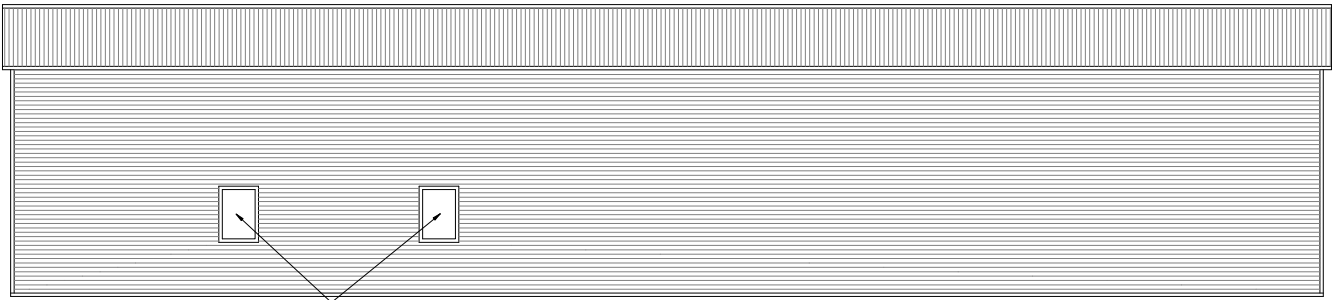
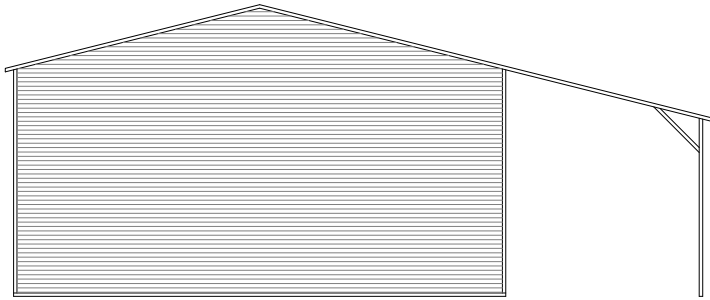


