

STANDARD BUILDING

DETAILS

50 ft SPAN

LIGHT FRAME CONSTRUCTION

METAL CARPORT INSTALLATION PLANS AND DETAILS

NOTE: USE  2 1/2" x 2 1/2" 14 Ga.
 2 1/2" x 2 1/2" 12 Ga.
STEEL TUBE FOR ALL FRAME AND BASE
RAIL MEMBERS UNLESS OTHERWISE SHOWN.

FRAMING AND FASTENER SPECIFICATIONS

MAX. GROUND SNOW LOAD

CAROLINA CARPORTS, INC.

187 Cardinal Ridge Trail
DOBSON, NORTH CAROLINA 27017

THE OWNER IS RESPONSIBLE FOR OBTAINING A BUILDING PERMIT, IF NEEDED, AND FOR COMPLYING WITH ALL LOCAL BUILDING CODE REQUIREMENTS.

THIS IS TO CERTIFY THAT THE CALCULATIONS AND SPECIFICATIONS HEREIN HAVE BEEN PREPARED BY THE UNDERSIGNED PROFESSIONAL ENGINEER AND ARE IN ACCORDANCE WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE 2021 AND SECTION 1609 OF THE FLORIDA BUILDING CODE, EIGHTH EDITION (2023). THE PLANS ARE VALID UNTIL THE NEXT REVISION OF THE FLORIDA BUILDING CODE.

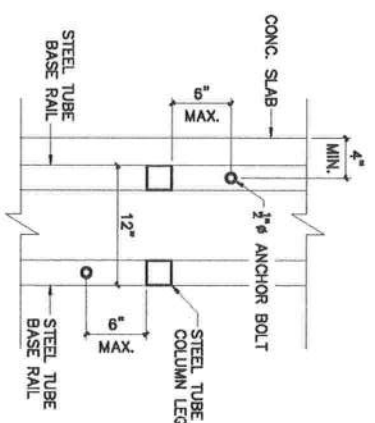
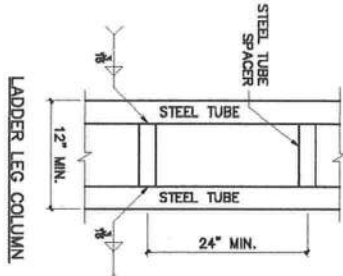
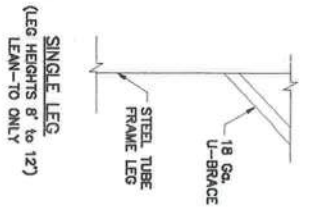
DESIGN LOADS

DESIGN LOADS

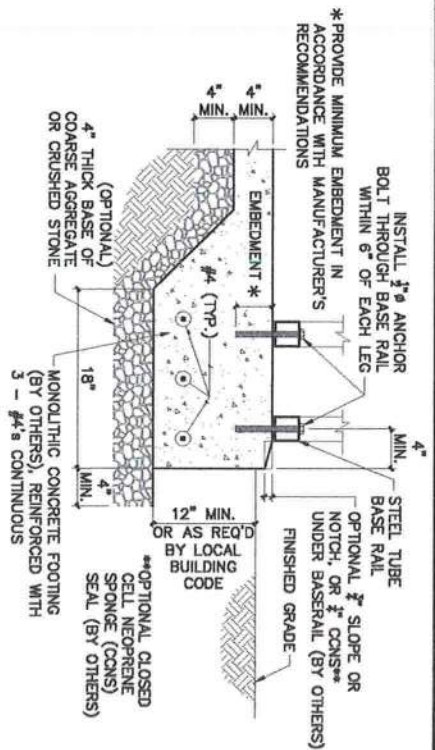
DESIGN LOADS

DESIGN LOADS

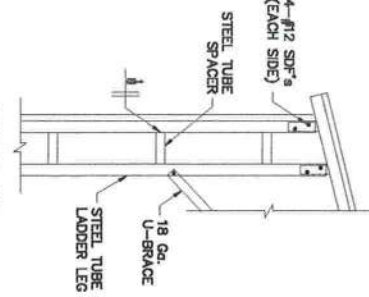
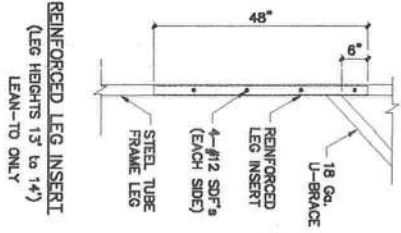
SHEET 1 OF 4



LADDER LEG - BASE RAIL CONNECTION

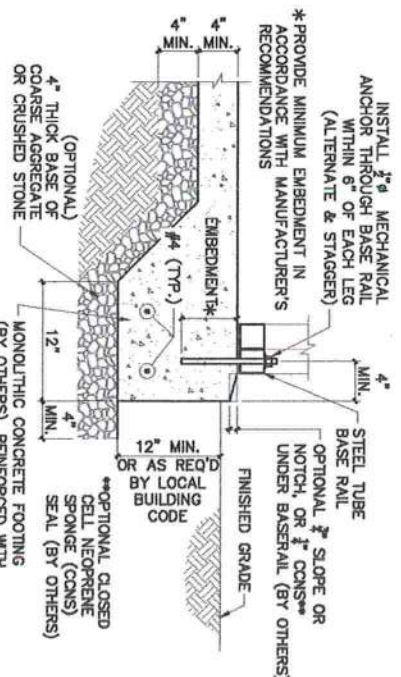


2 CONCRETE BASE RAIL ANCHORAGE (LADDER LEG)

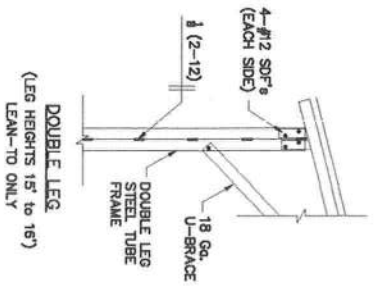


LADDER LEG (LEG HEIGHTS 17' TO 20')

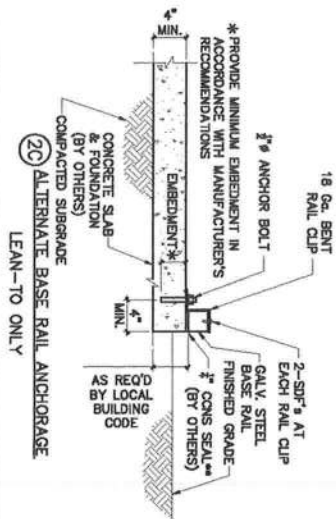
2A LADDER LEG/BASE RAIL CONNECTION



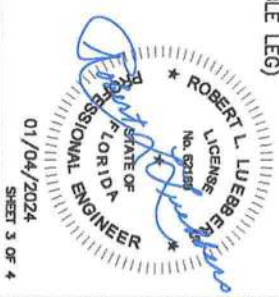
2B CONCRETE BASE RAIL ANCHORAGE (SINGLE OR DOUBLE LEG)

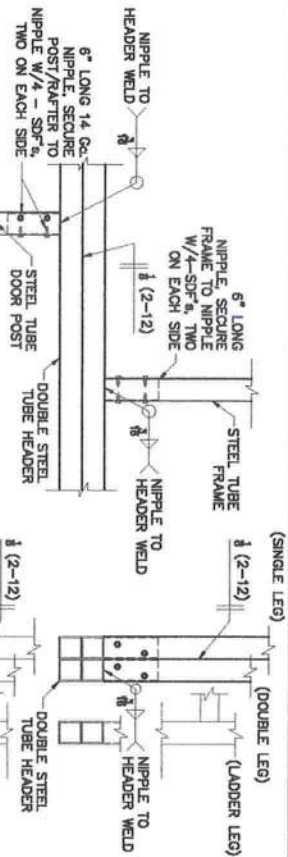


CRAWL SPACE DOOR SYSTEMS, INC.
5741 Boyds Road, #105
Virginia Beach, VA 23455
Engineered Flood Vent
Model CSBA816
OR Approved Equal
FLOOD VENTS

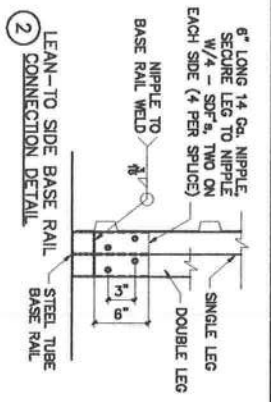
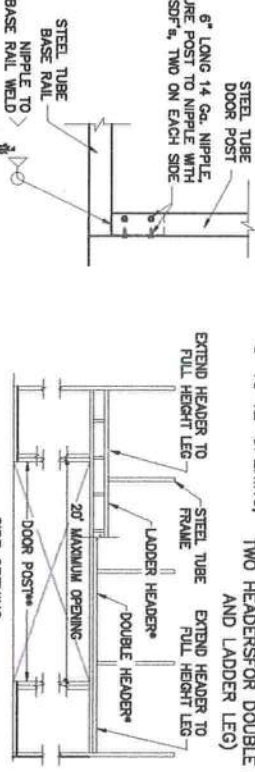


