

APPLICABLE CODES AND STANDARDS

- 2023 FLORIDA BUILDING CODE (8TH EDITION)
- 2021 INTERNATIONAL BUILDING CODE
- ASCE 7-22: MINIMUM DESIGN LOADS ON BUILDINGS AND OTHER STRUCTURES
- ACI 318-14: MINIMUM DESIGN MANUAL (15TH EDITION)
- ACI 318-14: BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
- THIS 402-16 BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES
- ANSI D1.1: STRUCTURAL WELDING

INSTALLATION NOTES AND SPECIFICATIONS

- ROOF PITCH SHALL NOT BE GREATER THAN 12H:4V
- END WALL COLUMNS (POST) AND SIDE WALL COLUMNS ARE THE SAME U.N.O.
- 28 GA METAL PANELS SHALL BE FASTENED DIRECTLY TO 2.5" x 2.5" x 14 GA TUBE STEEL (TS) FRAMING MEMBERS FOR VERTICAL PANELS.
- 28 GA METAL PANELS SHALL BE FASTENED DIRECTLY TO 18 GA HAT CHANNELS U.N.O.
- FASTENER SPACING ON CENTERS ALONG RAFTERS OR PURLINS, AND POSTS SHALL BE:
 - INTERIOR = 9"
 - END WALLS = 12"
- FASTENERS SHALL BE #12-14 x 3/4" SELF-DRILLING SCREWS (SDS), USE CONTROL SEAL WASHER WITH EXTERIOR FASTENERS, APPLICABLE ONLY FOR:
 - MEAN ROOF HEIGHT OF 20'-0" OR LESS.
 - ROOF SLOPES OF 18" (4:12 PITCH) OR LESS.
- SPACING REQUIREMENTS FOR OTHER ROOF HEIGHTS AND/OR SLOPES MAY VARY.
- ANCHORS SHALL BE INSTALLED THROUGH THE BASE RAIL WITHIN 6" OF EACH RAFTER COLUMN ALONG SIDES AND ENDS.
- STANDARD GROUND ANCHORS (SOIL NAILS) CONSIST OF #4 REBAR WITH WELDED NUT x 30" LONG AND MAY BE USED IN SUITABLE SOILS.
- 30" LONG AND MAY BE USED IN SUITABLE SOILS AND MUST BE USED IN UNSUITABLE SOILS AS NOTED. SOIL WALLS MAY BE USED FOR WIND SPEEDS LESS THAN OR EQUAL TO 145 MPH.

TABLE 1

BOW/RAFTER FRAME, END POST, GROUND ANCHOR AND PANEL FASTENER SPACING SPECIFICATIONS					
RISK CATEGORY	WIND EXPOSURE CATEGORY	ULT. WIND SPEED (MPH)	NOMINAL WIND SPEED (MPH)	MAXIMUM RAFTERS/BOWS PURLINS & POSTS (INCHES)	FASTENER SPACING O.C. FOR RAFTERS/PURLINS & POSTS (INCHES)
I, II, III, or IV	B, C, or D	115 - 150	89 - 116	5.0	6
		151 - 180	117 - 136	4.0	6

- NOTES:
- SPECIFICATIONS APPLICABLE TO 28 OR 30 GAUGE METAL PANELS FASTENED DIRECTLY TO 12 OR 14 GAUGE STEEL TUBE ROW.
 - FASTENERS SHALL BE #12-14 x 3/4" SELF-DRILLING SCREWS WITH CONTROL SEAL WASHER.
 - SPECIFICATIONS APPLICABLE ONLY FOR ROOF HEIGHTS OF 20 FEET OR LESS AND ROOF SLOPES OF 14 (3:12) PITCH.
 - GROUND ANCHOR REQUIREMENTS ARE: (a) EACH CORNER AND ONE EVERY OTHER INTERIOR BOW/RAFTER POST SHALL BE ANCHORED TO GROUND WITH 3" DIA. x 30" LONG ANCHORS. (b) IF BASE RAIL IS ABSENT, GROUND ANCHORS SHALL BE INSTALLED WITHIN 6" OF EACH CORNER AND ONE EVERY OTHER INTERIOR BOW/RAFTER POST.
 - GROUND ANCHORS SHALL BE 16" DIA. x 30" LONG ANCHORS WITH CONCRETE 5" DIA. x 30" LONG.

