DESIGN CRITERIA:

APPLICABLE CODES, REGULATIONS & STANDARDS:

1. THE 2023 FLORIDA BUILDING CODE, SPECIFICALLY CHAPTER 16 STRUCTURAL DESIGN, CHAPTER 20 ALUMINUM & CH. 23 WOOD.

2. AA ASM 35 & SPECIFICATIONS FOR ALUMINUM STRUCTURES, PART 1-A OF THE ALUMINUM DESIGN MANUAL PREPARED BY THE ALUMINUM ASSOCIATION, INC. WASHINGTON D.C. 2005 ED. 3. ASCE 7-22 & SE17

4. NDS NATIONAL DESIGN SPECIFICATION FOR WOOD.

5. ACI318 CONCRETE REFERENCE MANUAL.

WIND LOADS:

1. BUILDING OCCUPANCY CATEGORY, PARAGRAPH 1604.5 & TABLE 1604.5: RISK CATEGORY: I

2. BASIC WIND SPEED, TABLE 1609C, STATE OF FLORIDA DEBRIS REGION & BASIC WIND SPEED, PARAGRAPH 1609.3.1 & TABLE 1609.3.1 EQUIVALENT BASIC WIND SPEED: MPH EXPOSURE CATEGORY, PARAGRAPH 1609.4.3: 3. WIND LOADS PER FBC TABLE 2002.4 (MWFRS)

VULT = 120 MPH & EXPOSURE = C

FOR 20 X 20 X 0.013" MESH SCREEN

HORIZONTAL PRESSURES ON WINDWARD SURFACES = HORIZONTAL PRESSURES ON LEEWARD SURFACES = VERTICAL PRESSURES ON SCREEN SURFACES = VERTICAL PRESSURES ON SOLID SURFACES =

19 PSF 25 PSF

FOR 18 X 14 X 0.013" MESH SCREEN, APPLIED FACTOR = FOR ALLOWABLE STRESS DESIGN, APPLIED FACTOR =

FOUNDATION DESIGN:

NO ADDITIONAL FOOTING OR FOUNDATION SYSTEM IS REQUIRED BY THE PROPOSED CONSTRUCTION IF A MINIMUM 4" CONCRETE SLAB IS PROVIDED IN SOUND CONDITION, FREE FROM STRUCTURAL CRACKING, SPALLING & OTHER DETERIORATION. EXISTING FOUNDATION/FOOTING UNDER CONCRETE SLAB MINIMUM 8"x8" w/ (1) #5 BAR TO BE VERIFIED BY CONTRACTOR. SEE TYPICAL FOOTING DETAILS FOR NEW FOOTING DESIGN MINIMUM REQUIREMENTS.

MISCELLANEOUS:

- 1. SCREENED ENCLOSURES CONTAINING SWIMMING POOLS SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF FBC R4501.17 RESIDENTIAL SWIMMING BARRIER REQUIREMENTS.
- 2. ALUMINUM ADDITIONS ARE NOT TO BE INSTALLED ON A MANUFACTURED HOME, TRAILER HOME, OR PRE-FAB HOME. IF THE EXISTING STRUCTURE IS ONE OF THESE, A SEPARATE 4TH WALL SUPPORT SYSTEM IS SO TO BE ENGINEERED SO THAT NO ADDITIONAL LOADING IS PLACED ON THE MANUFACTURED HOME. 3. THE ENGINEERING ON THESE PLANS IS SITE SPECIFIC FOR (1)

STRUCTURE ONLY AT THE PROVIDED ADDRESS(ES).

