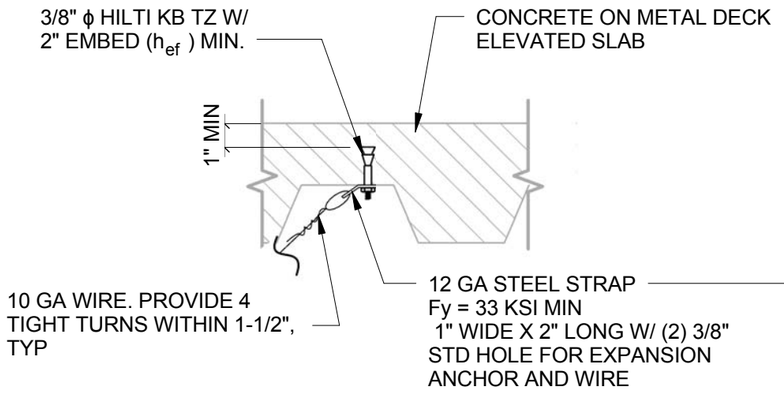


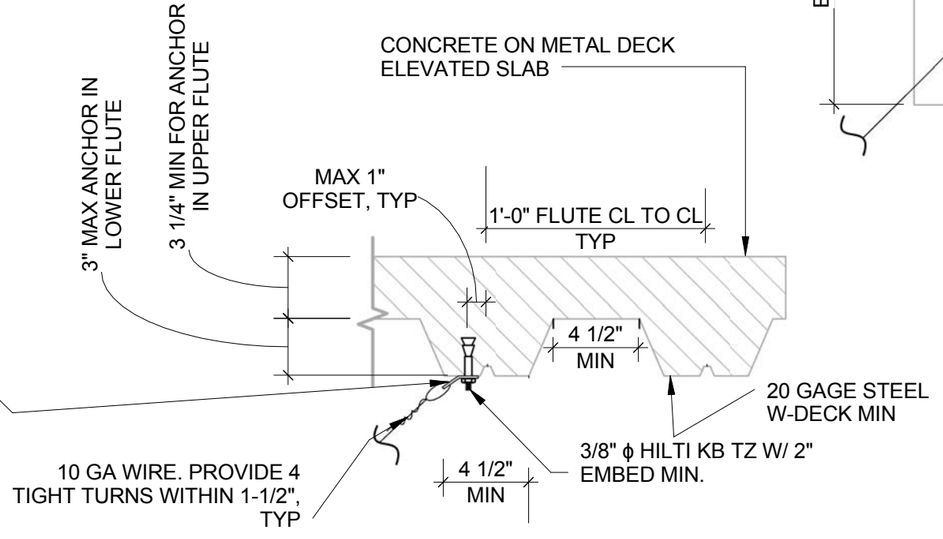
SIDE VIEW



PLAN VIEW



WIRE CONNECTION TO ELEVATED SLAB IN UPPER FLUTE



WIRE CONNECTION TO ELEVATED SLAB IN LOWER FLUTE

NOTES:
1. FOR MINIMUM CONCRETE ON METAL DECK PROPERTIES SEE WIRE CONNECTION TO ELEVATED SLAB IN LOWER FLUTE DETAIL AND NOTE 4 ON PAGE 1
2. PROVIDE EXPANSION ANCHORS WITH 12" MINIMUM DISTANCE TO EDGE OF SLAB, OPENINGS OR OTHER ATTACHMENTS