2D ALTERNATE BASE RAIL CLIP LEAN-TO ONLY

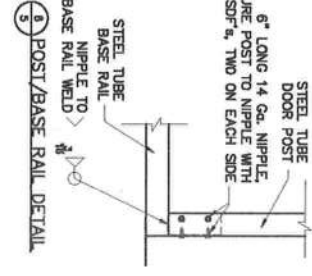




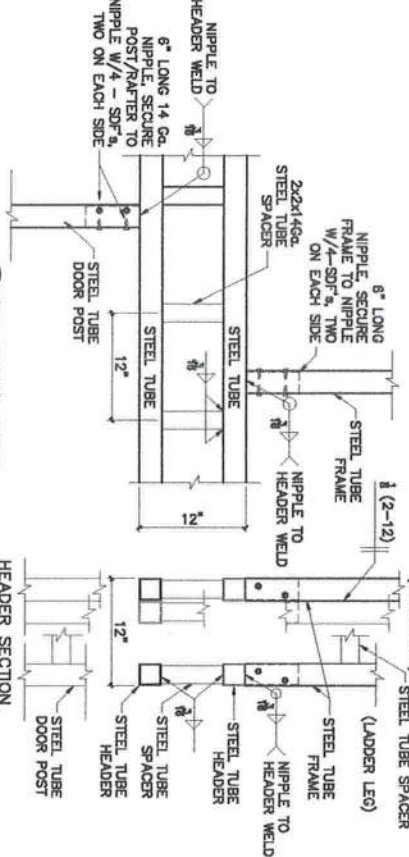
1 SIDE HEADER DETAIL.
(DOUBLE HEADER FOR
8' TO 12' OPENING,
AND LADDER LEG)



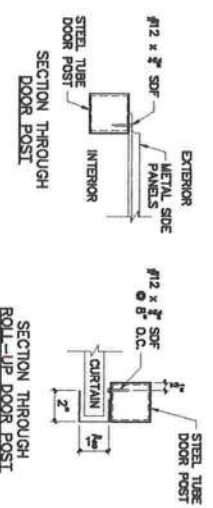
3 END POST/BASE RAIL
CONNECTION DETAIL.



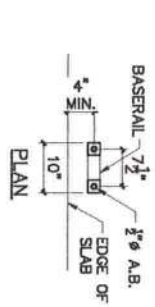
4 POST/BASE RAIL DETAIL.
(SINGLE LEG) (DOUBLE LEG)



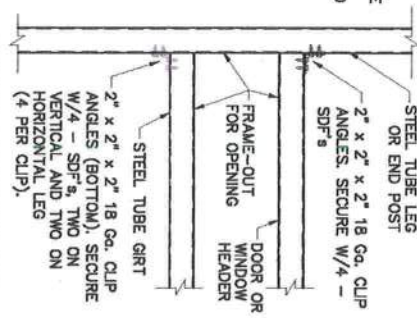
5 SIDE HEADER DETAIL.
(ONE HEADER FOR SINGLE LEG,
TWO HEADERS FOR DOUBLE LEG,
AND LADDER LEG)



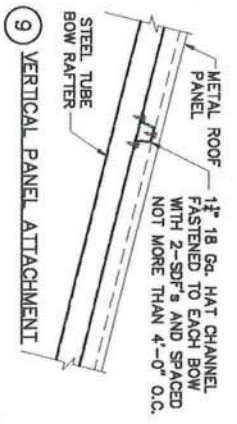
SECTION THROUGH
ROLL-UP DOOR POST



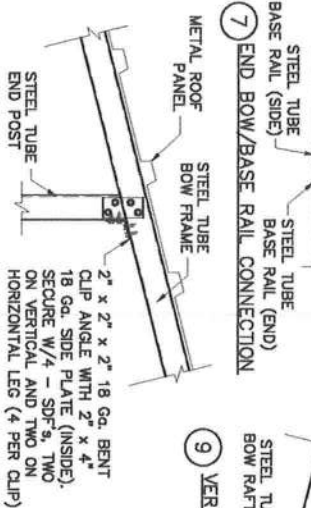
PLAN



8 ENDWALL TO HEADER AND
GIRT TO POST CONNECTION



9 VERTICAL PANEL ATTACHMENT



10 END POST TO BOW FRAME CONNECTION

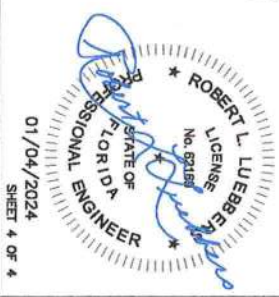


TABLE 1
BOW/RAFTER FRAME, END POST, GROUND ANCHOR AND PANEL FASTENER SPACING SPECIFICATIONS

WIND EXPOSURE CATEGORY	ULTIMATE WIND SPEED (MPH)	NOMINAL WIND SPEED (MPH)	MAXIMUM GROUND SNOW LOAD (PSF)	MAXIMUM POST/RAFTER SPACING (FEET)	AVERAGE FASTENER SPACING ON-CENTERS ALONG RAFTERS OR PURLINS, AND POSTS OR GIRTS (INCHES)	
					METAL PANELS	SPACING
B, C OR D	105 TO 170	82 TO 132	30	4.0	26 gauge	6

NOTES: 1. Specifications applicable to 26 or 29 gauge metal panels fastened directly to 12 or 14 gauge steel tube bow frames.
2. Fasteners consist of #12-14 x 3/4" self-drilling screws without control seal washer.
3. Specifications applicable only for mean roof height of 24 feet or less and roof slopes of 7 to 27 degrees (1.5:12 to 6:12 pitch). Spacing requirements for other roof heights and/or slopes may vary.

APPROVED PRODUCTS LIST

PRODUCT CATEGORY	SUB CATEGORY	MANUFACTURER	HHHZ	APPROVAL No. & DATE
STRUCTURAL COMPONENTS	ROOF DECK	CAROLINA CARPORTS, INC. 26 Ga. AG Roof Panel 29 Ga. AG Roof Panel	NO NO	12/15/20 FL6596.1-R6 FL6596.2-R6 06/20/23 FL42078.1-R0
	STRUCTURAL WALL	CAROLINA CARPORTS, INC. 26 Ga. AG Wall Panel 29 Ga. AG Wall Panel 26 Ga. Dutch Lap Wall Panel 29 Ga. Dutch Lap Wall Panel	NO NO NO NO	12/15/20 FL6702.1-R6 FL6702.2-R6 FL6702.3-R6 06/20/23 FL42077.1-R0
STRUCTURAL COMPONENTS	FLOOD VENTS	FLOOD FLAPS, LLC 7x16 Flood Flap	NO	11/04/21 FL17381.1-R4
STRUCTURAL COMPONENTS	FLOOD VENTS	CRAWL SPACE DOOR SYSTEMS 8x16 Model GSB4816	NO	02/28/21 FL29622.1-R1
EXTERIOR DOORS	SWINGING	ELKIR DOOR AND METAL COMPANY Series 402-14	NO	02/28/21 FL17996.3-R2 FL17966.5-R2
EXTERIOR DOORS	SWINGING	POCAHONTAS ALUMINUM Co., INC. DD 100	NO	08/16/22 FL12903.1-R7
EXTERIOR DOORS	ROLL-UP	CAROLINA CARPORTS, INC. 26 Ga. Steel Roll Up Sheet Door	NO	06/07/22 FL41335.1-R1
WINDOWS	SINGLE HUNG	12' x 8' 26 Ga. Steel Door 8' x 8' 26 Ga. Steel Door 16' x 8' 26 Ga. Steel Door 10' x 8' 28 Ga. Steel Door	NO NO NO NO	12/16/20 FL16806.1-R5 FL16806.2-R5 FL16806.4-R5
		MI WINDOWS AND DOORS Model 185 SH	NO	11/23/20 FL17499.1-R8
WINDOWS	SINGLE HUNG	APPLE FASTENERS, INC. Series Storage Shed	NO	02/09/21 FL21990.1-R1

NOTE: THE HIGH VELOCITY HURRICANE ZONE (HHHZ) INCLUDES BROWARD & DADE COUNTIES.

GENERAL NOTES:

THESE PLANS PERTAIN ONLY TO THE STRUCTURE, INCLUDING MAIN WIND FORCE RESISTING SYSTEM (WFRS), COMPONENTS AND CLADDING, AND BASE RAIL ANCHORAGE. OTHER DESIGN ISSUES, INCLUDING, BUT NOT LIMITED TO, PLUMBING, ELECTRICAL, INGRESS/EGRESS, PROPERTY SET-BACKS, OR OTHER LOCAL ZONING REQUIREMENTS ARE THE RESPONSIBILITY OF OTHERS.