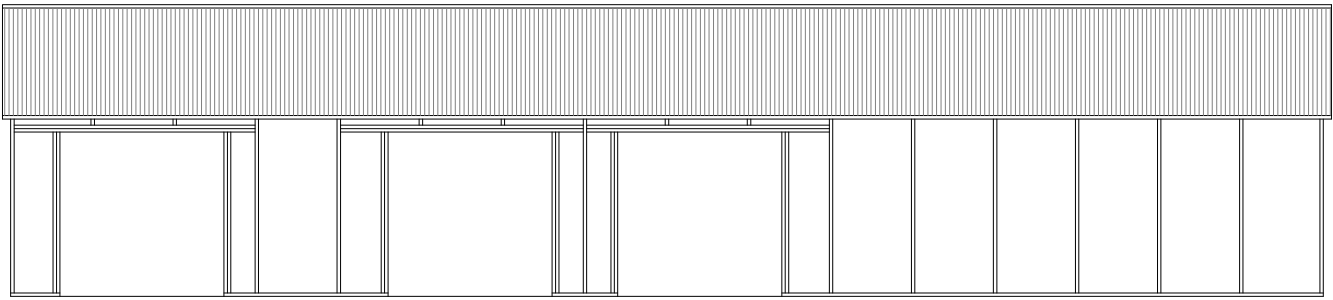
WINDOW FRONT ELEVATION



WINDOW RIGHT SIDE ELEVATION




REAR ELEVATION

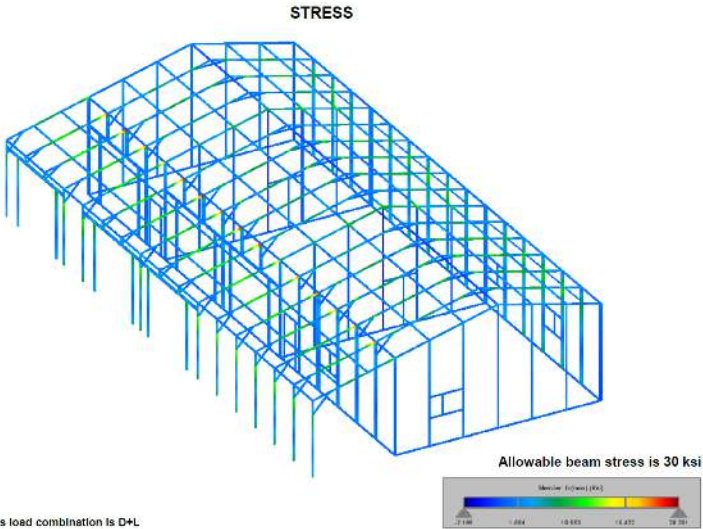


LEFT SIDE ELEVATION

PROPOSED METAL BUILDING FOUNDATION & SHELL
STRUCTURAL DESIGN ONLY. ALL OTHER REQUIRED
PERMITS TO BUILD OUT TO A HABITABLE LIVING SPACE
ARE TO BE BY OTHERS/ PER SEPERATE CERTIFICATE.
INCLUDING BUT NOT LIMITED TO, ELECTRICAL,
PLUMBING, ENERGY CALCS., ETC. FOR MORE
INFORMATION VISIT:
<https://flengineeringllc.com/order/> OR SCAN QR
CODE.