DRAWING INDEX

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S-3	CONNECTION DETAILS (1 OF 4)
S-4	BASE RAIL AND ANCHORAGE DETAILS
S-5	BOX EAVE RAFTER END WALL, SIDE WALL AND OPENING FRAMING
S-6	CONNECTION DETAILS (2 OF 4)
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S-11	BOX EAVE RAFTER VERTICAL ROOF-SIDING OPTION
S-12	OPTIONAL CONCRETE STRIP FOOTING
S-13	OPTIONAL HELICAL ANCHORING DETAIL

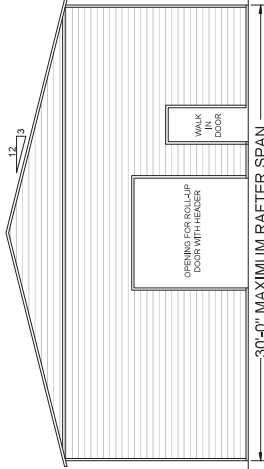
DESIGN LOADS

- DEAD LOAD = 15 PSF
- LIVE LOAD = 20 PSF
- WIND LOAD (SEE TABLE 1)

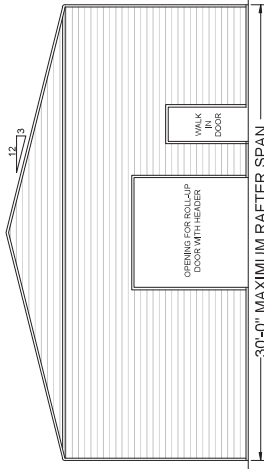
ENCLOSED METAL BUILDING DESIGN

24FT WIDE X 40FT LONG X 10FT EAVE HT.

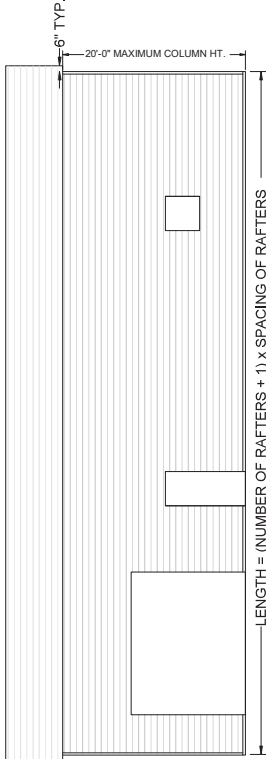
LEAN-TO 12FT WIDE X 20FT LONG X 8FT EAVE HT.



TYPICAL ELEVATION - BOX EAVE
SCALE: NTS



TYPICAL ELEVATION - BOW EAVE
SCALE: NTS



TYPICAL SIDE ELEVATION
SCALE: NTS

TABLE 1

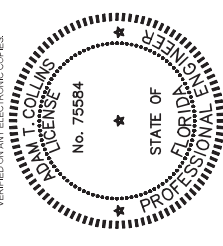
MEMBER	PRODUCT APPROVAL NUMBER	MAX WIND DESIGN PRESSURES
ROOF PANELS	FL39486	+41.6 PSF / -31.2 PSF
WALL PANELS	FL39594	+55.4 PSF / -41.6 PSF
GARAGE DOOR	CTP	CTP
WALK-IN DOOR	CTP	CTP

CTP = CONTRACTOR TO PROVIDE 2023 FBC APPROVED PRODUCTS THAT MEET OR EXCEED DESIGN PRESSURES AS TABULATED.