FASTENER SPECIFICATIONS:

- 1. FASTENERS ARE REQUIRED TO BE SAE GRADE 2 OR BETTER ZINC PLATED. (CONCRETE ANCHORS ARE TO BE 410 S.S. TAPCONS OR BETTER, INSTALLED TO MFG. SPECIFICATIONS)
- 2. WHERE WOOD DECK IS PRESENT USE 1/4" X 3-1/2" GALV. LAG SCREWS IN LIEU OF MASONRY ANCHORS. UNLESS OTHERWISE
- 3. FOR 1"x2" NON-STRUCTURAL MEMBERS ATTACHED TO HOST a. FOR MASONRY/CONCRETE APPLICATION USE GALVANIZED

 1/4" X 2-3/4" TAPCONS 6" FROM ENDS & 24" CENTER TO CENETER. b. FOR WOOD APPLICATION USE #14 X 2-3/4" WOOD SCREW AT 6" FROM ENDS & 24" CENTER TO CENETER.
- C. FOR ALUMINUM APPLICATION USE #10 X 1-1/2" SMS OR TEK 6" FROM ENDS & 24" CENTER TO CENETER.
- d. WHERE 1"x2" INSTALLED THROUGHOUT AN "OPEN VIEW" SPACING SHALL BE REDUCED TO 6" FROM ENDS & 18" C.C.

RESPONSIBILITIES:

- I. ALL SITE WORK SHALL BE PERFORMED BY A LICENSED CONTRACTOR IN ACCORDANCE WITH APPLICABLE BUILDING CODES, LOCAL ORDANANCES, AND THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES.
- 2. FOR FASTENERS WHICH ARE NOT VISIBLE AFTER INSTALLATION, THE CONTRACTOR SHALL VERIFY AND ENSURE INSTALLATION HAS BEEN ACCOMPLISHED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS AND IN ACCORDANCE WITH THE ATTACHED DETAILS.
- 3. CONTRACTOR TO PROVIDE NOA'S & INSTALL ALL MATERIALS AS PER MANUFACTURER'S SPECIFICATIONS.
- 4. INTEGRITY OF EXISTING/ HOST STRUCTURE SHALL NOT BE COMPROMISED WITH THE ATTACHMENT OF THE PROPOSED
- 5. IT IS THE OWNERS RESPONSIBILITY TO MAINTAIN THE SCREENS & FASTENERS TO MANUFACTURING SPECIFICATIONS.

ALUMINUM SPECIFICATIONS:

- 1. ALUMINUM EXTRUSIONS SHALL BE 6005 T5 ALLOY UNLESS OTHERWISE NOTED.
- 2. ALL SELF MATING BEAM SECTIONS ARE TO BE STITCHED WITH a.#14 SCREWS 6" FROM ENDS & 24" CENTER TO CENTER. b. #12 SCREWS 6" FROM ENDS & 18" CENTER TO CENTER C. #10 SCREW 6" FROM ENDS & 12" CENTER TO CENTER.

 3. ROOF BRACING SHALL BE A MINIMUM 2"X3"X.050".

 4. THE MINIMUM NORMAL THICKNESS OF PROTECTOR PANELS

- (KICKPLATES) SHALL BE AN INDUSTRY STANDARD OF 0.024
- 5. SCREEN MATERIAL SHALL BE 18/14 SCREEN UNLESS APPROVED BY FLORIDA ENGINEERING LLC.
- 6. 1"x2" & 1"x3" NON-STRUCTURAL MEMBERS MAY BE USED INTERCHANGEABLY.
- 7. DOOR LOCATION MAY BE DETERMINED/ RELOCATED BY CONTRACTOR IN THE FIELD. NOT TO AFFECT DESIGN SPANS AND STRUCTURAL MEMEBRS SHOWN

CONCRETE SPECIFICATIONS:

THE FOLLOWING SPECIFICATIONS ARE APPLICABLE TO THIS PROJECT:

