

STANDARD CARPORT DETAILS

26 ft to 30 ft SPAN



CAROLINA CARPORTS INC.
P.O. BOX 1263
DOBSON, NC 27017
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LOCAL 338-387-6400
FAX 338-387-6410

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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 2015 INTERNATIONAL BUILDING CODES AND THE 2018 NORTH CAROLINA BUILDING CODE.

DESIGN LOADS	
MIN. DEAD LOAD	5 PSF
MIN. FLOOR LIVE LOAD	20 PSF
MIN. ROOF LIVE LOAD	20 PSF
MIN. GROUND SNOW LOAD	
MAX. GROUND SNOW LOAD	
MIN. ULTIMATE WIND SPEED	SEE TABLE 1
MAX. ULTIMATE WIND SPEED	
EXPOSURE CATEGORY	
MAX. SEISMIC DESIGN CATEGORY	02

BUILDING CODE INFORMATION	
OCCUPANCY CATEGORY	I, II, U or S
USE GROUP	2B
CONSTRUCTION TYPE	
IMPORTANCE FACTORS	
WIND W	1.0
SNOW S	0.8, 1.0
EARTHQUAKE E	1.0

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

Name: **Keith Burakowski** State: **NC**
Address: **54 Paul Clayton Circle**
City: **Coala** Zip: **27521**

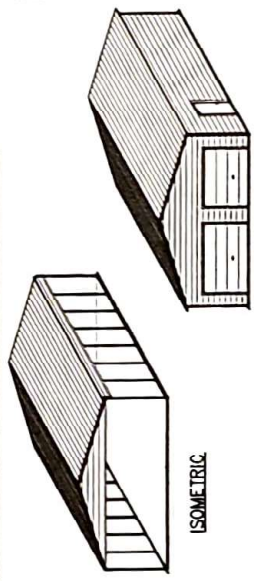
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LIGHT FRAME CONSTRUCTION
NOTE: THESE PLANS MAY BE USED FOR SPANS LESS THAN 36 FEET.

NOTE: USE $\odot 2\frac{1}{2}" \times 2\frac{1}{2}" \times 14$ Ga. STEEL TUBE FOR ALL FRAME AND BASE RAIL MEMBERS UNLESS OTHERWISE SHOWN.

NOTE: THESE PLANS INCLUDE STANDARD DETAILS THAT CAN BE USED FOR A WIDE RANGE OF APPLICATIONS. IF SITE SPECIFIC PLANS ARE REQUIRED, A SEPARATE SET OF PLANS WILL NEED TO BE PREPARED.



ISOMETRIC

ISOMETRIC

CONCRETE FOUNDATION DESIGN RECOMMENDATIONS:
CONCRETE INFORMATION AND DETAILS SHOWN IN THESE PLANS ARE FOR INFORMATION ONLY. 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 COVER IN FOUNDING BARS SHALL BE 3 INCHES WHERE BARS ARE EXPOSED TO THE WEATHER AND 1 1/2 INCHES WHERE BARS ARE ENCASED IN CONCRETE.

REINFORCING STEEL SHALL BE WELDED OR WELDED WIRE FABRIC (WFW) IS ACCEPTABLE.

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 or C	105 TO 150	82 TO 117	35	5.0	26 Gauge	8
	151 TO 170	118 TO 132	40	4.0		
			50	4.0 (12 Ga.)		

NOTES: 1. Specifications applicable to 29 gauge metal panels fastened directly to 12 or 14 gauge steel tube bow frames.
2. Fasteners consist of #12 x 3" self-drilling screws without control seal washers.
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.