Digitally signed by Adam Collins
DN: c=US, sn=Collins,
givenName=Adam,
email=adam@collinseng.com,
cn=Adam Collins
Date: 2024.08.02 14:52:57 -04'00'

PLANS PREPARED BY:
ADAM COLLINS
ENGINEERING INC.
12558 BASS ROAD, LIVE OAK, FLORIDA 32060
P: 386.320.7400 F: 850.807.7399
WWW.COLLINSENG.COM
CERTIFICATE OF AUTHORIZATION: 31728

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NO.	REVISIONS	DATE	DATE	SUBMITTALS	DATE	PREPARED BY	CLIENT	SHEET TITLE	NOTES AND SPECIFICATIONS	PROJECT	SHEET NO.
							ADAM COLLINS ENGINEERING INC.	ELITE METAL MANUFACTURING		Joseph Chassereau 601 SW Broderick Dr Lake City, FL 32025	S-1
							2024.08.02	DMC			SCALE
							DESIGNED	SM			AS-SHOWN
							CHECKED	ATC			
							JOB NO.	22047			

MINIMUM SOIL BEARING CAPACITY: 1500 PSF.
CONCRETE STRENGTH: 3000 PSI @ 28 DAYS

1. REBAR SHALL BE ASTM A615 GRADE 60
2. SLAB REINFORCEMENT = WELDED WIRE FABRIC PER ASTM A185 OR FIBERGLASS FIBER REINFORCEMENT
3. CONCRETE COVER SHALL BE
 - 3.1. 3" WHERE EXPOSED TO SOIL OR WATER.
 - 3.2. 2" EVERYWHERE ELSE.
4. REBAR SHALL BE BENT WITHOUT HEATING.
5. MINIMUM BEND = 6 X BAR DIAMETER
6. REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE BENT.

1. USE MINIMUM (2) 4" HELICES WITH 30" EMBEDMENT FOR THE FOLLOWING SOILS:

- 1.1. VERY DENSE AND/OR CEMENTED SANDS
- 1.2. COARSE GRAVEL AND COBBLES
- 1.3. CALICHE
- 1.4. PRELOADED SILTS AND CLAYS
- 1.5. CORALS
- 1.6. MEDIUM DENSE COARSE SANDS
- 1.7. SANDY GRAVEL
- 1.8. VERY STIFF SILTS AND CLAYS

2. USE MINIMUM (2) 6" HELICES WITH MINIMUM 48" EMBEDMENT FOR

- 2.1. LOOSE TO MEDIUM DENSE SANDS
- 2.2. FIRM TO STIFF CLAYS AND SILTS
- 2.3. ALLUVIAL FILL.

3. USE MINIMUM (2) 8" HELICES WITH MINIMUM 60" EMBEDMENT.

- 3.1. FOR VERY LOOSE TO MEDIUM DENSE SANDS
- 3.2. FIRM TO STIFFER CLAYS AND SILTS
- 3.3. ALLUVIAL FILL.

3C ASPHALT BASE ANCHORAGE
(HP 9 BARBED DRIVE ANCHOR)
SCALE: NTS

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			JOB NO.	22047

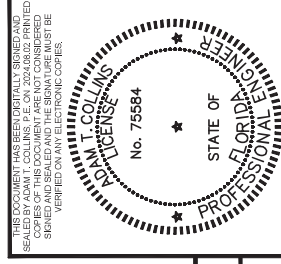
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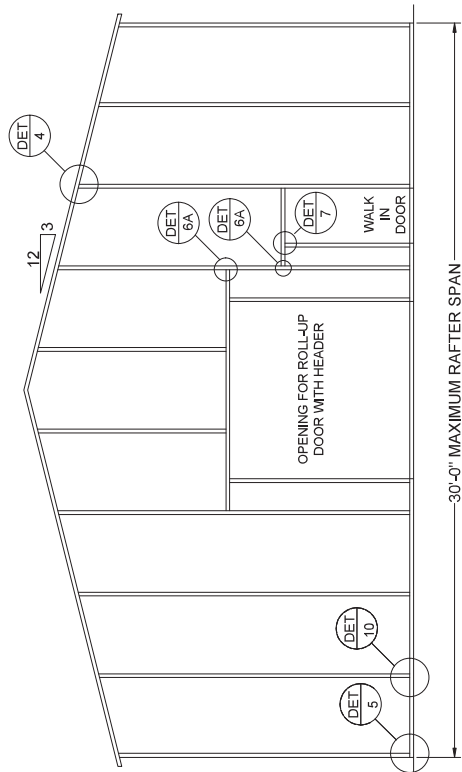
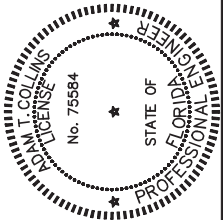
DAM COLLINS
ENGINEERING INC.