3-D FINITE ELEMENT ANALYSIS PERFORMED
STRUCTURE COMPLIES w/ FBC 2020 7th EDITION

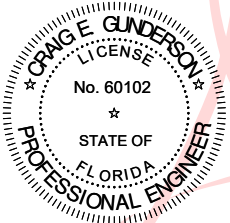


GENERAL NOTES

- APPLICABLE CODES, REGULATIONS, & STANDARDS
 - THE 2020 FLORIDA BUILDING CODE, 7TH EDITION
 - ASCE 7-16 & SEI 7
 - ACI318 CONCRETE REFERENCE MANUAL
- THESE PLANS BELONG EXCLUSIVELY TO THE STRUCTURE. INCLUDING MAIN WIND FORCE RESISTING SYSTEM (MWFRS), COMPONENTS AND CLADDING (C&C), AND BASE RAIL ANCHORAGE. OTHER DESIGN ISSUES, INCLUDING BUT NOT LIMITED TO PROPERTY SET-BACKS, ELECTRICAL, PLUMBING, INGRESS/EGRESS, FINISH FLOOR SLOPES AND ELEVATIONS, OR OTHER LOCAL ZONING REQUIREMENTS ARE THE LIABILITY OF OTHERS.
- THESE STRUCTURES ARE ENGINEERED AS (RISK CATEGORY 2) CAPABLE OF SUPPORTING DEAD LOAD OF THE STRUCTURE AND LIVE AND WIND LOADS. UPGRADES NOT SPECIFICALLY ADDRESSED HEREIN, SUCH AS WINDOWS, DOORS, OR ANOTHER COMPONENT NOT LISTED IN THE FLORIDA BUILDING CODE APPROVED PRODUCT LIST, AND NOT PROVIDED AND INSTALLED BY TUBULAR BUILDING SYSTEMS, WHICH CAUSE ADDITIONAL LOADS ON THE STRUCTURE SHALL BE AT THE OWNER'S RISK. FLORIDA ENGINEERING LLC, SHALL NOT BE RESPONSIBLE FOR FAILURE OR STRUCTURAL DAMAGE DUE TO THE EXTRA LOAD.
- LOW ULTIMATE WIND SPEED 105 TO 140 MPH (NOMINAL WIND SPEED 81 TO 108 MPH): MAXIMUM RAFTER/POST AND END POST SPACING = 5.0 FEET.
- HIGH ULTIMATE WIND SPEED 141 TO 170 MPH (NOMINAL WIND SPEED 109 TO 132 MPH): MAXIMUM RAFTER/POST AND END POST SPACING = 4.0 FEET.
- ALL STEEL TUBING SHALL BE 50 KSI GALVANIZED STEEL. ALL FASTENERS SHALL BE ZINC COATED HARDWARE.
- SPECIFICATIONS APPLICABLE TO 29 GAUGE METAL PANELS FASTENED DIRECTLY TO 2 1/2" x 2 1/2" - 14 GAUGE TUBE STEEL (TS) FRAMING MEMBERS FOR VERTICAL PANELS, 29 GAUGE METAL PANELS SHALL BE FASTENED TO 18 GAUGE HAT CHANNELS (UNLESS OTHERWISE NOTED).
- FASTENERS CONSIST OF #12-14 x 3/4" SELF DRILLING FASTENER (SDF), USE CONTROL SEAL WASHER WITH EXTERIOR FASTENERS SPECIFICATIONS APPLICABLE ONLY FOR MEAN ROOF HEIGHT OF 20 FEET OR LESS, AND ROOF SLOPES OF 14° (3:12 PITCH) OR LESS SPACING REQUIREMENTS FOR OTHER ROOF HEIGHTS AND/OR SLOPES MAY VARY.
- AVERAGE FASTENER SPACING ON-CENTERS ALONG RAFTERS OR PURLINS, AND POSTS, INTERIOR = 9" OR END = 6", (MAX.).
- WIND FORCES GOVERN OVER SEISMIC FORCES. SEISMIC PARAMETERS ANALYZED ARE:
SOIL SITE CLASS = D
RISK CATEGORY I/II/III
R = 3.25 Ie = 1.0
Sds = 0.087 g V = CsW
Sdi = 0.084 g
- GROUND ANCHORS SHALL BE INSTALLED THROUGH BASE RAIL WITHIN 6" OF EACH RAFTER COLUMN ALONG SIDES.
- GROUND ANCHOR (SOIL NAILS) CONSIST OF #5 REBAR W/ WELDED NUT X 30" LONG IN SUITABLE SOIL CONDITIONS MAY BE USED FOR LOW (≤ 108 MPH NOMINAL) WIND SPEEDS ONLY. OPTIONAL ANCHORAGE MAY BE USED IN SUITABLE SOILS AND MUST BE USE IN UNSUITABLE SOILS AS NOTED.
- MIN. LAP REQUIREMENT FOR REBAR IN FOOTER IS 25".
- SOIL TO BE COMPACTED TO 95% OF ITS MAXIMUM DRY DENSITY, AT OPTIMUM MOISTURE CONTENT, IN ACCORDANCE WITH ASTM D1557-93
- PRIOR TO PLACING CONCRETE, TREAT THE ENTIRE SUBSURFACE AREA FOR TERMITES IN COMPLIANCE WITH THE FBC. FOR RISK CATEGORY II, III, & IV STRUCTURES ONLY.
- ALL OPEN AREAS OF CONCRETE OUTSIDE OF THE PROPOSED STRUCTURE SHALL BE DESIGNED TO SLOPE AWAY FROM THE STRUCTURE.
- A LANDING OF MIN. 36" WIDTH IN THE DIRECTION OF TRAVEL SHALL BE PROVIDED AT THE EXTERIOR DOORS. SLOPE OF LANDING NOT TO EXCEED 1/4"-1". LANDING LEVEL NOT TO BE LOWER THAN 1-1/2" (FOR EGRESS DOORS) & 7-3/4" (FOR OTHER EXTERIOR DOORS) BELOW THE TOP OF THRESHOLD.



This item has been electronically signed and sealed by Craig E. Gunderson, P.E. on date below using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.



Digitally signed
by Craig E
Gunderson
Date:
2022.12.01
16:03:55 -05'00'

RISK CATEGORY:	II
MAXIMUM DISPLACEMENT :	L/240
ULTIMATE WIND SPEED (MPH):	120
NOMINAL DESIGN WIND SPEED (MPH):	93
WIND EXPOSURE CATEGORY:	C
BUILDING ENCLOSURE TYPE:	ENCLOSED
ROOF ANGLE (DEGREES):	14.0
MEAN ROOF HEIGHT (FEET):	15.875
DESIGN PRESSURES (PSF):	
MAIN BUILDING:	
ROOF:	
ZONE 1:	+11.0 / -17.4
ZONE 2:	+11.0 / -30.4
ZONE 3:	+11.0 / -44.9
DESIGN ROOF PRESSURES:	+11.0 / -23.5
WALLS:	
ZONE 4:	+19.1 / -20.7
ZONE 5:	+19.1 / -25.5
DESIGN WALL PRESSURES:	+19.1 / -21.7
SWINGING DOOR:	+18.3 / -19.8
WINDOW:	+19.1 / -20.7
ROLL-UP DOOR:	+16.3 / -17.7
OPEN LEAN TO:	
ROOF:	
CLEAR WIND FLOW:	
ZONE 1:	+24.5 / -25.8
ZONE 2:	+36.7 / -39.4
ZONE 3:	+36.7 / -39.4
DESIGN ROOF PRESSURES:	+36.7 / -39.4
OBSTRUCTED WIND FLOW:	
ZONE 1:	+16.3 / -28.5
ZONE 2:	+24.5 / -43.5
ZONE 3:	+24.5 / -43.5
DESIGN ROOF PRESSURES:	+24.5 / -43.5