THESE STRUCTURES ARE DESIGNED AS UTILITY/STORAGE BUILDINGS CAPABLE OF SUPPORTING THE DEAD LOAD OF THE STRUCTURE AND APPLICABLE LIVE AND WIND LOADS. IMPROVEMENTS NOT SPECIFICALLY ADDRESSED HEREIN, WHICH EXERT ADDITIONAL LOADS ON THE STRUCTURE SHALL BE AT THE OWNER'S RISK. CAROLINA CARPORTS SHALL NOT BE RESPONSIBLE FOR STRUCTURAL DAMAGE OR FAILURE DUE TO THE APPLICATION OF ADDITIONAL LOADS.

ALL STEEL TUBING SHALL BE 55 KSI STEEL OR BETTER. ALL METAL PANELS SHALL BE 80 KSI STEEL OR BETTER.

FASTEN METAL ROOF AND WALL PANELS TO FRAMING WITH #12" x 3/4" SELF-DRILLING FASTENERS WITH CONTROL SEAL WASHERS AT AN AVERAGE SPACING OF 8" FOR 29 GAUGE PANELS AND 6" FOR 26 GAUGE PANELS.

ALL FIELD CONNECTIONS SHALL BE #12 x 3/4" SELF-DRILLING FASTENERS (SDF) UNLESS NOTED OTHERWISE.

ALL WELDED CONNECTIONS SHALL BE SHOP WELDED UNLESS NOTED OTHERWISE.

GROUND ANCHOR REQUIREMENTS: INSTALL HELICAL ANCHORS WITHIN 6" OF EACH CORNER POST AND AT A MAXIMUM SPACING OF 25' ALONG THE BASE RAIL. INSTALL GROUND RODS (#4 TREADED REBAR) BETWEEN THE HELICAL ANCHORS AT A MAXIMUM SPACING OF 5' AND A MINIMUM SPACING OF 4' ALONG THE BASE RAIL. HELICAL ANCHORS AND GROUND RODS ARE NOT REQUIRED FOR CONCRETE FOOTING AND/OR CONCRETE SLAB CONSTRUCTION. CONCRETE ANCHORS SHALL BE **SIMPSON STRONG-TIE TITEN HD SCREW ANCHOR** OR AN APPROVED EQUAL.



POST/RAFTER BRACING: BRACE ON EVERY POST/RAFTER CONNECTION, EXCEPT FOR END WALLS AND HEADERS.

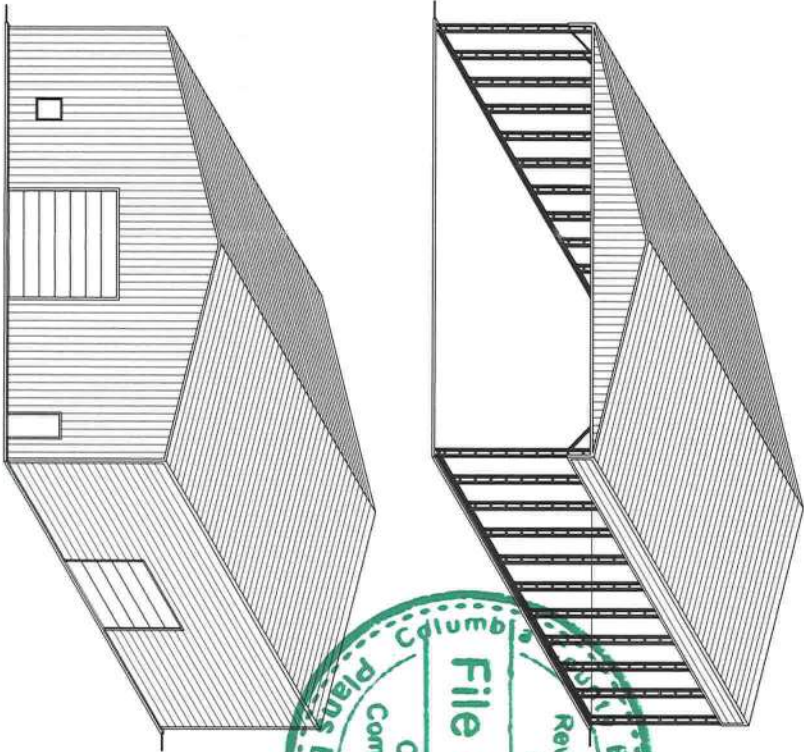
PROVIDE LONGITUDINAL BRACING ON TOP OF THE BOTTOM CHORD OF THE ROOF TRUSS FOR THE FULL LENGTH OF THE BUILDING AS INDICATED.

GALVANIZATION: METAL ACCESSORIES FOR USE IN EXTERIOR WALL CONSTRUCTION AND NOT DIRECTLY EXPOSED TO THE WEATHER SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 153, CLASS B-2. METAL PLATE CONNECTORS, SCREWS, BOLTS AND NAILS EXPOSED DIRECTLY TO THE WEATHER SHALL BE STAINLESS STEEL OR HOT DIPPED GALVANIZED.

STANDARD BUILDING
DETAILS
50 ft SPAN

LIGHT FRAME CONSTRUCTION

NOTE: USE  2 1/2" x 2 1/2" 14 Ga.
 2 1/4" x 2 1/4" 12 Ga.
STEEL TUBE FOR ALL FRAME AND BASE
RAIL MEMBERS UNLESS OTHERWISE SHOWN.



CONCRETE FOUNDATION DESIGN RECOMMENDATIONS:

CONCRETE INFORMATION AND DETAILS SHOWN IN THESE PLANS ARE FOR INFORMATION ONLY. THE CONCRETE SLAB AND FOUNDATION ARE BY OTHERS. THE OWNER IS RESPONSIBLE FOR PROVIDING A SUITABLE FOUNDATION FOR THE PROPOSED STRUCTURE AND COORDINATING CONCRETE STRENGTH AND FOUNDATION DEPTH REQUIREMENTS WITH THE LOCAL BUILDING CODE OFFICIALS.

CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS OR AS REQUIRED BY LOCAL BUILDING CODE. THE USE OF HIGHER STRENGTH CONCRETE IS ACCEPTABLE.

COVER OVER REINFORCING STEEL:

MINIMUM CONCRETE OVER REINFORCING BARS SHALL BE 3 INCHES WHERE CONCRETE IS CAST AGAINST AND PERMANENTLY IN CONTACT WITH THE EARTH OR EXPOSED TO THE EARTH OR WEATHER AND 1 1/2" ELSEWHERE.

REINFORCING STEEL:

THE REINFORCING STEEL SHALL BE MINIMUM GRADE 40. THE USE OF FIBER REINFORCED CONCRETE (FRC) OR WELDED WIRE FABRIC (WWF) IS ACCEPTABLE.



CAROLINA CARPORTS INC.
P.O. BOX 1263
DOBSON, NC 27017
TOLL FREE 1-800-670-4262
LOCAL 336-367-6400
FAX 336-367-6410

This document is the property of Carolina Carports, Inc. Use of these plans without the permission of Carolina Carports is prohibited.

METAL CARPORT INSTALLATION PLANS AND DETAILS

AND

FRAMING AND FASTENER SPECIFICATIONS

CAROLINA CARPORTS, INC.
187 Cardinal Ridge Trail
DOBSON, NORTH CAROLINA 27017

THE OWNER IS RESPONSIBLE FOR OBTAINING A BUILDING PERMIT, IF NEEDED, AND FOR COMPLYING WITH ALL LOCAL BUILDING CODE REQUIREMENTS.

THIS IS TO CERTIFY THAT THE CALCULATIONS AND SPECIFICATIONS HEREIN HAVE BEEN PREPARED BY THE UNDERSIGNED PROFESSIONAL ENGINEER, AND ARE IN ACCORDANCE WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE 2021 AND SECTION 1609 OF THE FLORIDA BUILDING CODE, EIGHTH EDITION (2023). THE PLANS ARE VALID UNTIL THE NEXT REVISION OF THE FLORIDA BUILDING CODE.