CLIENT	SHEET TITLE
ELITE METAL MANUFACTURING 10121 88TH TRACE	BASE RAIL AND ANCHORAGE DETAILS

PROJECT	SHEET NO.
Joseph Chassereau 601 SW Broderick Dr Lake City, FL 32025	S-4
	SCALE
	AS-SHOWN

MONOLITHIC FOOTER SIZE	
110 C - 140 C	8" x 12" - (2) #4
ABOVE 140 C	12" x 16" - (2) #4

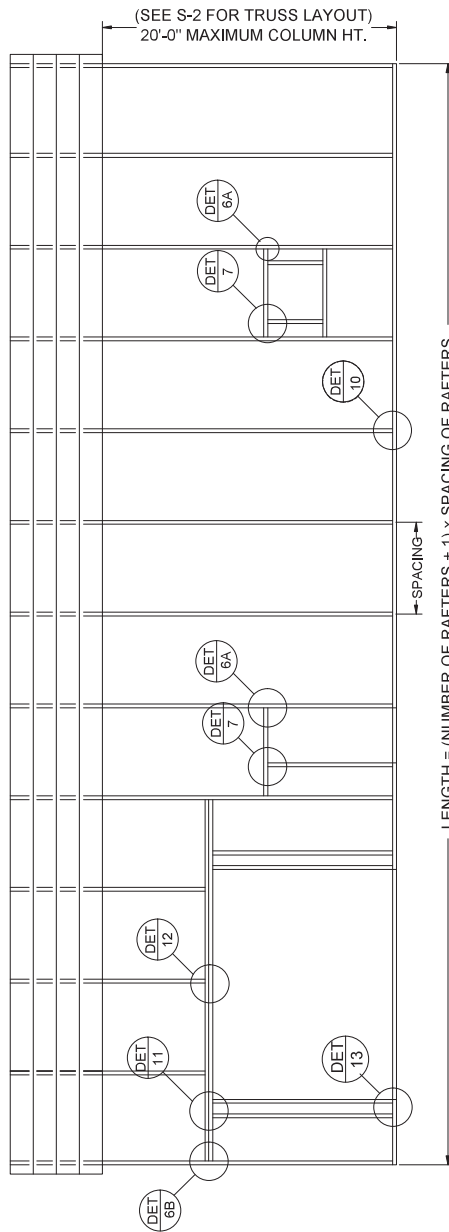




SPACING = 5'-0" FOR WIND SPEEDS BETWEEN 110 MPH AND 140 MPH
SPACING = 4'-0" FOR WIND SPEEDS BETWEEN 140 MPH AND 180 MPH

TYPICAL BOX EAVE RAFTER END WALL FRAMING SECTION

SCALE: NTS

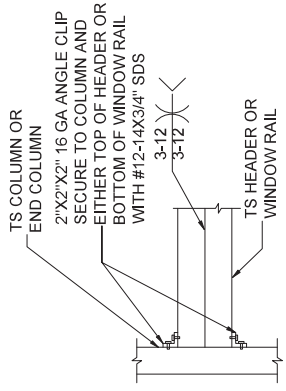


— LENGTH = (NUMBER OF RAFTERS + 1) x SPACING OF RAFTERS
SPACING = 5'-0" FOR WIND SPEEDS BETWEEN 110 MPH AND 140 MPH
SPACING = 4'-0" FOR WIND SPEEDS BETWEEN 140 MPH AND 180 MPH