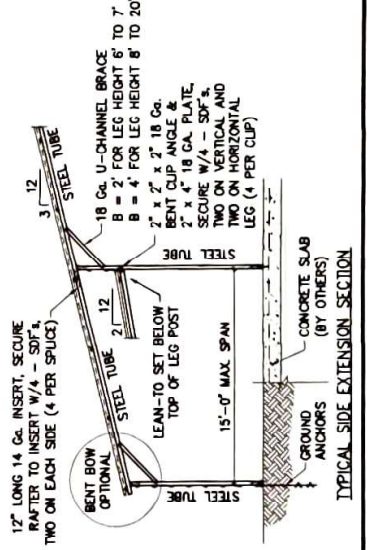
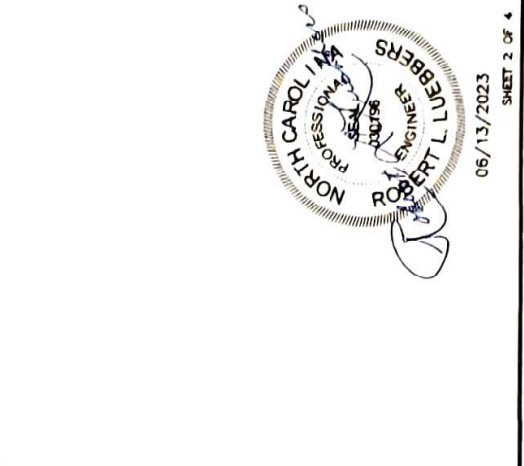
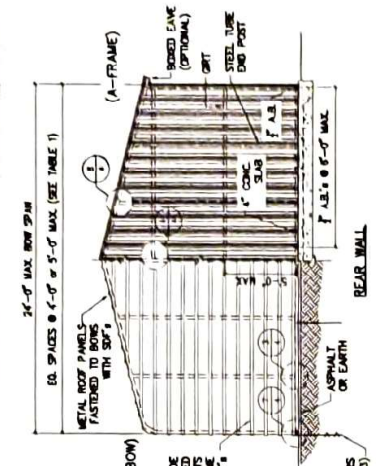
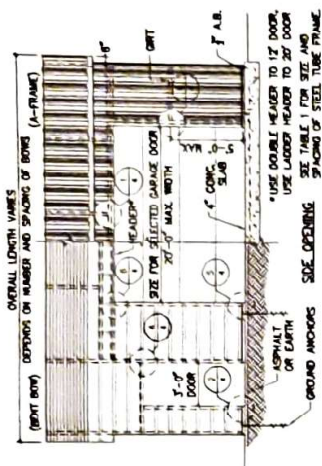
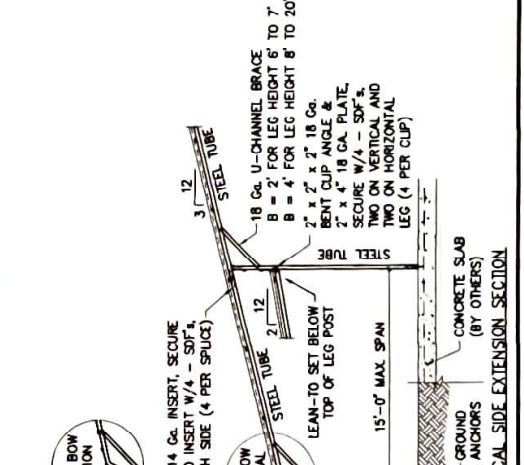
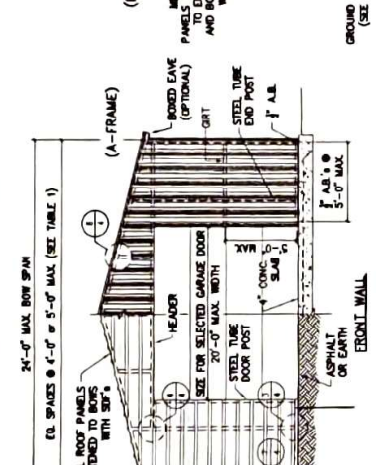
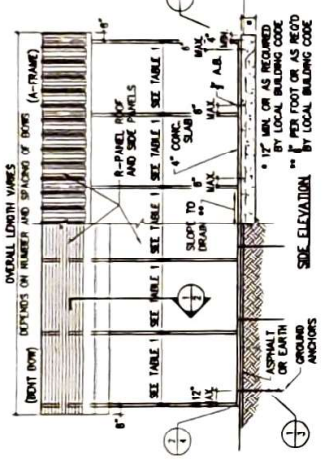
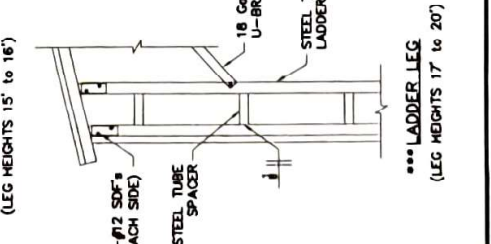
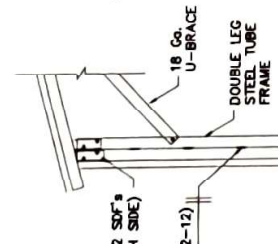
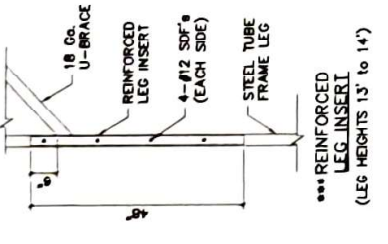
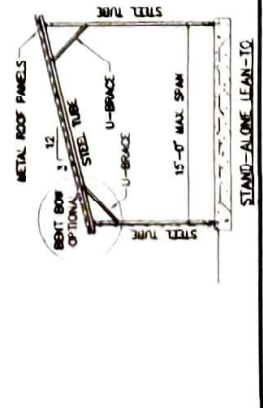
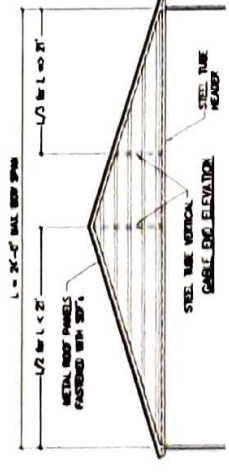
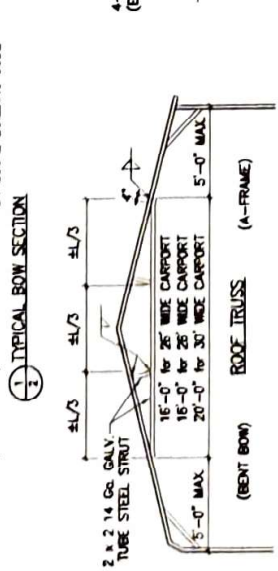
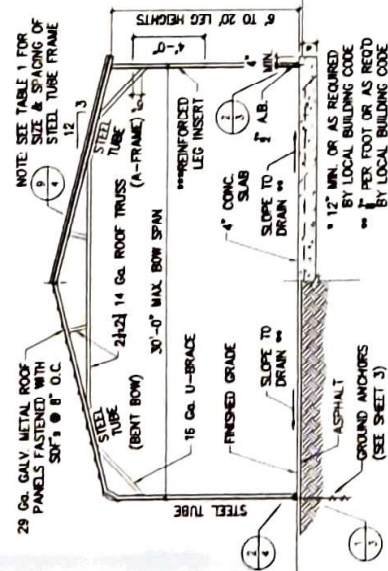
TABLE 1 (HIGH WIND REGION) BOW/RAFTER FRAME, END POST, GROUND ANCHOR AND PANEL FASTENER SPACING SPECIFICATIONS