BUILDING CODE INFORMATION	
OCCUPANCY CATEGORY	II
USE GROUP	U or S
CONSTRUCTION TYPE	2B

IMPORTANCE FACTORS	
WIND Iw	1.0
SNOW Is	1.0
EARTHQUAKE Ie	1.0

DESIGN LOADS	
MIN. DEAD LOAD	5 PSF
MIN. FLOOR LIVE LOAD	125 PSF
MIN. ROOF LIVE LOAD	20 PSF
MIN. GROUND SNOW LOAD	0 PSF
MAX. GROUND SNOW LOAD	
MIN. ULTIMATE WIND SPEED	SEE TABLE 1
MAX. ULTIMATE WIND SPEED	
EXPOSURE CATEGORY	
SEISMIC RESPONSE COEFFICIENT	0.500

These plans have been provided for the purpose of obtaining a building permit for:

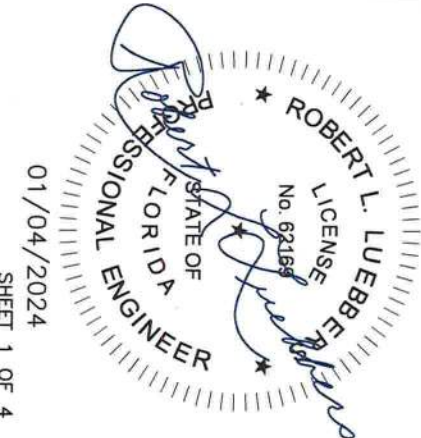
Beryl Sanders

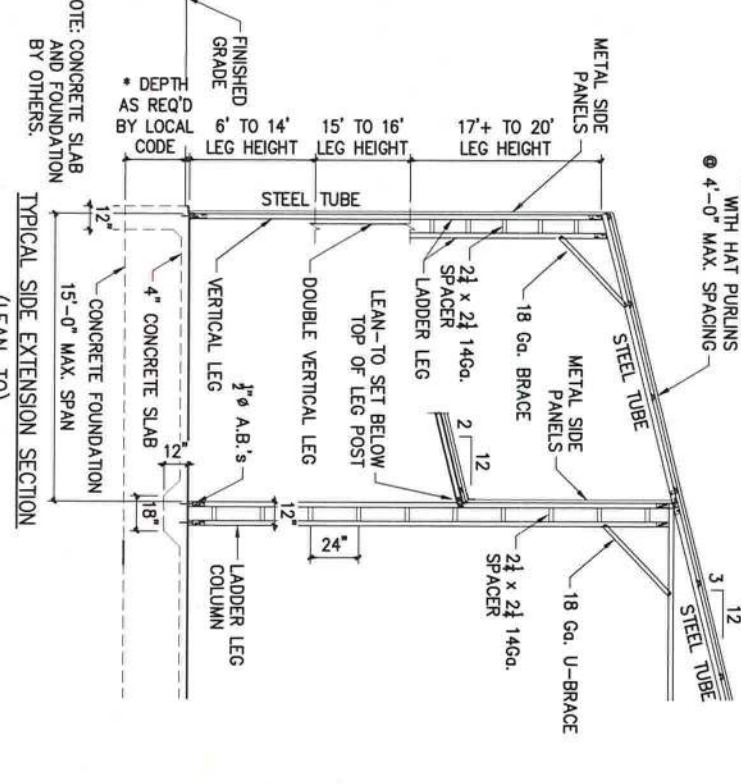
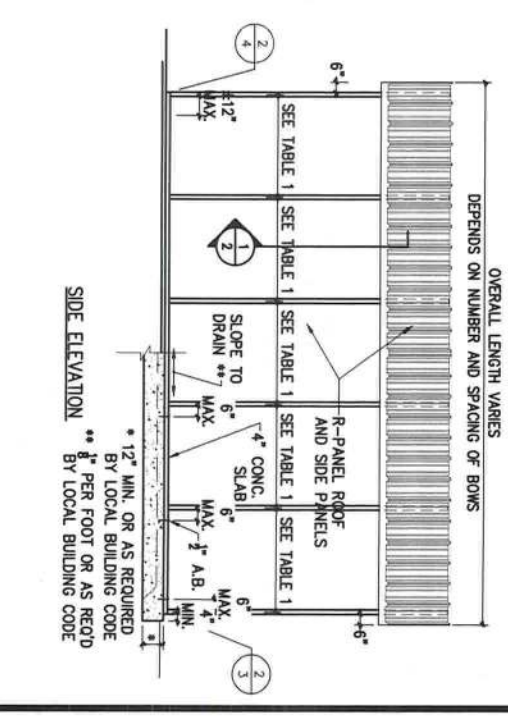
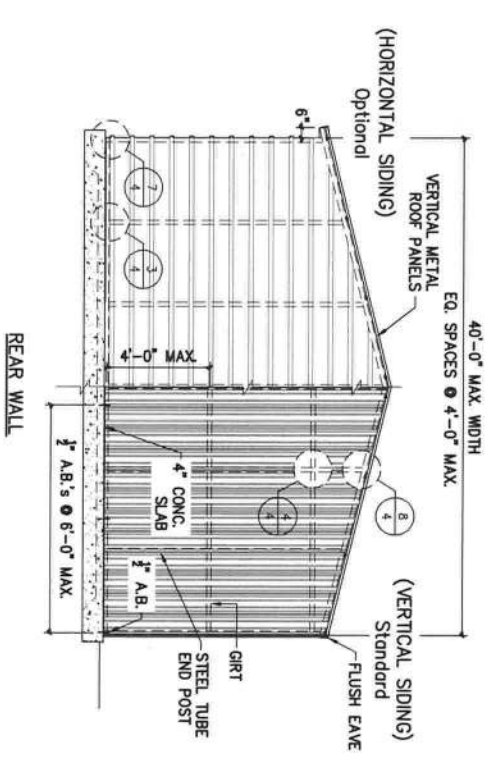
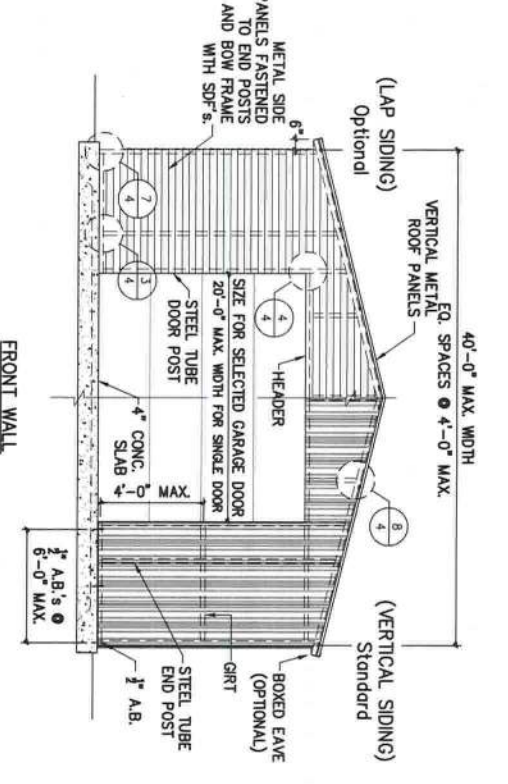
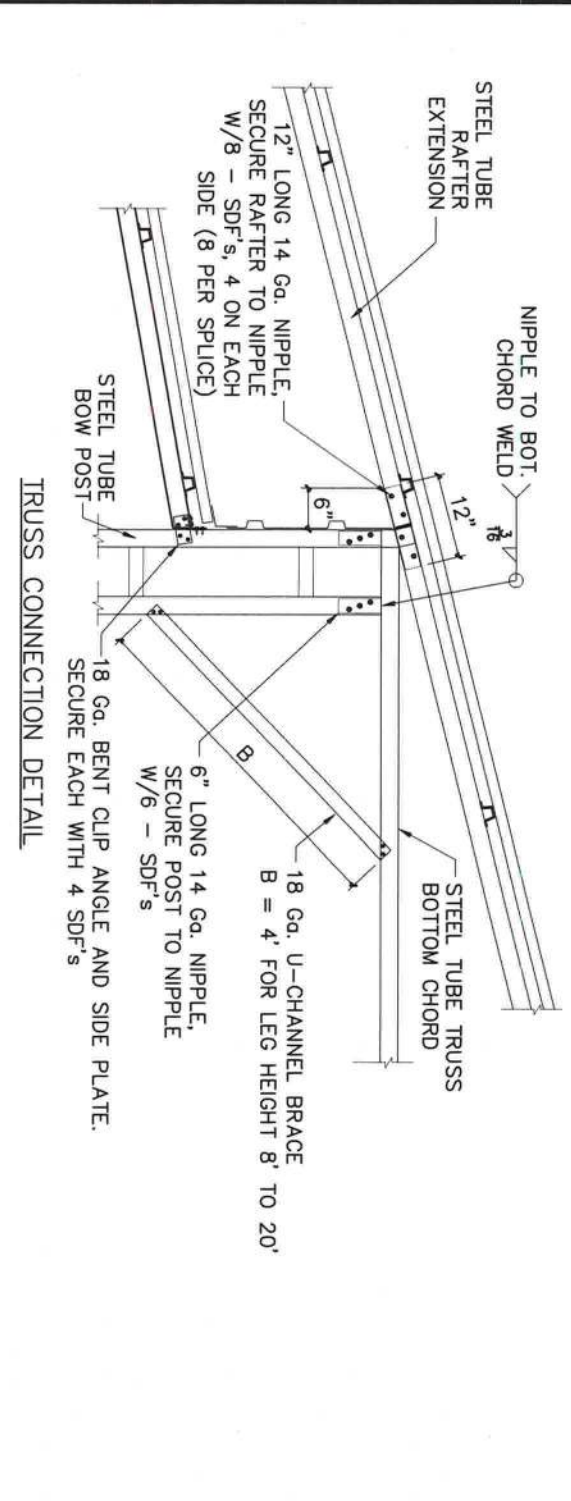
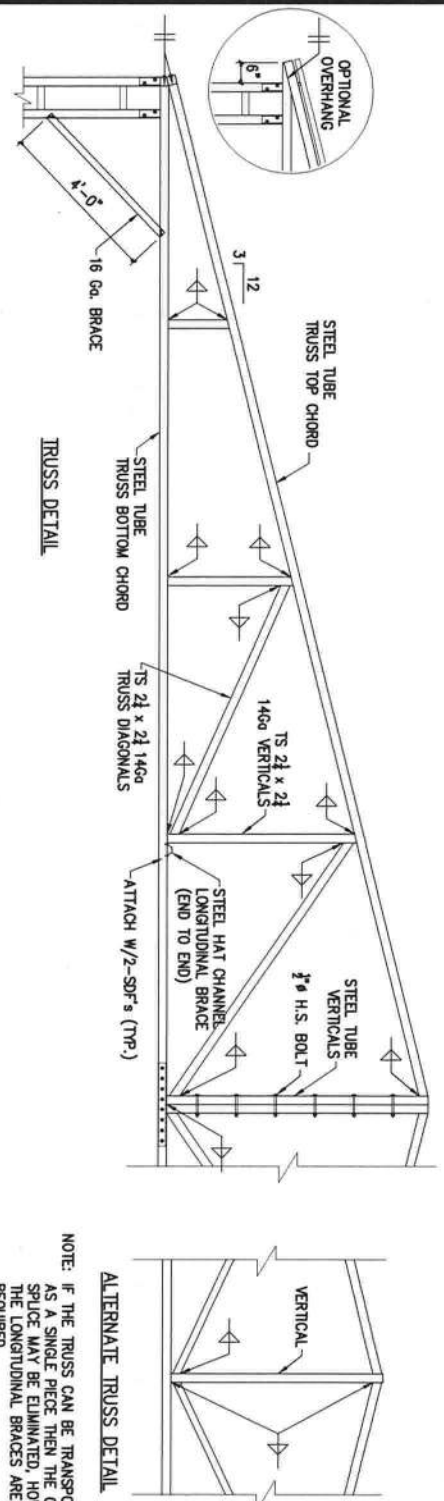
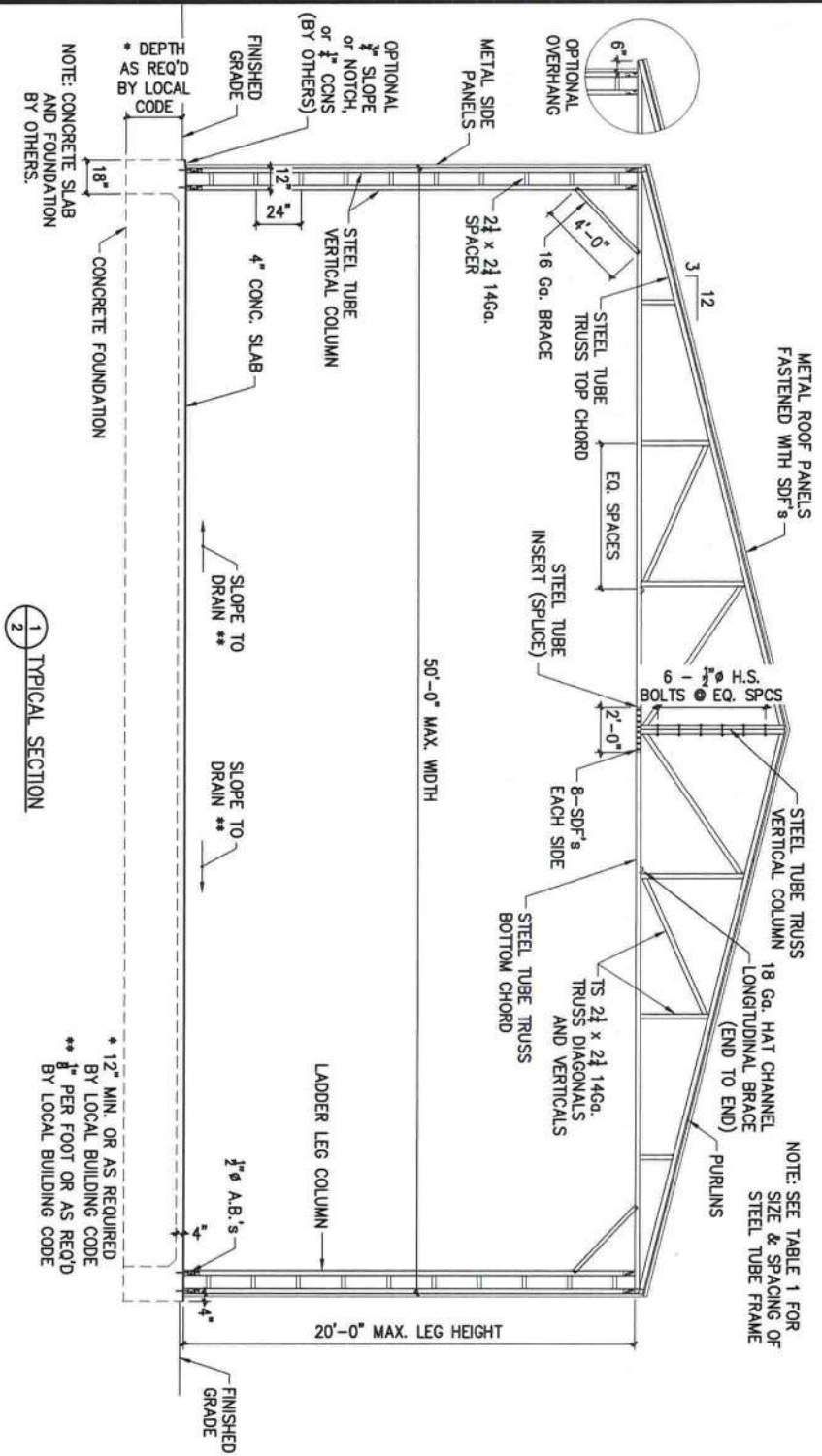
321 SW Greenwood Terrace