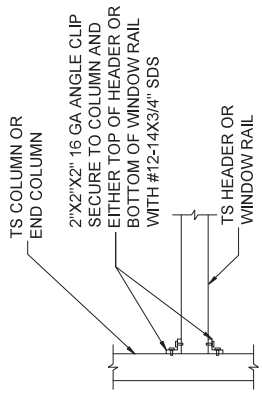
TYPICAL BOX EAVE RAFTER SIDE FRAMING SECTION

SCALE: NTS

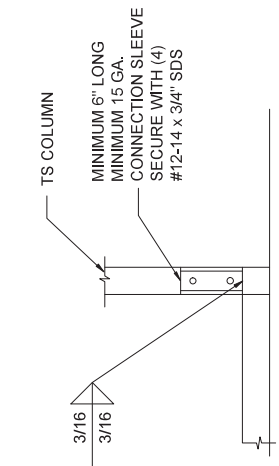
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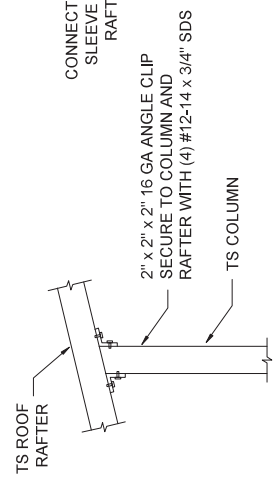
DOUBLE HEADER TO
POST CONNECTION
6B SCALE: NTS