- 1. WHERE CONCRETE SPECIFICATIONS ARE REQUIRED, WHETHER IN THE SCREEN ENCLOSURE SCOPE OR NOT, BY ONE OR MORE REGULATORY AGENCIES, THE FOLLOWING SPECIFICATIONS ARE APPLICABLE:
- a. CONCRETE SHALL CONFORM TO ASTM C94 FOR THE FOLLOWING COMPONENTS:
- PORTLAND CEMENT TYPE 1 ASTM C 150
- ii AGGREGATES LARGE AGGREGATE 3/4 MAX. ASTM C 33
- iii. AIR ENTRAINING +/- 1 % ASTM C 260
- iv. WATER REDUCING AGENT ASTM C 494
- v. CLEAN POTABLE WATER
- vi. OTHER ADMIXTURES NOT PERMITTED
- b. METAL ACCESSORIES SHALL CONFORM TO:
- i. REINFORCING BARS ASTM A615, GRADE 60
- ii. WELDED WIRE FABRIC ASTM A185
- C. CONCRETE SLUMP AT DISCHARGE CHUTE NOT LESS THAN 3"
 OR MORE THAN 5". WATER ADDED AFTER BATCHING IS NOT PERMITTED.
- d. PREPARE & PLACE CONCRETE PER AMERICAN CONCRETE INSTITUTE MANUAL OF STANDARD PRACTICE, PART 1, 2, & 3 INCLUDING HOT WEATHER RECOMMENDATIONS.
- e. MOIST CURE OR POLYETHYLENE CURING PERMITTED.
- f. PRIOR TO PLACING CONCRETE, TREAT THE ENTIRE SUBSURFACE AREA FOR TERMITES IN COMPLIANCE WITH THE FBC. FOR RISK CATEGORY II, III, & IV STRUCTURES ONLY.
- g. CONCRETE SLAB SHALL BE PLACED OVER A POLYETHYLENE VAPOR BARRIER. (SLAB ONLY)
- 2. WHEN PAVERS ARE UNDER ALUMINUM MEMBERS, CONTRACTOR SHALL EPOXY TO DECK OR GROUT TO DECK w/ 2000 PSI GROUT WITH BONDING AGENT
- 3. WHEN APPLICABLE FOR NEW SLAB ADDITION TO ADJACENT DRILL & EPOXY #4 X 8" REBAR INTO EX. FOUNDATION EMBED 4" MIN W/ NON-SHRINKING SIMPSON EPOXY-TIE (OR EQUAL) 48" O.C. TYP. ALL LOCATIONS
- 4. WHEN APPLICABLE FOR NEW FOOTER TO EXISTING, DRILL & EPOXY NEW STEEL INTO EX. FOUNDATION WITH EMBED 6" MIN W/ NON-SHRINKING SIMPSON EPOXY-TIE (OR EQUAL) TYP. ALL LOCATIONS
- 5. WHERE PAVERS ARE UNDER ALUMINUM MEMBERS, CONTRACTOR SHALL EPOXY TO DECK OR GROUT TO DECK w/3000 PSI GROUT WITH BONDING AGENT.
- 6. MINIMUM CONCRETE STRENGTH 3000 PSI UNLESS OTHERWISE NOTED.

MASONRY SPECIFICATIONS:

- 1. CONCRETE MASONRY UNITS (CMU) SHALL BE STANDARD HOLLOW UNITS AND SHALL BE 1900 PSI MINIMUM BASED ON TYPE M OR S MORTAR.
- 2. ALL MORTAR SHALL BE TYPE M OR S.
- 3. ALL GROUT SHALL BE 1800 PSI MINIMUM AND HAVE MAXIMUM COARSE AGGREGATE SIZE OF 3/8".
- 4. PROVIDE CLEAN-OUTS FOR REINFORCED CELLS CONTAINING REINFORCEMENT WHEN GROUT POUR EXCEEDS 5'-0" IN HEIGHT

ALUMINUM MEMBERS DIMENSIONS:

HOLLOW SECTIONS 2 x 2: 2" x 2" x 0.050" 2 x 3: 2" x 3" x 0.050" 2 x 4: 2" x 4" x 0.050" 2 x 5: 2" x 5" x 0.050"

OPEN BACK SECTIONS 1 x 2: 1" x 2" x 0.044" 1 x 3: 1" x 3" x 0.045"