Fort White

State: FL
Zip: 32038

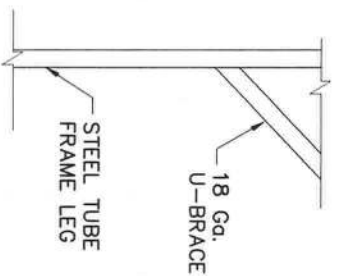
Use of these plans by anyone else or for any other purpose is prohibited.



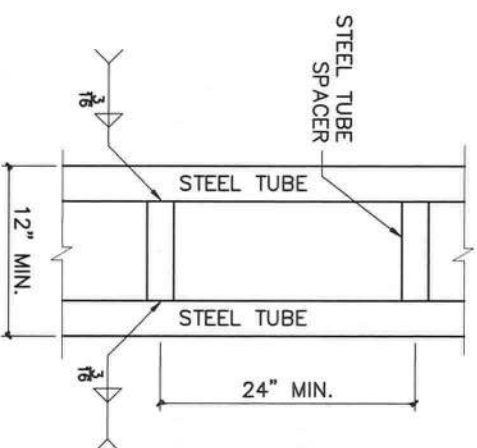


ROBERT L. LUEBBE
LICENSE No. 62168
STATE OF FLORIDA
PROFESSIONAL ENGINEER

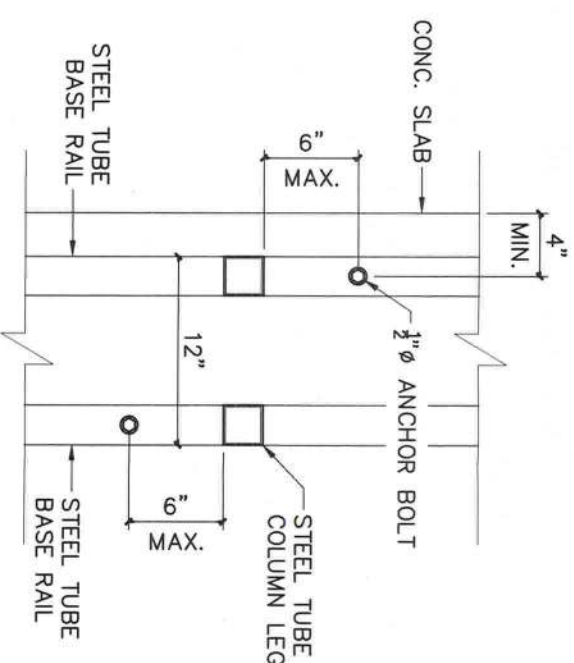
01/04/2024
SHEET 2 OF 4



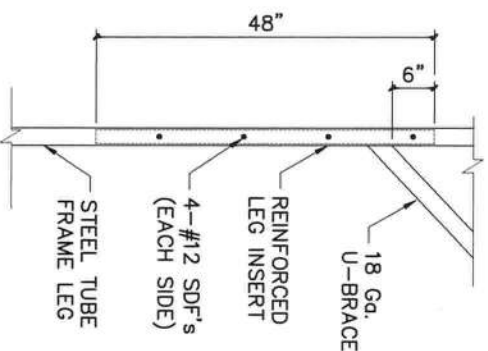
SINGLE LEG
(LEG HEIGHTS 8' to 12')
LEAN-TO ONLY