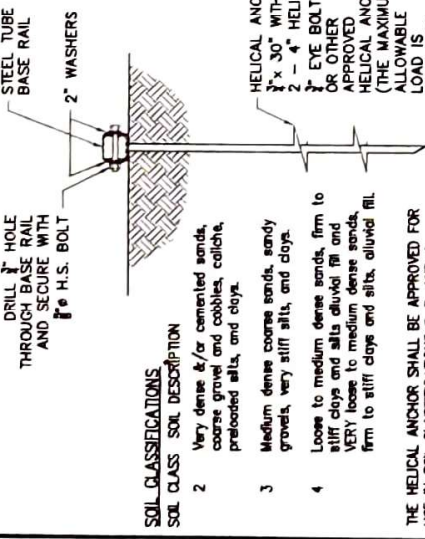
WIND EXPOSURE CATEGORY	ULTIMATE WIND SPEED (MPH)	NOMINAL WIND SPEED (MPH)	MAXIMUM GROUND SNOW LOAD (PSF)	MAXIMUM POST/RAFTER SPACING (FEET)	AVERAGE FASTENER SPACING ON-CENTERS ALONG RAFTERS OR PURLINS, AND POSTS OR GIRTS (INCHES)	
					METAL PANELS	SPACING
B or C	151 TO 170	118 TO 132	20	4.0	26 Gauge	6

NOTES: 1. Specifications applicable to 29 gauge and 26 gauge metal panels fastened directly to 12 or 14 gauge steel tube bow frames.
2. Fasteners consist of #12 x 3" 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.