FLORIDA ENGINEERING LLC

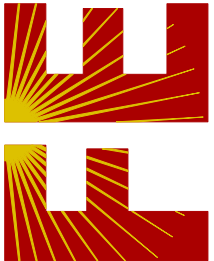
4161 TAMiami TRAIL, UNIT 101
PORT CHARLOTTE, FLORIDA 33952

(941) 391-5980

FLEng.com

Orders@FLEng.com

CA CERT. #30782



PROJECT NO. 2232709

CONTRACTOR:
TUBULAR BUILDING SYSTEMS

PROJECT ADDRESS:

WHITE
3766 SW WATSON ST
FORT WHITE, FL 32038

DESIGN DATE: 11/28/2022

REVISION 1: DATE

REVISION 2: DATE

DRAWN BY: TCP

SCALE: NTS

SHEET:

01

CTP = CONTRACTOR TO PROVIDE APPROVED PRODUCTS THAT MEET OR EXCEED WIND DESIGN PRESSURES.

PRODUCT CATEGORY	SUB CATEGORY	MANUFACTURER	APPROVAL No. & DATE
STRUCTURAL COMPONENTS	ROOF DECK	CAPITAL METAL SUPPLY, INC. 29 GA. CAPITAL RIB ROOF PANEL	FL20147.2-R2 10/13/20
STRUCTURAL COMPONENTS	STRUCTURAL WALL	CAPITAL METAL SUPPLY, INC. 29 GA. CAPITAL RIB WALL PANEL	FL20148.2-R2 10/13/20
EXTERIOR DOORS	ROLL-UP	JANUS INTERNATIONAL GROUP, LLC. SERIES 3652	FL14425.1-R6 12/15/21
EXTERIOR DOORS	SWINGING	ELIXIR DOOR AND METAL COMPANY SERIES 407	FL17996.5-R2 02/28/21
WINDOWS	SINGLE HUNG	KINRO, INC H.18000-R VS	FL993.8-R18 11/15/21

A circular professional engineer seal for Craig E. Gunderson. The outer ring contains the text "CRAIG E. GUNDERSON" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. Inside the ring, the word "LICENSE" is at the top, "No. 60102" is in the center, a single star is below the number, "STATE OF" is below the star, and "FLORIDA" is at the bottom.