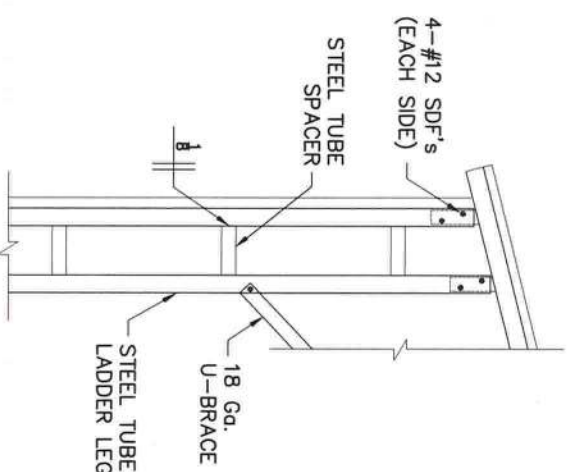
LADDER LEG COLUMN



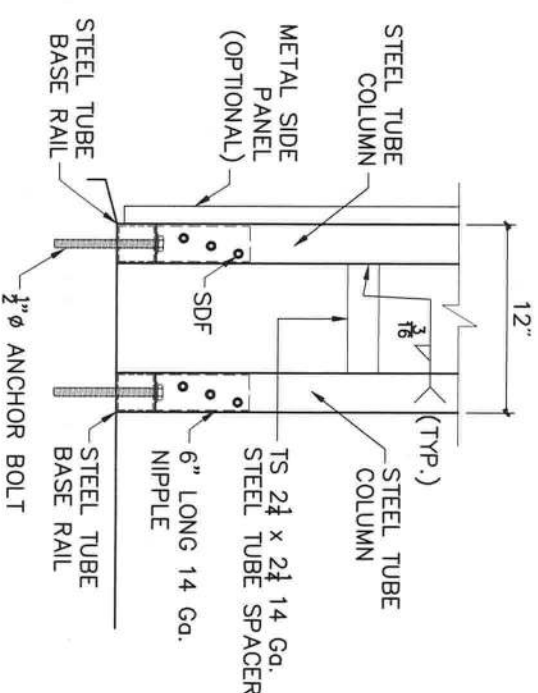
LADDER LEG - BASE RAIL CONNECTION



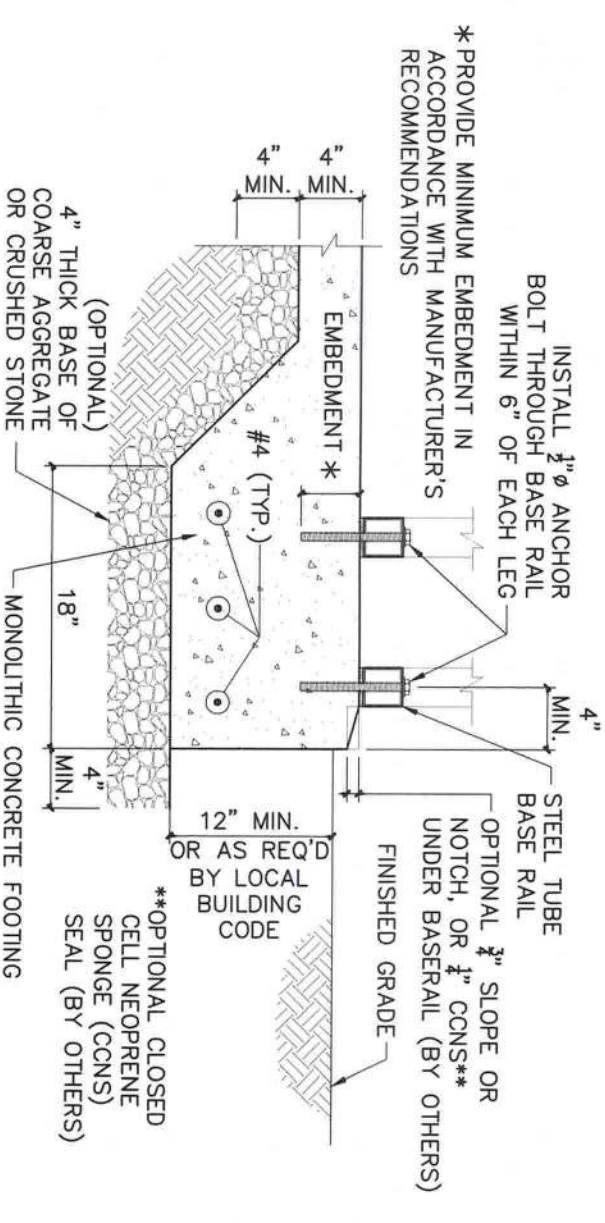
REINFORCED LEG INSERT
(LEG HEIGHTS 13' to 14')
LEAN-TO ONLY



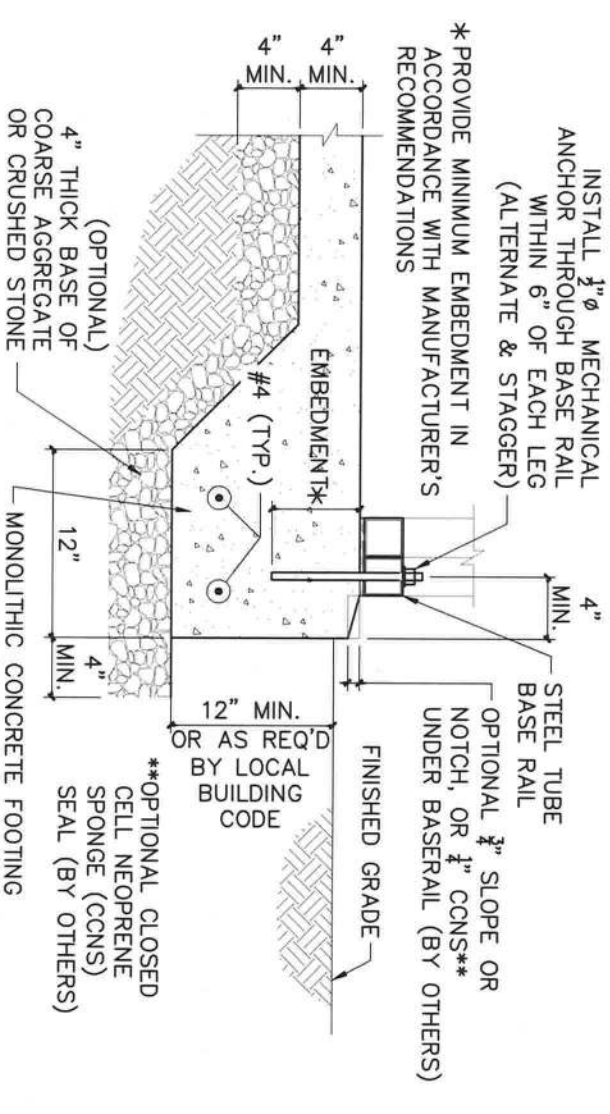
LADDER LEG
(LEG HEIGHTS 17' to 20')



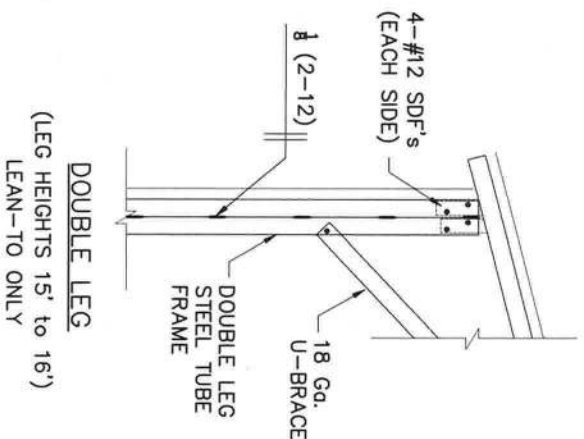
2A LADDER LEG/BASE RAIL CONNECTION



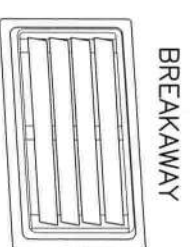
2 CONCRETE BASE RAIL ANCHORAGE
(LADDER LEG)