GENERAL NOTES:

- THESE PLANS PERTAIN ONLY TO THE STRUCTURE, INCLUDING MAIN WIND FORCE RESISTING SYSTEM (WFRS), COMPONENTS AND CLADDING, AND BASE NAIL ANCHORAGE OTHER DESIGN ISSUES, INCLUDING, BUT NOT LIMITED TO, PLUMBING, ELECTRICAL, DRESSING, 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.
- THE SPACING INDICATED IN THE ABOVE TABLE IS THE MAXIMUM SPACING FOR THE MAIN WIND FORCE RESISTING SYSTEM. A CLOSER SPACING MAY BE NEEDED TO MEET LOCAL BUILDING CODE AND/OR SITE SPECIFIC REQUIREMENTS.
- ALL STEEL TUBING SHALL BE 60 KSI STEEL OR BETTER. ALL METAL PANELS SHALL BE 80 KSI STEEL OR BETTER.
- PANTEL METAL ROOF AND WALL PANELS TO FRAMING WITH #12 x 3" SELF DRILLING FASTENERS WITH CONTROL SEAL WASHERS AT AN AVERAGE SPACING OF 8" FOR 26 GAUGE PANELS AND 6" FOR 28 GAUGE PANELS.
- ALL FIELD CONNECTIONS SHALL BE #12 x 3" SELF DRILLING FASTENERS (SDF) UNLESS NOTED OTHERWISE.
- ALL WELDED CONNECTIONS SHALL BE SHOP WELDED UNLESS NOTED OTHERWISE.
- GROUND ANCHOR REQUIREMENTS: INSTALL HELIX ANCHORS ALONG BASE RAIL WITHIN 6" OF EACH CORNER POST AND AT A MAXIMUM SPACING OF 25' ALONG THE BASE RAIL. INSTALL GROUND ANCHORS (24 THREADED REBAR) BETWEEN THE HELIX ANCHORS WITHIN 6" OF EACH POST ALONG THE BASE RAIL. HELIX ANCHORS AND GROUND ANCHORS ARE NOT REQUIRED FOR CONCRETE FOOTING AND/OR CONCRETE SLAB CONSTRUCTION.
- INSTALL CONCRETE ANCHORS WITHIN 6" OF EACH VERTICAL POST ALONG SIDE AND END BASE NAILS. USE 1/4" REBAR/REINFORCING WIRE OR SIMILAR STRONG-TIE STRONG BOLT-2 WEDGE ANCHORS, OR 1/4" REBAR/TAPCON'S OR TITAN HD SPOW ANCHORS OR AN APPROVED EQUAL.
- POST/RAFTER BRACING: BRACE ON EVERY POST/RAFTER CONNECTION, EXCEPT FOR END WALLS AND HEADERS.
- GAUZHIFICATION: METAL ANCHORS 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 CONNECTIONS, SCHEM'S, BOLTS AND NAILS EXPOSED DIRECTLY TO THE WEATHER SHALL BE STAINLESS STEEL OR HOT DIPPED GALVANIZED.





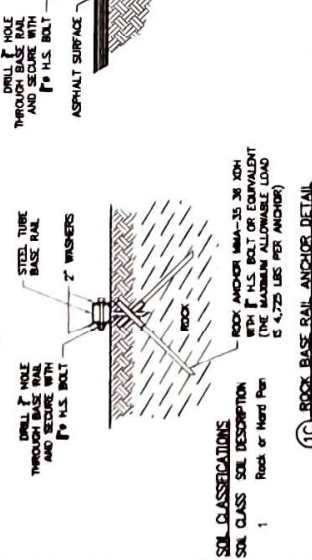
SOIL CLASSIFICATIONS

- SOIL CLASS SOIL DESCRIPTION**
- 2 Very dense &/or cemented sands, coarse gravel and cobbles, caliche, preloaded silts, and clay.
 - 3 Medium dense coarse sands, sandy gravels, very stiff silts, and clays.
 - 4 Loose to medium dense sands, firm to stiff clays and silts, silty clays, and silty clays and silts, silty clays, and silty clays.

THE HELICAL ANCHOR SHALL BE APPROVED FOR USE IN SOIL CLASSIFICATIONS 2, 3, AND 4.