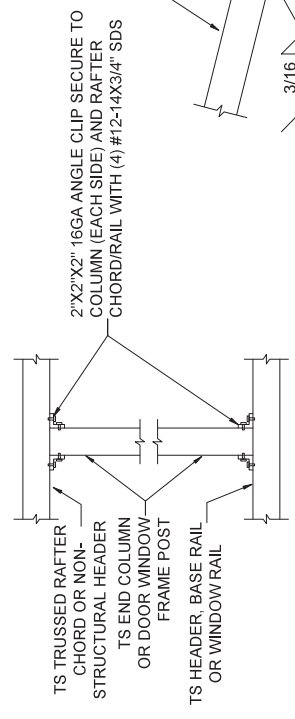
HEADER TO
POST CONNECTION
6A SCALE: NTS



POST/BASE RAIL CONNECTION
5 SCALE: NTS

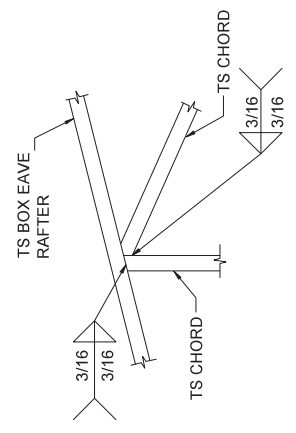


POST/RAFTER CONNECTION
4 SCALE: NTS

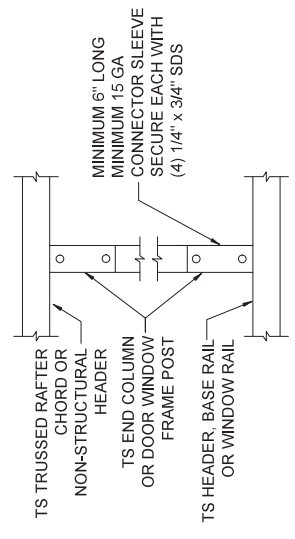


NOTE AT ROLL-UP DOOR OPENINGS.
COLUMN SHOULD BE FLUSH WITH RAIL
END CLIP SIDE OPPOSITE THE OPENING

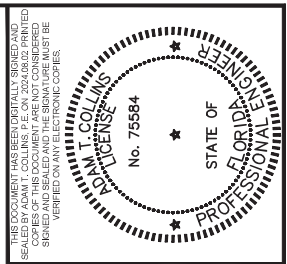
POST TO HEADER, BASE RAIL
OR WINDOW RAIL CONNECTION
7 SCALE: NTS



TRUSS POST AND CHORD
TO RAFTER CONNECTION
9 SCALE: NTS

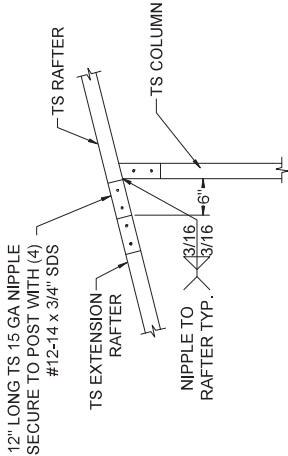


POST TO HEADER, BASE
RAIL CONNECTION
10 SCALE: NTS

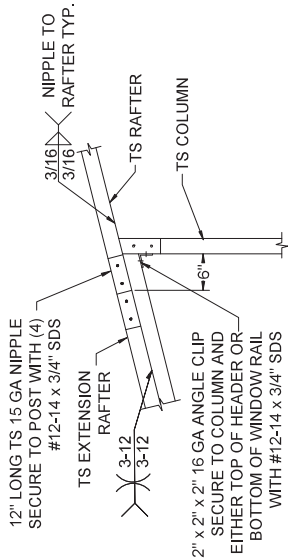


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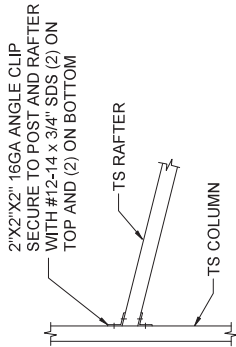
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								ELITE METAL MANUFACTURING 10121 88TH TRACE	CONNECTION DETAILS (2 OF 4)	Joseph Chassereau 601 SW Broderick Dr Lake City, FL 32025	S-6
								ADAM COLLINS ENGINEERING INC.			SCALE
								CAD 31728 - P 363.3207420 - WWW.COLLINSENGINEERING.COM			AS-SHOWN



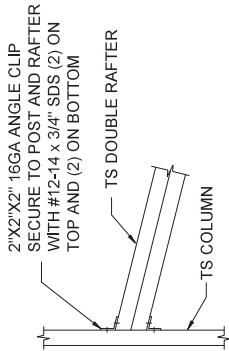
16A SIDE EXTENSION RAFTER/POST CONNECTION
RAFTER SPAN LESS THAN 12'-0"
SCALE: NTS



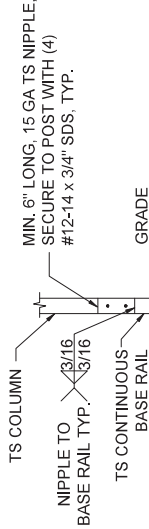
16B SIDE EXTENSION RAFTER/POST CONNECTION
RAFTER SPAN BETWEEN 12'-0" AND 16'-0"
SCALE: NTS



17A LEAN TO RAFTER/COLUMN CONNECTION
RAFTER SPAN LESS THAN 12'-0"
SCALE: NTS



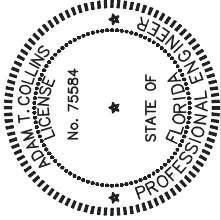
17B LEAN TO RAFTER/COLUMN CONNECTION
RAFTER SPAN BETWEEN 12'-0" AND 16'-0"
SCALE: NTS