SNAP SECTIONS 2 x 2 SNAP: 2" x 2" x 0.045" 2 x 3 SNAP: 2" x 3" x 0.050" 2 x 4 SNAP: 2" x 4" x 0.045"

SELF MATING (SMB)

2 x 4 SMB: 2" x 4" x 0.046" x 0.100" 2 x 5 SMB: 2" x 5" x 0.050" x 0.116" 2 x 6 SMB: 2" x 6" x 0.050" x 0.120" 2 x 7 SMB: 2" x 7" x 0.055" x 0.120" 2 x 8 SMB: 2" x 8" x 0.072" x 0.224" 2 x 9 SMB: 2" x 9" x 0.072" x 0.224" 2 x 9(H) SMB: 2" x 9" x 0.082" x 0.306" 2 x 10 SMB: 2" x 10" x 0.092" x 0.374"

ALL MAY NOT APPLY DETAIL "A" MEMEBR DIME

> DR SHEET NO. GE S/01 S/02 PLA \$/03 S/04



DESIGN LOADS:

- . DEAD LOADS = 2. LIVE LOADS
- a. PRIMARY MEMBERS =
- b. SECONDARY MEMBERS =
- c. SCREEN ROOF = d. SOLID ROOF =

MEMBER SELF-WEIGHT

300 LB. VERT. LOAD 200 LB. VERT. LOAD 20 PSF

iis item has been digitally signed do sealed by Richard E. Walker.

E. on the date adjacent to the seal inted copies of this document are at considered signed and sealed the signature must be verified or y electronic copies. EDWARD WALL Digitally signed by Richard E No. 61240 Walker Date: SIAN ORIDA SIN 2024.05.03 13:08:47-04'00'

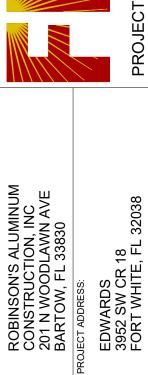


CA CERT.

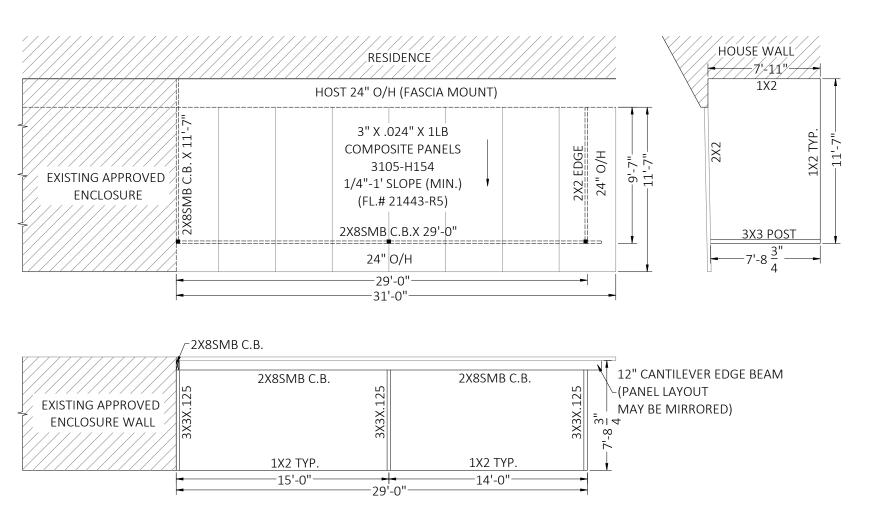
.Eng.com

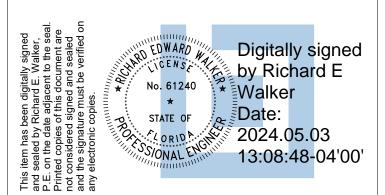
2410165

Š.