* Taken from HUD "Standard for Installation of Mobile Homes"

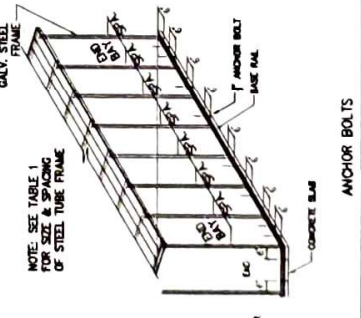
1 SOIL-BASE RAIL ANCHOR DETAIL



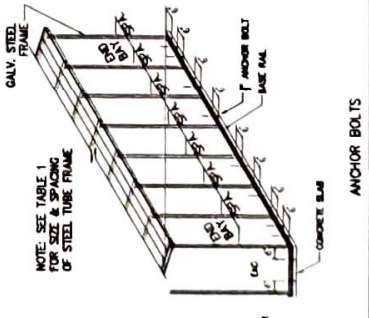
SOIL CLASSIFICATIONS

- SOIL CLASS SOIL DESCRIPTION**
- 1 Rock or Hard Pan
 - 2 Rock or Hard Pan
 - 3 Rock or Hard Pan
 - 4 Rock or Hard Pan

NOTE: IF THE DISTANCE BETWEEN HELICAL ANCHORS EXCEEDS 20\"/>

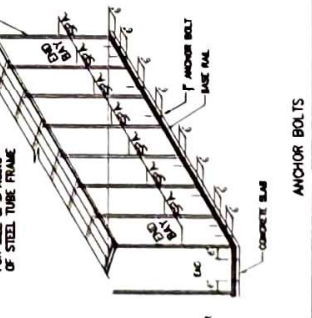


1B ASPHALT ANCHOR DETAIL

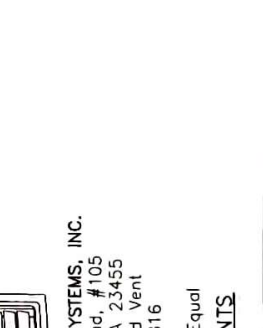


1C ROCK-BASE RAIL ANCHOR DETAIL

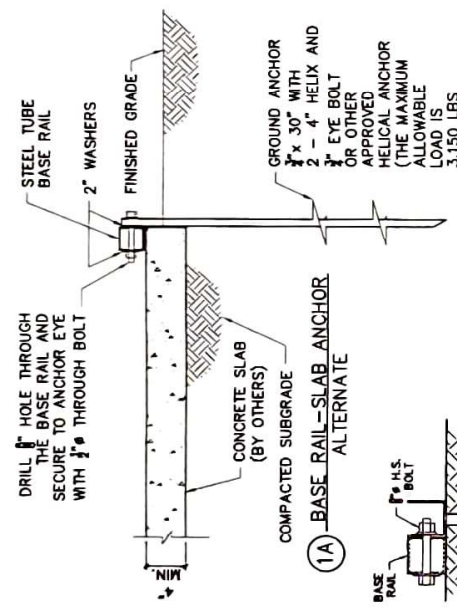
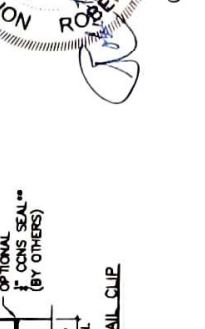
NOTE: SEE TABLE 1 FOR SIZE & SPACING OF STEEL TUBE FRAME



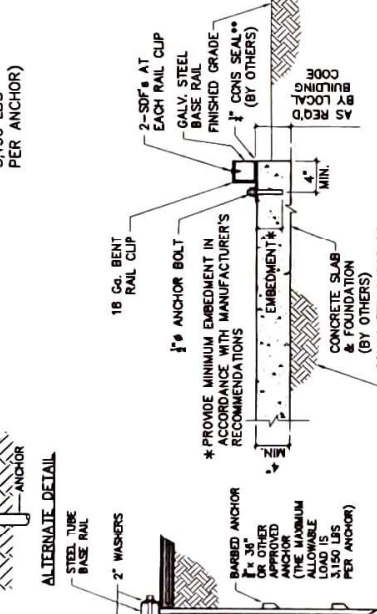
2 CONCRETE BASE RAIL ANCHORAGE (SINGLE LEG)