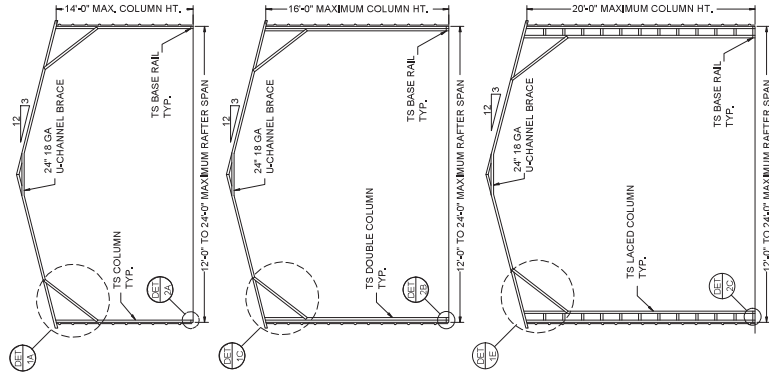


18 LEAN-TO POST CONNECTION
SCALE: NTS

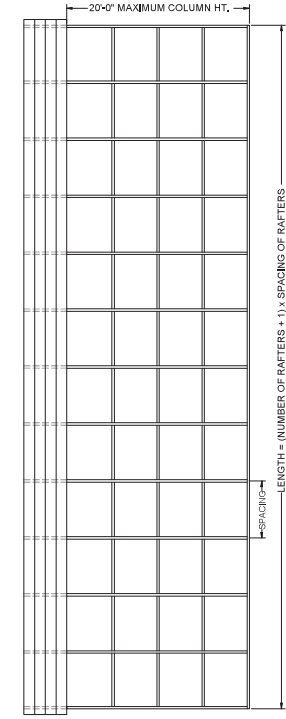
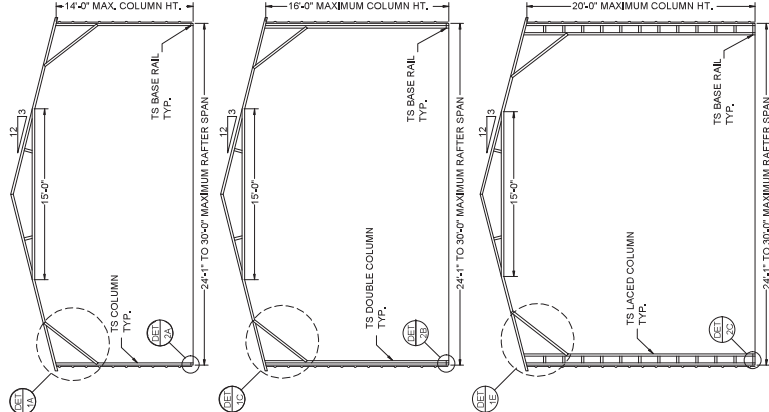
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			2024.06.02			ADAM COLLINS ENGINEERING INC.	ELITE METAL MANUFACTURING 10121 88TH TRACE	CONNECTION DETAILS (4 OF 4)	Joseph Chassereau 601 SW Broderick Dr Lake City, FL 32025	S-10
										SCALE
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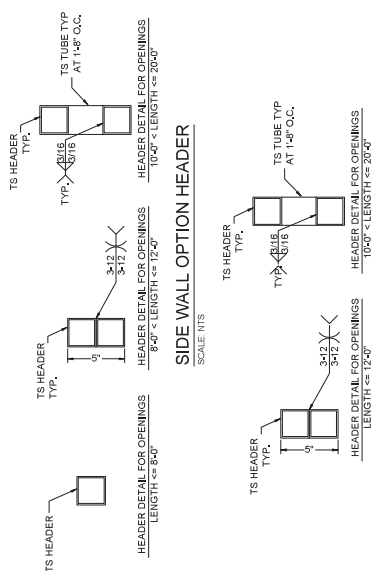




BOX EAVE FRAME
SCALE: NTS



TYPICAL SIDE FRAME SECTION
SCALE: NTS



END WALL OPTION HEADER
SCALE: NTS



PANEL ATTACHMENT
(ALTERNATE FOR VERTICAL ROOF PANELS)
SCALE: NTS

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ADAM T. COLLINS
No. 75584
STATE OF FLORIDA
PROFESSIONAL ENGINEER

PROJECT

SHEET NO.

SCALE

AS-SHOWN

CLIENT

ELITE METAL MANUFACTURING
10121 88TH TRACE

PREPARED BY

DATE

SUBMITTALS

DATE

DESIGNED

CHECKED

ATC

JOB NO.

ADAM COLLINS
ENGINEERING, INC.