DESIGN DATE: 04/12/2024 DATE REVISION 1: **REVISION 2:** DATE SHEET: DRAWN BY: MBG SCALE: NTS





HATCH/ SYMBOL LEGEND

HATCH	INDICATES
	EXIST. STRUCTURE

NOTE: ALL MAY NOT APPLY

■ = 3X3X.125

FLORIDA ENGINEERING LLC
4161 TAMIAMI TRAIL, UNIT 101
PORT CHARLOTTE, FLORIDA 33952
(941) 391-5980
FLEng.com
Orders@FLEng.com

CA CERT. #30782

2410165

PROJECT NO.

EDWARDS 3952 SW CR 18 FORT WHITE, FL 32038



FLORIDA ENGINEERING LLC HAS NOT PERFORMED ANY ON SITE INSPECTIONS AT THIS LOCATION

OR CHANGES TO THE EXISTING STRUCTURE AS A RESULT OF ANY MODIFICATION OR FOR ANY

THESE PLANS WERE PREPARED BASED ON THE PREMISE THAT THE EXISTING STRUCTURE WAS DESIGNED BY A PROPERLY LICENSED PROFESSIONAL ENGINEER OF THE STATE OF FLORIDA, WAS PERMITTED BY THE APPROPRIATE PERMITTING AGENCY, WAS CONSTRUCTED BY A FLORIDA LICENSED CONTRACTOR AT THE TIME OF CONSTRUCTION, HAS NOT BEEN SUBJECT TO DAMAGE BY A MAJOR EVENT, AND HAS BEEN CERTIFIED BY THE CONTRACTOR THAT THE EXISTING STRUCTURE CURRENTLY SHOWS NO DEVIATIONS OR DEFECTS FROM THE STATE OF THE STRUCTURE AS PERMITTED BY THE FINAL INSPECTION OF THE PERMITTING AGENCY. ALSO, THE OWNER AND ALL PARTIES CONCERNED WILL INDEMNIFY FLORIDA ENGINEERING LLC FROM ANY DAMAGES

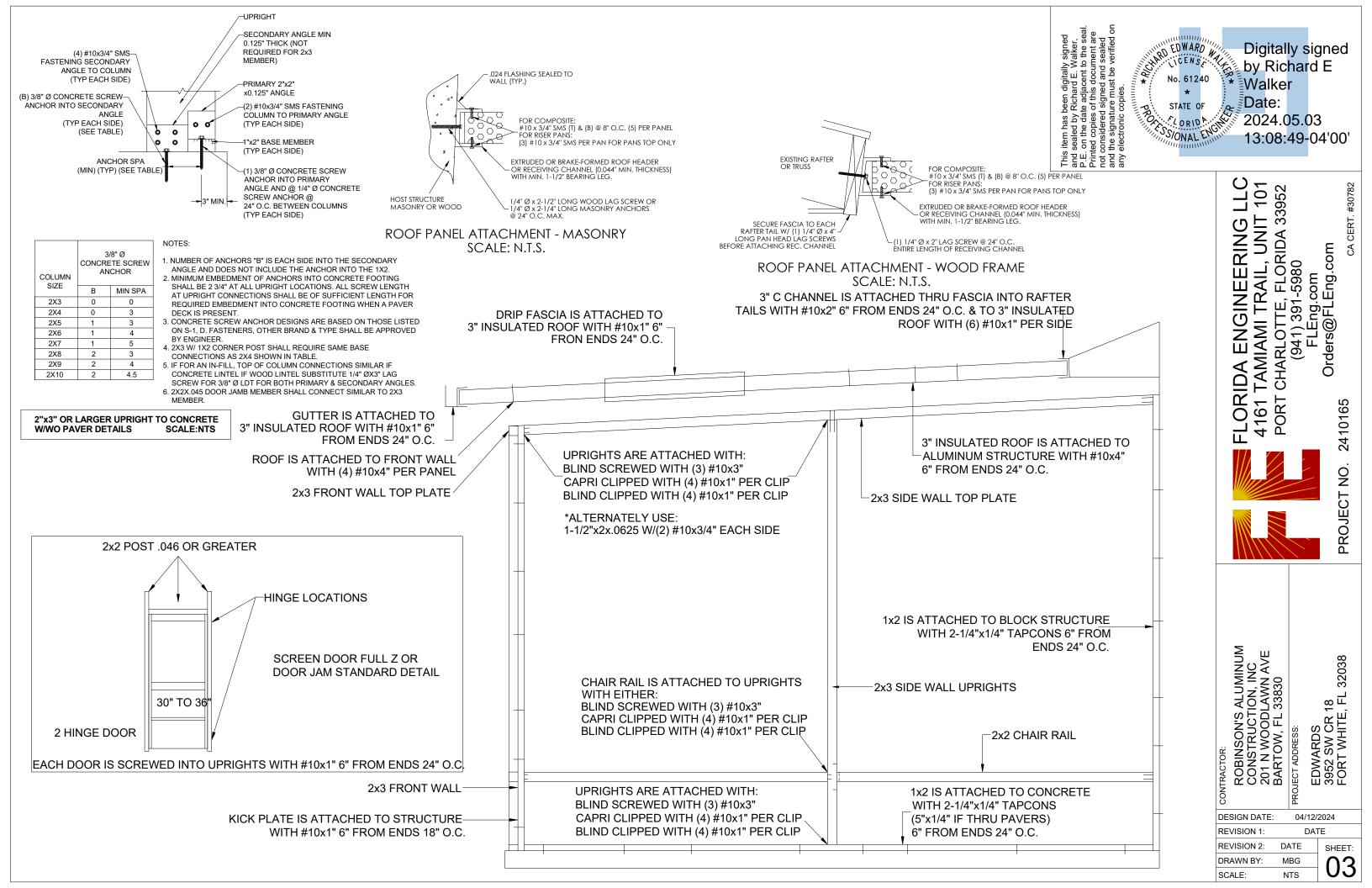
OTHER REASON.