2B CONCRETE BASE RAIL ANCHORAGE
(SINGLE OR DOUBLE LEG)



DOUBLE LEG
(LEG HEIGHTS 15' to 16')
LEAN-TO ONLY

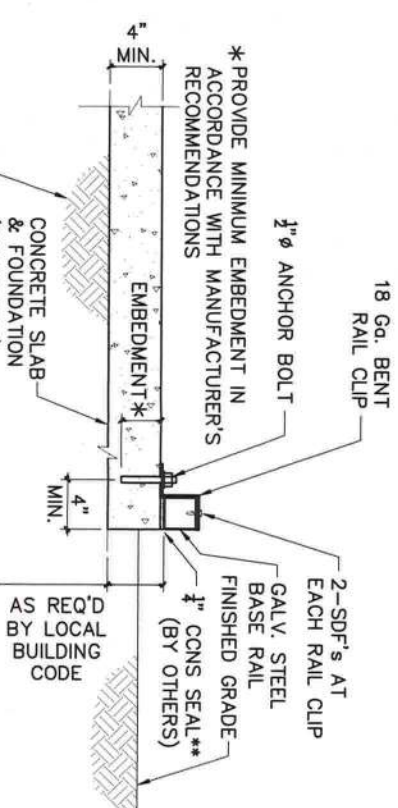


CRAWL SPACE DOOR SYSTEMS, INC.

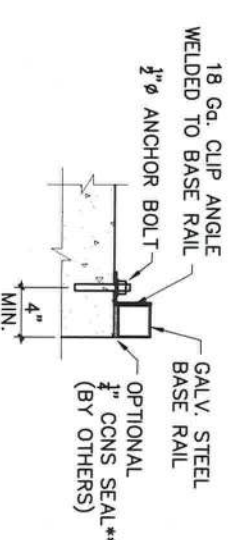
5741 Bayside Road, #105
Virginia Beach, VA 23455
Engineered Flood Vent
Model CSBA816

OR Approved Equal

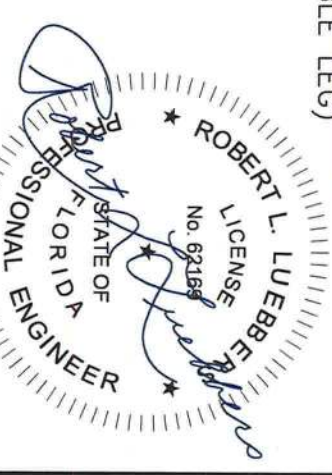
FLOOD VENTS



2C ALTERNATE BASE RAIL ANCHORAGE
LEAN-TO ONLY

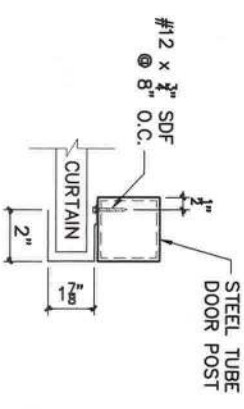
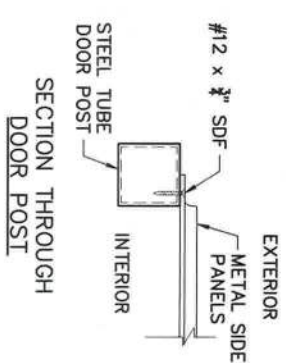
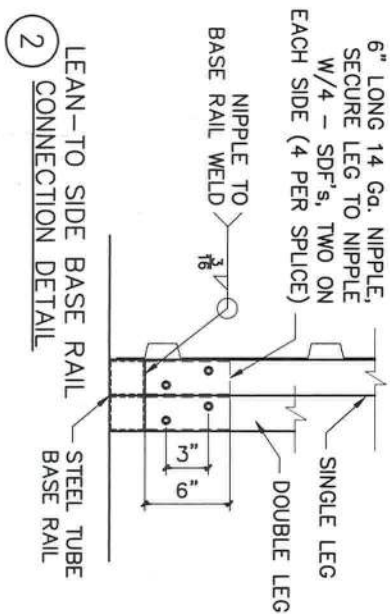
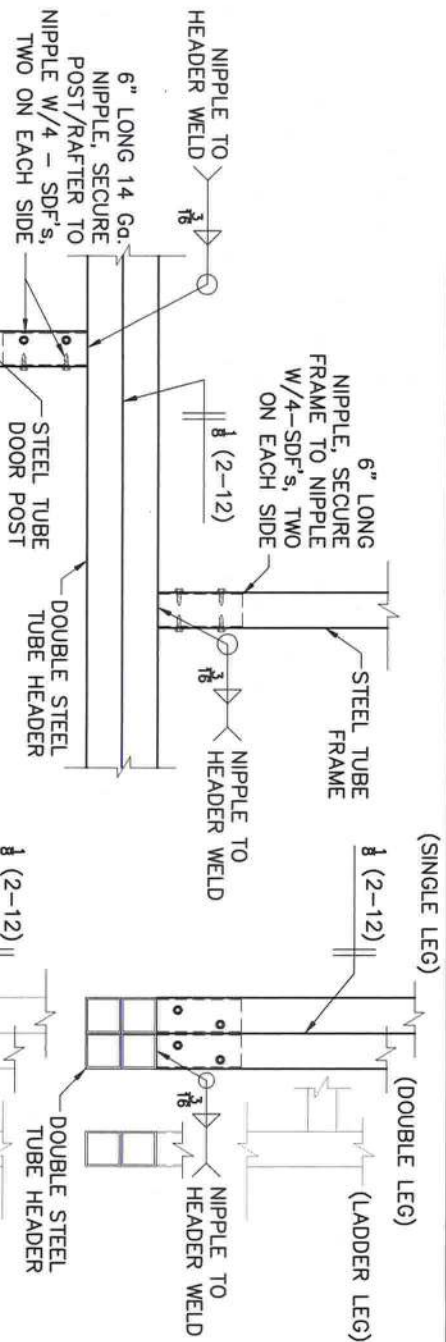