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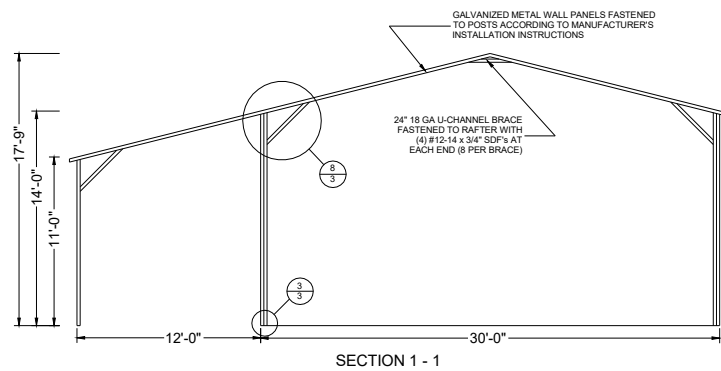
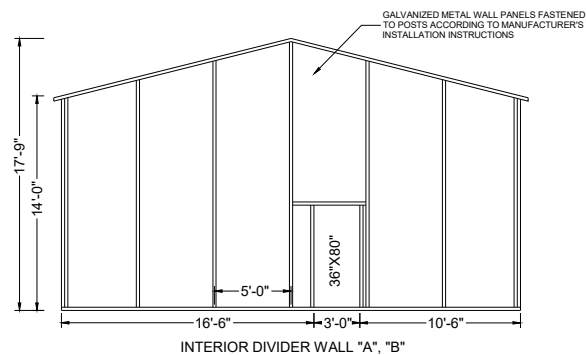
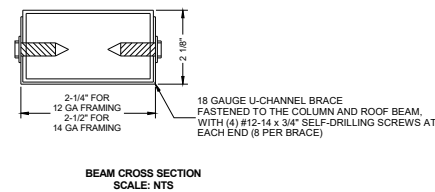
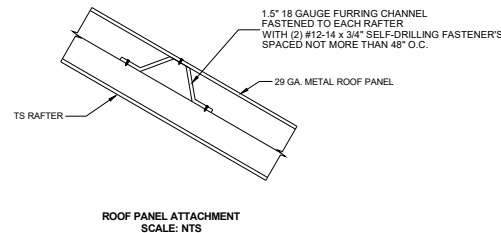
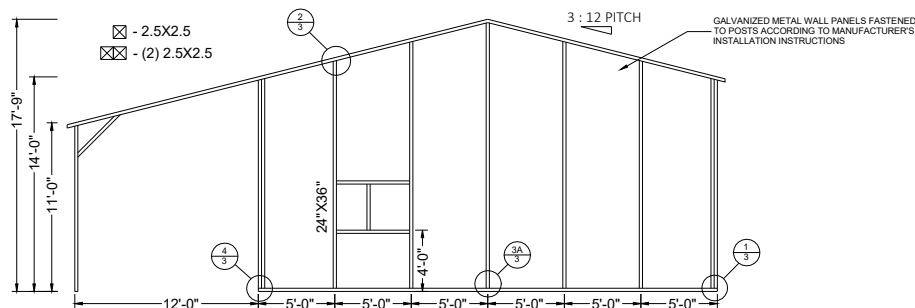
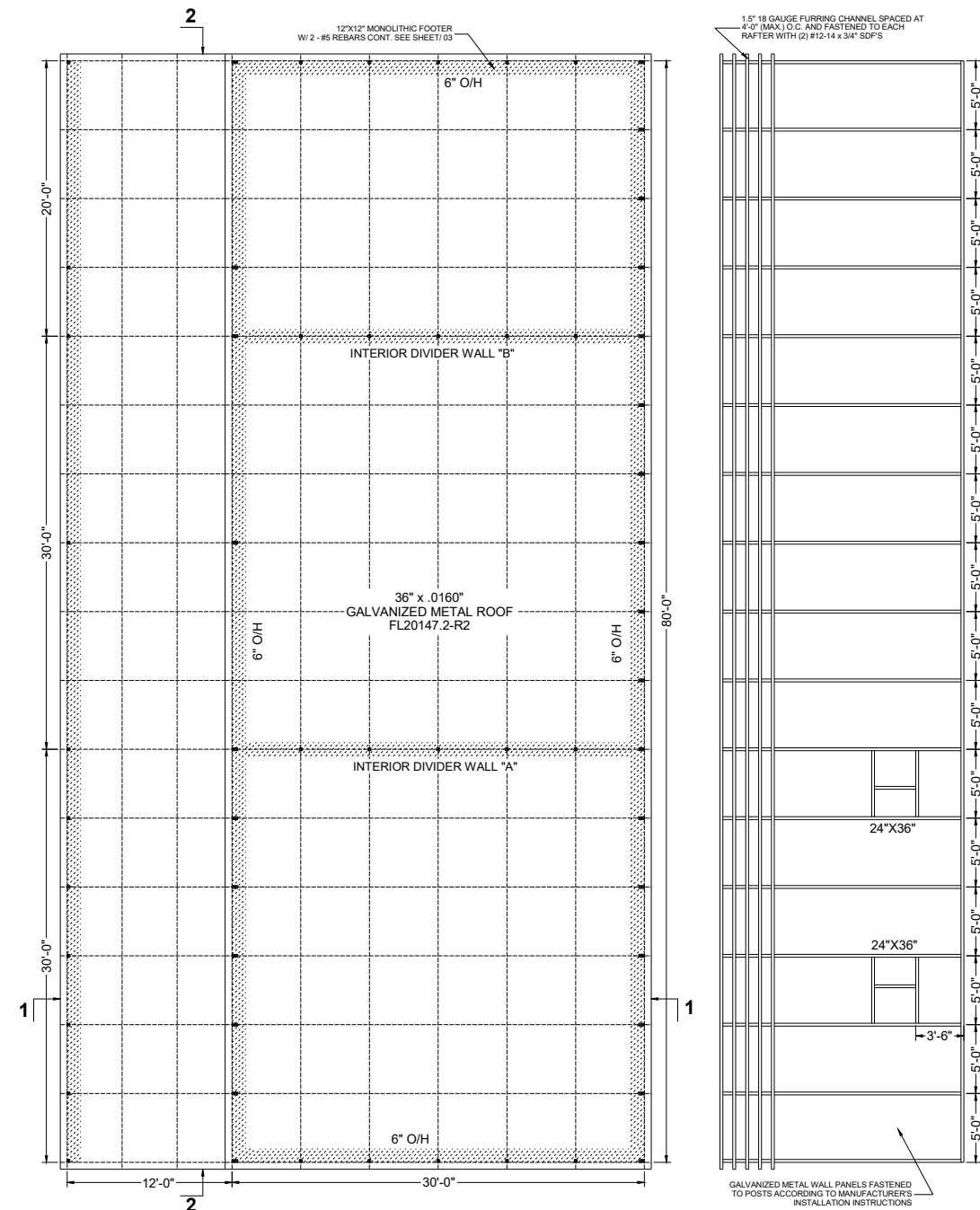
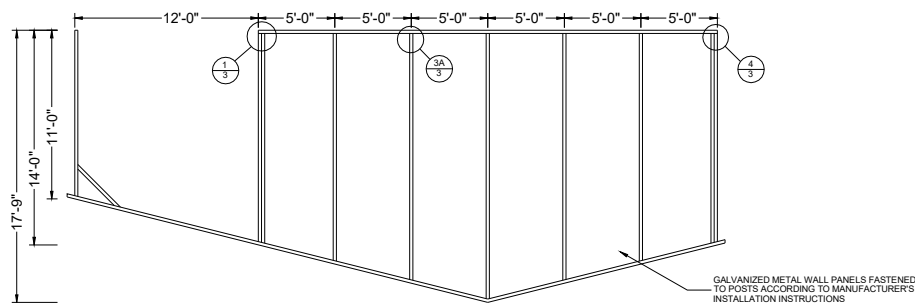
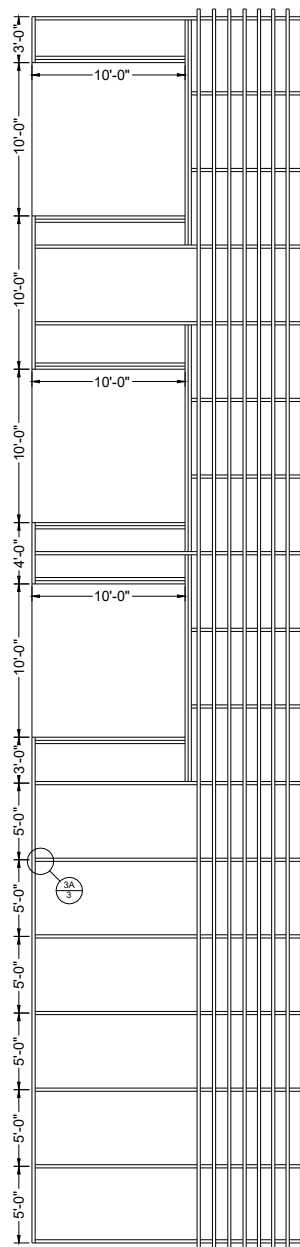
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REVISION 2: DATE