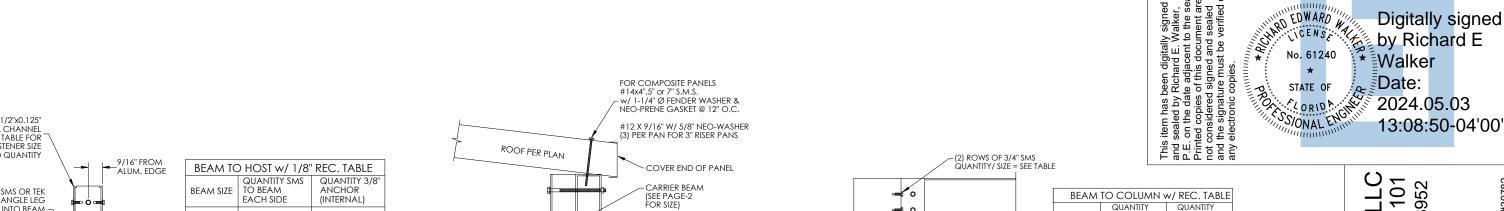
CONTRACTOR:
ROBINSON'S ALUMINUM
CONSTRUCTION, INC
201 N WOODLAWN AVE
BARTOW, FL 33830

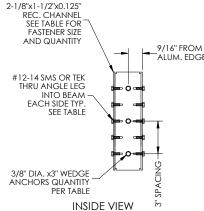
DESIGN DATE: 04/12/2024
REVISION 1: DATE
REVISION 2: DATE
DRAWN BY: MBG
SCALE: NTS