2D ALTERNATE BASE RAIL CLIP
LEAN-TO ONLY

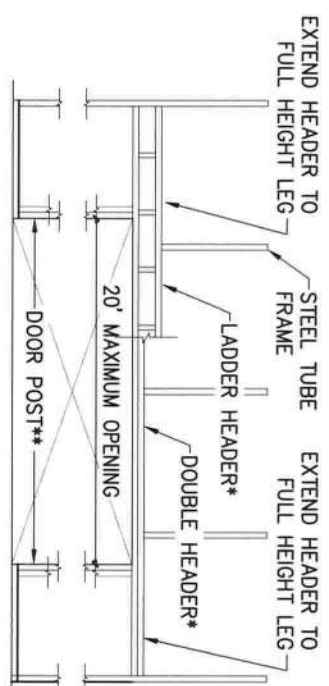


01/04/2024

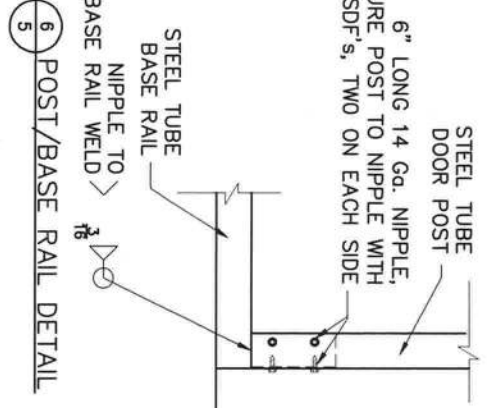
SHEET 3 OF 4



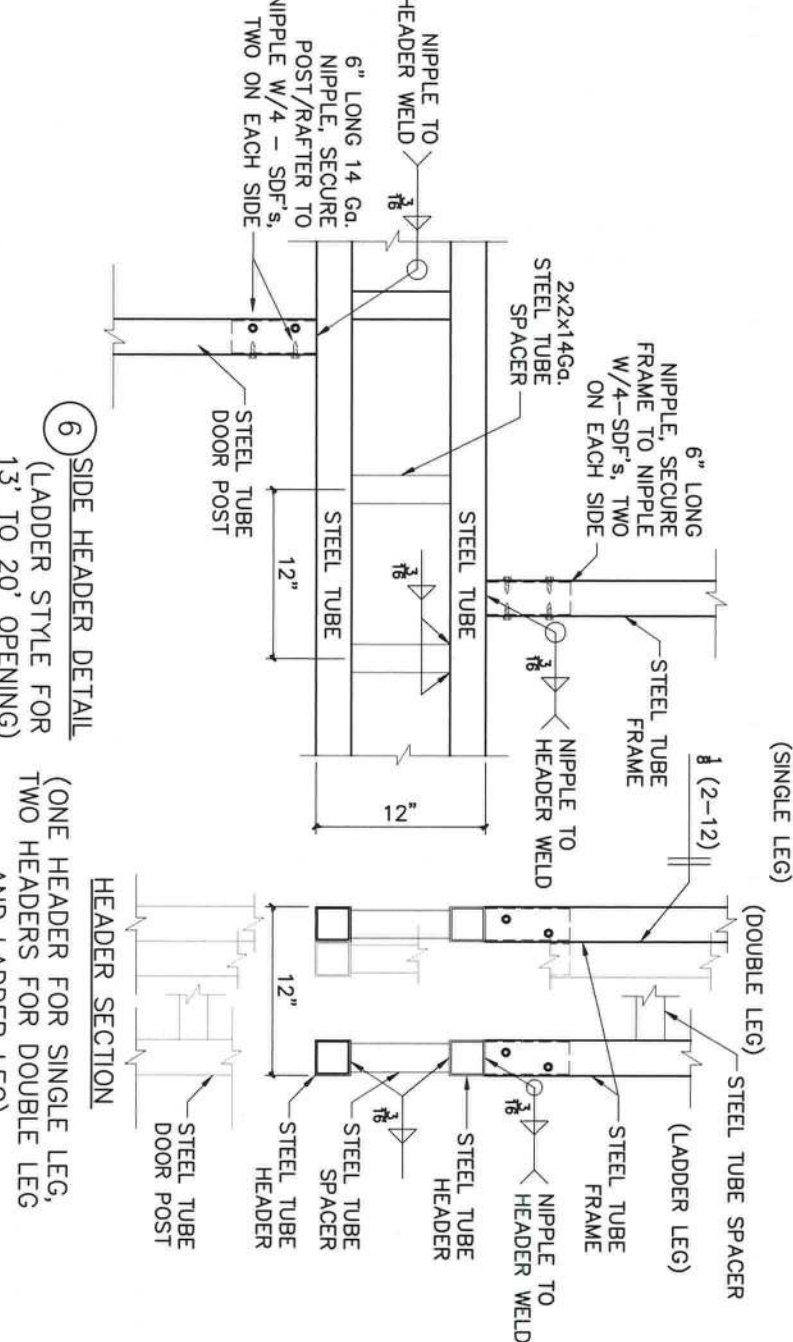
1 SIDE HEADER DETAIL
(DOUBLE HEADER FOR 8' TO 12' OPENING,
ONE HEADER FOR SINGLE LEG,
AND LADDER LEG)



* USE DOUBLE HEADER TO 12' DOOR, ** USE SINGLE DOOR POST TO 12' DOOR,
USE LADDER HEADER TO 20' DOOR, USE DOUBLE DOOR POST TO 20' DOOR.

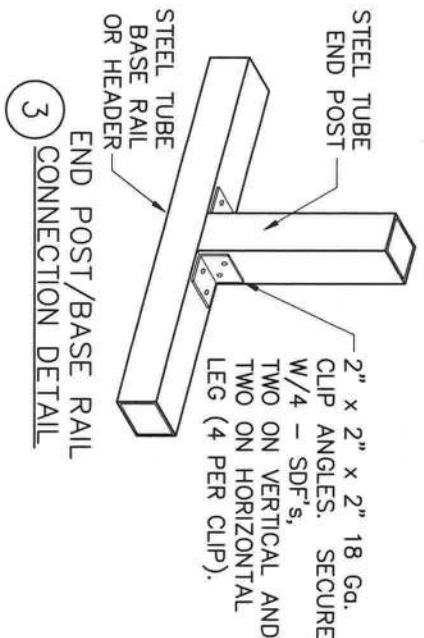


5 POST/BASE RAIL DETAIL

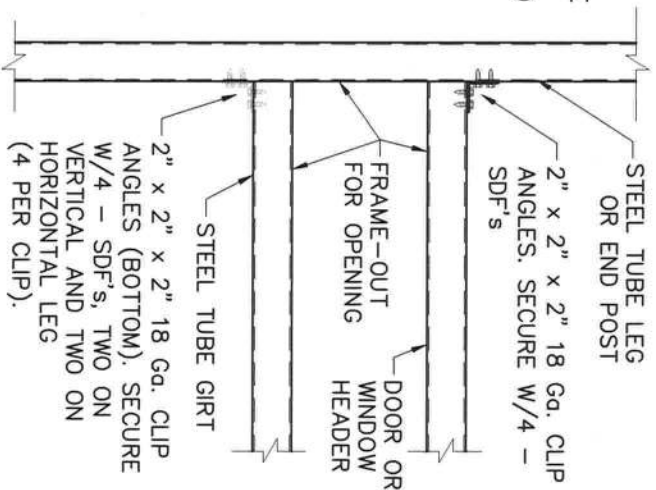


6 SIDE HEADER DETAIL
(LADDER STYLE FOR 13' TO 20' OPENING)

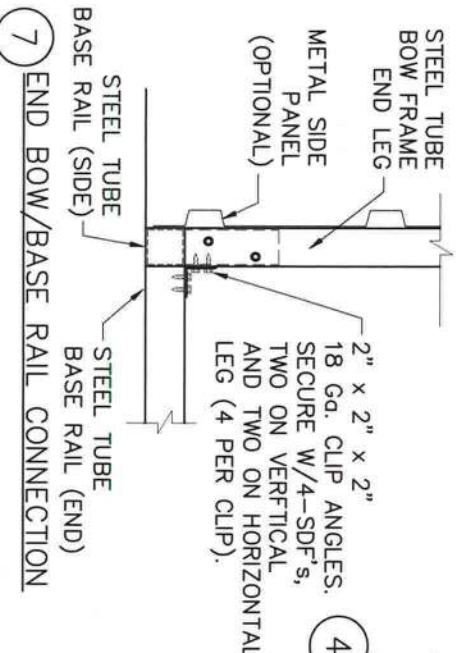
(ONE HEADER FOR SINGLE LEG,
TWO HEADERS FOR DOUBLE LEG
AND LADDER LEG)



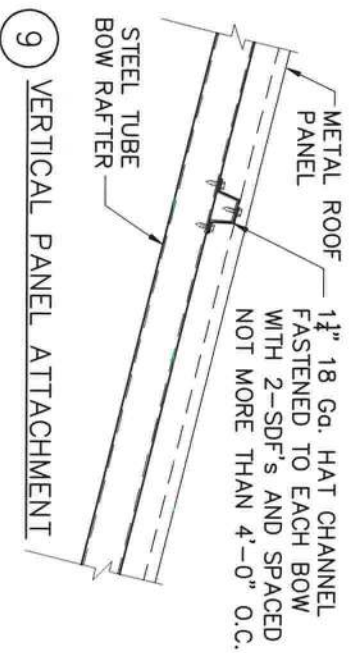
3 END POST/BASE RAIL CONNECTION DETAIL



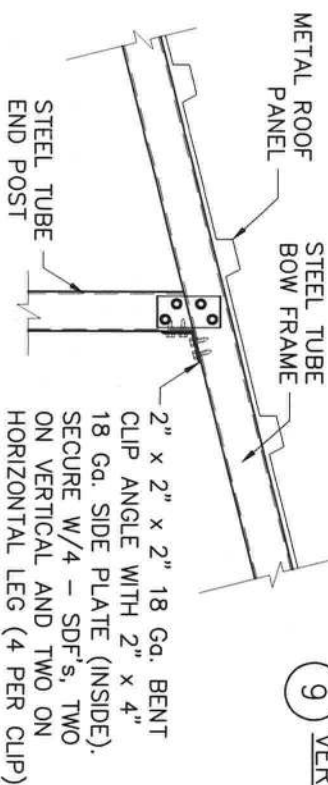
4 ENDWALL TO HEADER AND GIRT TO POST CONNECTION



7 END BOW/BASE RAIL CONNECTION

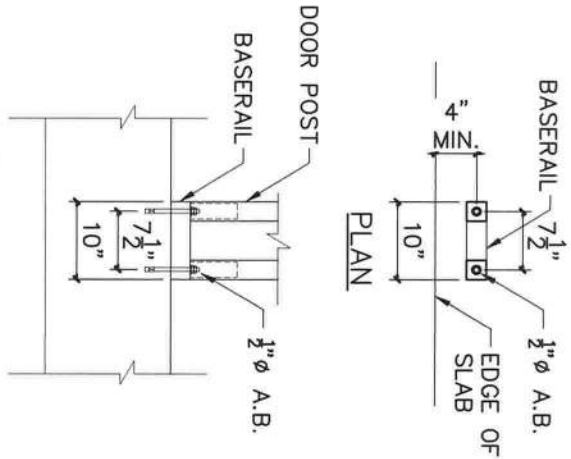


9 VERTICAL PANEL ATTACHMENT



8 END POST TO BOW FRAME CONNECTION

MINIMUM DISTANCE
BETWEEN DOORWAYS
(12" MINIMUM IS PREFERRED,
10" MINIMUM IS ACCEPTABLE.)



SECTION THROUGH ROLL-UP DOOR POST