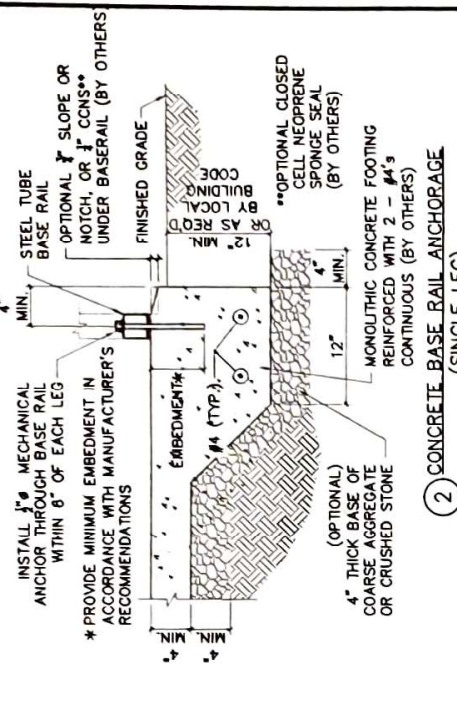
2B CONCRETE BASE RAIL ANCHORAGE (DOUBLE LEG)



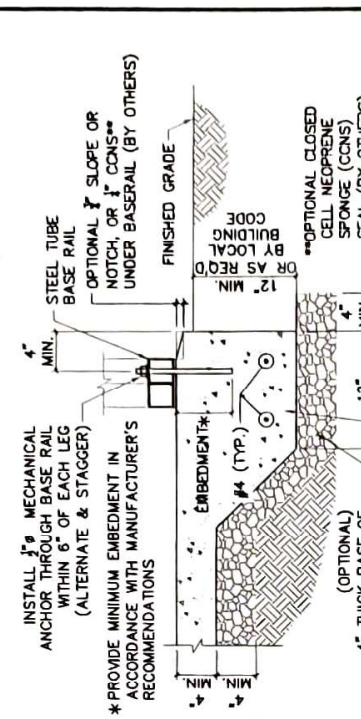
2C ALTERNATE BASE RAIL ANCHORAGE



2D ALTERNATE BASE RAIL CLIP



2 CONCRETE BASE RAIL ANCHORAGE (SINGLE LEG)



2B CONCRETE BASE RAIL ANCHORAGE (DOUBLE LEG)