04/12/2024
SHEET:
DATE
DATE
DRAWN BY: MBG
SCALE: NTS

PROPOSED MONOSLOPE SCREEN ROOM

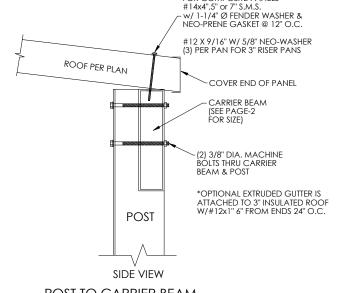




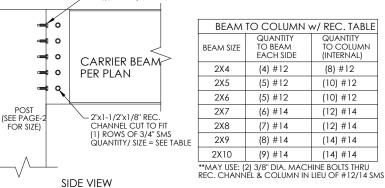


BEAM TO HOST W/ 1/8" REC. TABLE		
BEAM SIZE	QUANTITY SMS TO BEAM EACH SIDE	QUANTITY 3/8" ANCHOR (INTERNAL)
2X4	(4) #12	(2) 3/8"
2X5	(5) #12	(2) 3/8"
2X6	(5) #12	(2) 3/8"
2X7	(6) #14	(2) 3/8"
2X8	(7) #14	(3) 3/8"
2X9	(8) #14	(3) 3/8"
2X10	(9) #14	(3) 3/8"

SELF-MATING BEAM TO MASONRY WALL CONNECTION SCALE: NTS



POST TO CARRIER BEAM **CONNECTION SCALE: NTS**



LNO

ENGINEERING

FLORIDA

ROBINSON'S ALUMINUM CONSTRUCTION, INC 201 N WOODLAWN AVE BARTOW, FL 33830

DESIGN DATE:

REVISION 1:

REVISION 2:

DRAWN BY:

SCALE:

I TAMIAMI TRAIL, UNIT T CHARLOTTE, FLORIDA 3: (941) 391-5980 FLEng.com Orders@FLEng.com

ORT 161

CA CERT.

2410165

S.

PROJECT

EDWARDS 3952 SW CR 18 FORT WHITE, FL 32038

04/12/2024

DATE

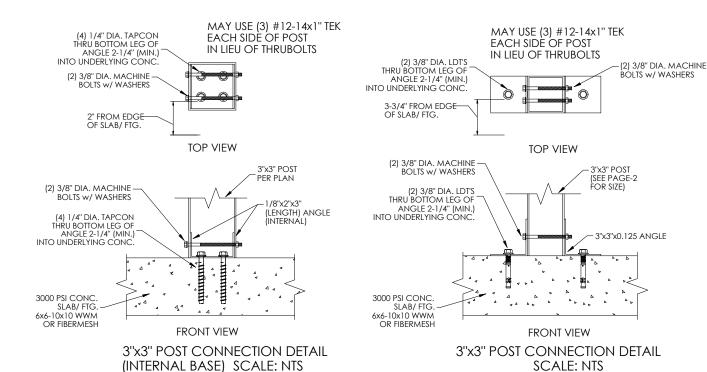
SHEET:

DATE

MBG

NTS

BEAM TO COLUMN CONNECTION **DETAIL SCALE: NTS**



- 1. 3x3 POST TO HAVE 3/8" RED HEAD TRUBOLT WEDGE ANCHORS (STAINLESS STEEL, PROVIDE MINIMUM 2" FROM EDGE OF SLAB AND PROVIDE MINIMUM 2" SPACING TO ANY OTHER CONNECTOR. SEE MFG. NOTES FOR INSTALLATION REQUIREMENTS. THREADED ROD REQUIRES 3" MINIMUM EDGE DISTANCE.
- 2. WHERE 4x4 POST HAVE 1/2" RED HEAD TRUBOLT WEDGE ANCHORS (STAINLESS STEEL), PROVIDE MINIMUM 3-3/4" FROM EDGE OF SLAB AND PROVIDE MINIMUM 3-3/4" SPACING TO ANY OTHER CONNECTOR. SEE MFG. NOTES FOR INSTALLATION REQUIREMENTS.
- 3. WHERE PAVERS ARE PRESENT ANCHOR LENGTH SHALL BE INCREASED BY THICKNESS OF PAVER NOT TO EXCEED 2-1/2" FOR PAVER THICKNESS MORE THAN 2-1/2" SITE SPECIFIC SPECIFICATIONS SHALL BE REQUIRED. PAVERS SHALL BE BONDED TO UNDERLYING CONCRETE FOUNDATION W/ 3000 PSI GORUT.