0407.31728 - P. 366.3207420 - WWW.COLLINS-ENG.COM

PROJECT

JOSEPH CHASSEREAU
601 SW BRODERICK DR
LAKE CITY, FL 32025

SHEET NO.

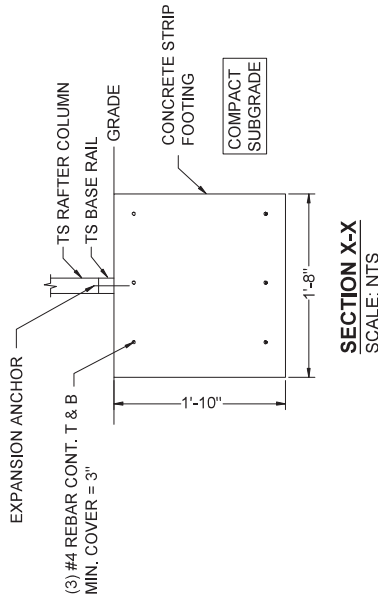
S-11

SCALE

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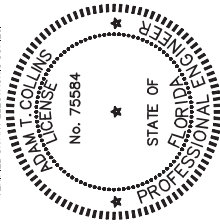
**MINIMUM SOIL BEARING CAPACITY: 1500 PSF.
CONCRETE STRENGTH: 3000 PSI @ 28 DAYS**

1. REBAR SHALL BE ASTM A615 GRADE 60.
2. SLAB REINFORCEMENT = WELDED WIRE FABRIC PER ASTM A185 OR FIBERGLASS FIBER REINFORCEMENT CONCRETE COVER SHALL BE 3"
3. 3" WHERE EXPOSED TO SOIL OR WATER.
- 3.1. 3"
- 3.2. 2" EVERYWHERE ELSE.
4. REBAR SHALL BE BENT WITHOUT HEATING.
5. MINIMUM BEND = 6 X BAR DIAMETER
6. REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FIELD BENT.



SCALE: NTS

NO.	REVISIONS	DATE	DATE	2024.08.02	SUBMITTALS	DATE	PREPARED BY	CLIENT	SHEET TITLE	PROJECT	SHEET NO.
			DRAWN	SM			 ADAM COLLINS ENGINEERING INC. 204-37728 - P: 966-307-1207 - WWW.COI-ENGINE.COM	ELITE METAL MANUFACTURING 10121 88TH TRACE	OPTIONAL CONCRETE STRIP FOOTING	Joseph Chasseau 601 SW Broderick Dr Lake City, FL 32025	S-12
			DESIGNED	DMC							
			CHECKED	ATC							
			JOB NO.	22047							

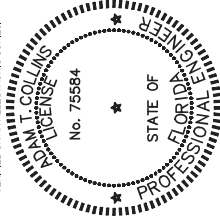


1. USE MINIMUM (2) 4" HELICES WITH 30" EMBEDMENT FOR THE FOLLOWING SOILS:

- 1.1. VERY DENSE AND/OR CEMENTED SANDS
- 1.2. COARSE GRAVEL AND COBBLES
- 1.3. CALICHE
- 1.4. PRELOADED SILTS AND CLAYS
- 1.5. CORALS
- 1.6. MEDIUM DENSE COARSE SANDS
- 1.7. SANDY GRAVEL
- 1.8. VERY STIFF SILTS AND CLAYS
2. USE MINIMUM (2) 6" HELICES WITH MINIMUM 50" EMBEDMENT FOR
 - 2.1. LOOSE TO MEDIUM DENSE SANDS
 - 2.2. FIRM TO STIFF CLAYS AND SILTS
 - 2.3. ALLUVIAL FILL
3. USE MINIMUM (2) 8" HELICES WITH MINIMUM 60" EMBEDMENT
 - 3.1. FOR VERY LOOSE TO MEDIUM DENSE SANDS
 - 3.2. FIRM TO STIFFER CLAYS AND SILTS
 - 3.3. ALLUVIAL FILL,



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