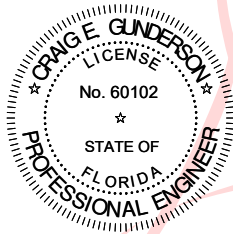
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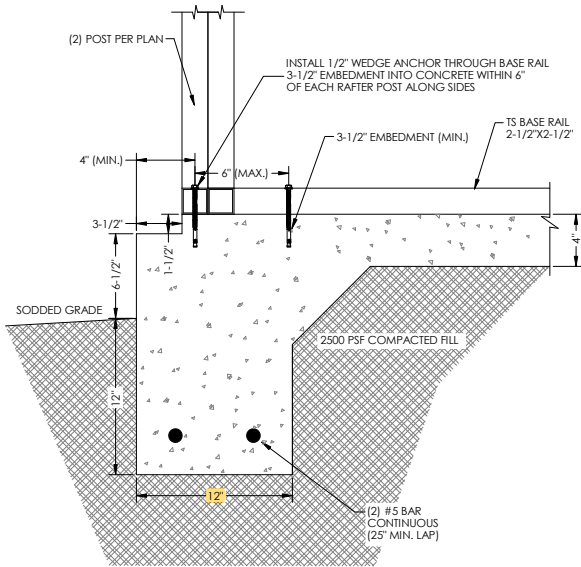
02