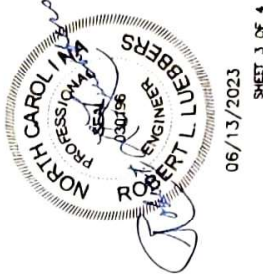


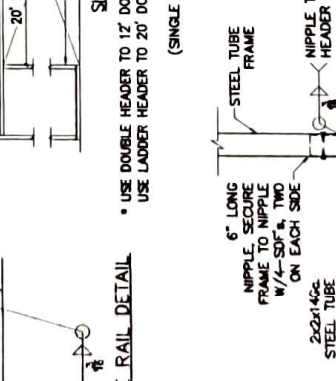
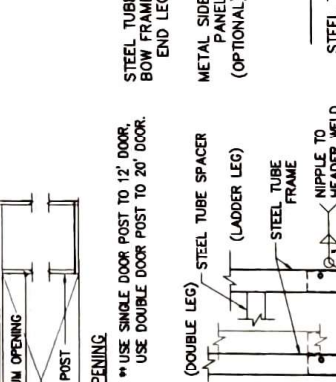
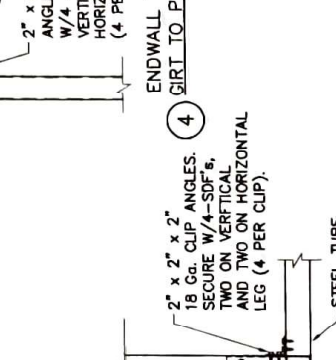
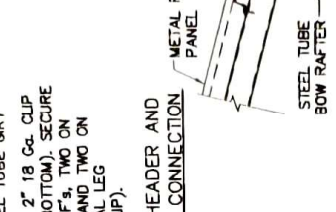
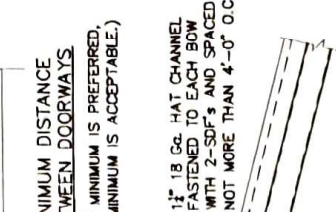
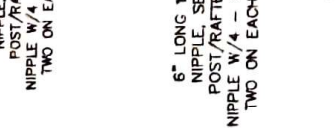
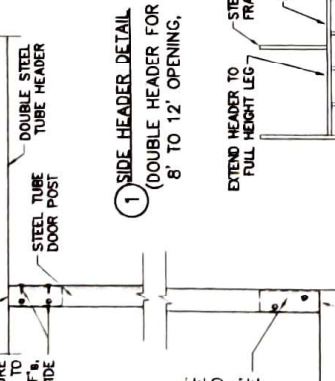
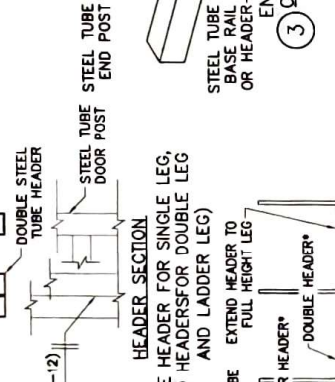
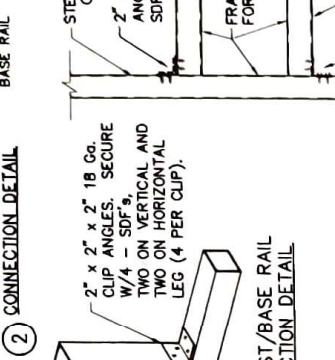
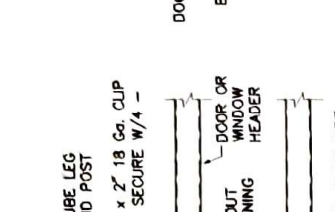
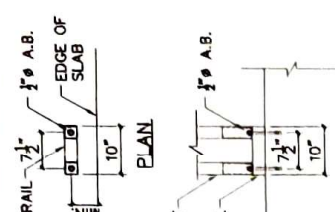
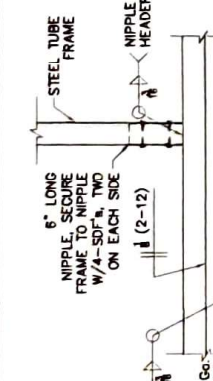
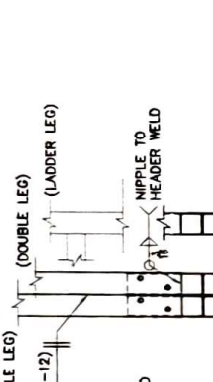
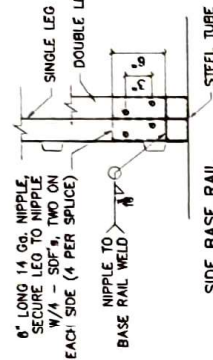
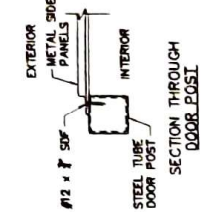
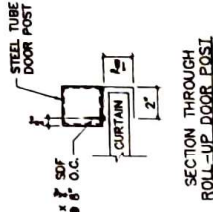
2D ALTERNATE BASE RAIL CLIP

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

OR Approved Equal

FLOOD VENTS





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

1" 18 Gg HAT CHANNEL FASTENED TO EACH BOW WITH 2-SDF'S AND SPACED NOT MORE THAN 4'-0" O.C.

END WALL TO HEADER AND GIRTS TO POST CONNECTION

4

2" x 2" x 2" 18 Gg CLIP ANGLES. SECURE W/4-SDF'S, TWO ON VERTICAL AND TWO ON HORIZONTAL LEG (4 PER CLIP).

7

2" x 2" x 2" 18 Gg CLIP ANGLES. SECURE W/4-SDF'S, TWO ON VERTICAL AND TWO ON HORIZONTAL LEG (4 PER CLIP).

8

2" x 2" x 2" 18 Gg BENT CLIP ANGLE WITH 2" x 4" 18 Gg SIDE PLATE (INSIDE). SECURE W/4-SDF'S, TWO ON VERTICAL AND TWO ON HORIZONTAL LEG (4 PER CLIP)

9



06/13/2023

SHEET 4 OF 4