This item has been electronically signed and sealed by Craig E. Gunderson, P.E. on date below using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.



Digitally signed
by Craig E
Gunderson
Date:
2022.12.01
16:04:06 -05'00'



1 12'x12' MONO. FOOTER BASE RAIL ANCHORAGE
SCALE: NTS

GENERAL NOTES

CONCRETE:

CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS.

COVERAGE OF THE REINFORCED STEEL:

FOR FOUNDATIONS, MINIMUM CONCRETE COVER OVER REINFORCING BARS SHALL BE PER ACI-318: 3 INCHES WHERE THE CONCRETE IS POURED AGAINST AND TEMPORARY IN CONTACT WITH THE EARTH OR UNPROTECTED FROM THE EARTH OR WEATHER, OTHERWISE 1-1/2 INCHES.

CONCRETE NOTE:

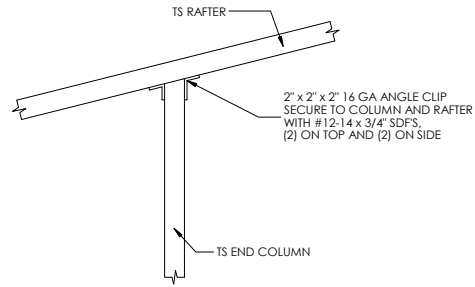
ALL OPEN AREAS OF CONCRETE OUTSIDE OF THE PROPOSED STRUCTURE SHALL BE DESIGNED TO SLOPE AWAY FROM THE STRUCTURE

REINFORCING STEEL:

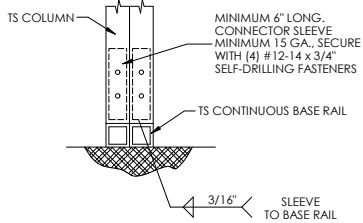
THE TURNDOWN REINFORCING STEEL SHALL BE ASTM A615 GRADE 60. THE SLAB REINFORCEMENT SHALL BE WELDED WIRE FABRIC MEETING ASTM A185 OR FIBERGLASS FIBER REINFORCEMENT.

REINFORCEMENT MAY BE BENT IN THE FIELD OR SHOP AS LONG AS:

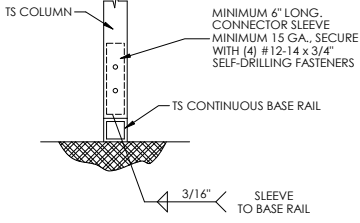
1. IT IS BENT COLD;
2. REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FIELD BENT;
3. THE DIAMETER OF THE BEND, MEASURED ON THE INSIDE OF THE BAR, IS NOT LESS THAN SIX-BAR DIAMETERS.



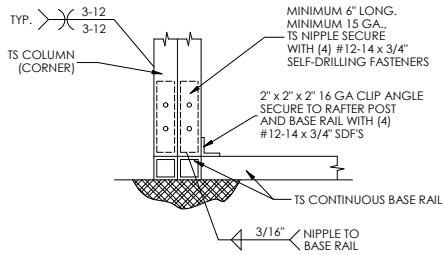
2 END POST/RAFTER
CONNECTION DETAIL
SCALE: NTS



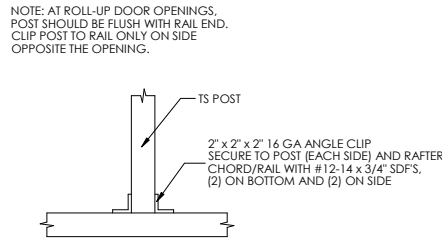
3 RAFTER POST/BASE RAIL
CONNECTION DETAIL
SCALE: NTS



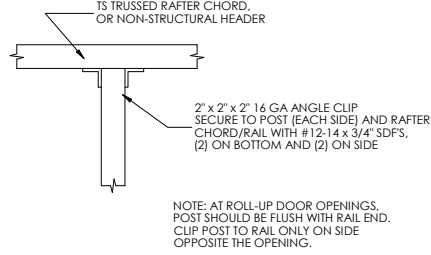
3A RAFTER POST/BASE RAIL
CONNECTION DETAIL
SCALE: NTS



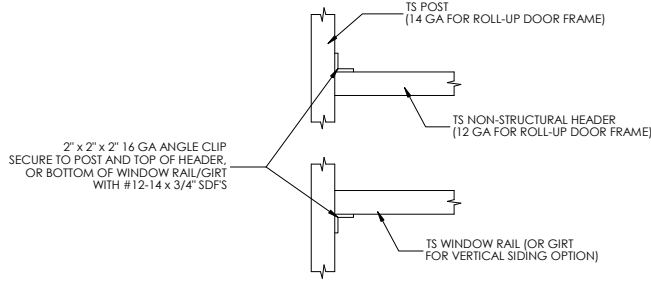
4 END POST/BASE RAIL
CONNECTION DETAIL
SCALE: NTS



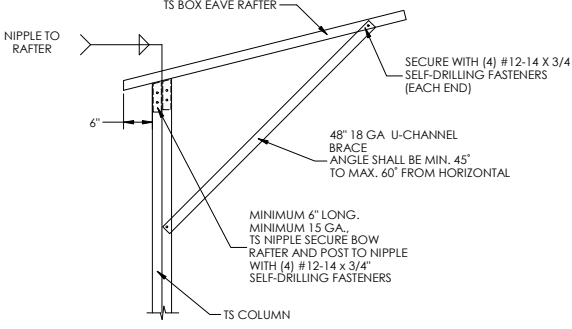
5 POST TO NON-STRUCTURAL HEADER, BASE,
RAIL OR WINDOW RAIL CONNECTION DETAIL
SCALE: NTS



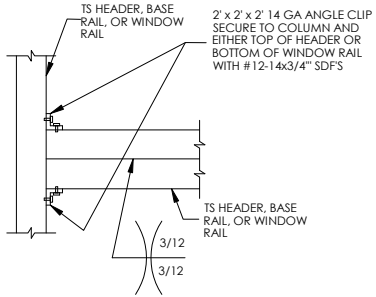
6 POST TO NON-STRUCTURAL HEADER, BASE,
RAIL OR WINDOW RAIL CONNECTION DETAIL
SCALE: NTS



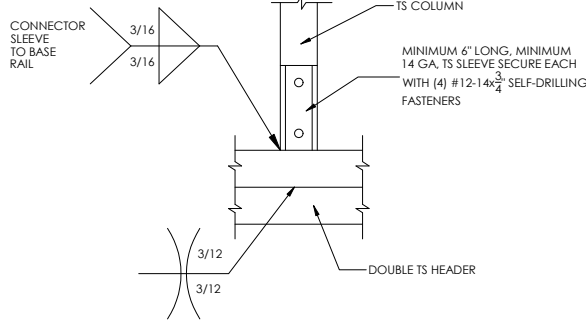
7 NON-STRUCTURAL HEADER OR WINDOW RAIL
TO POST CONNECTION DETAIL
SCALE: NTS



8 BOX EAVE RAFTER/CORNER POST
CONNECTION DETAIL
SCALE: NTS



9 COLUMN OR WINDOW
RAIL TO POST CONNECTION DETAIL
SCALE: NTS



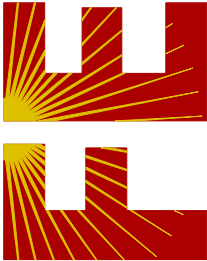
10 COLUMN/DOUBLE HEADER
CONNECTION DETAIL
SCALE: NTS

CONTRACTOR:
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