

TABLE 1  
END POST, GROUND ANCHOR AND PANEL FASTENER SPACING SPECIFICATIONS

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
82 TO 117	35	5.0	29 Gauge	8
	40	4.0		
	50	4.0 (12 Ga.)		

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

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

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
118 TO 132	20	4.0	26 Gauge	6

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

THE STRUCTURE, INCLUDING MAIN WIND FORCE RESISTING SYSTEM (MWFRS), COMPONENTS ANCHORAGE, OTHER DESIGN ISSUES, INCLUDING, BUT NOT LIMITED TO, PLUMBING, ELECTRICAL, BACKS, OR OTHER LOCAL ZONING REQUIREMENTS ARE THE RESPONSIBILITY OF OTHERS.

AS UTILITY/STORAGE BUILDINGS CAPABLE OF SUPPORTING THE DEAD LOAD OF THE AND WIND LOADS. IMPROVEMENTS NOT SPECIFICALLY ADDRESSED HEREIN, WHICH EXERT TURE SHALL BE AT THE OWNER'S RISK. CAROLINA CARPORTS SHALL NOT BE RESPONSIBLE LURE DUE TO THE APPLICATION OF ADDITIONAL LOADS.

ABOVE TABLE IS THE MAXIMUM SPACING FOR THE MAIN WIND FORCE RESISTING SYSTEM. A TO MEET LOCAL BUILDING CODE AND/OR SITE SPECIFIC REQUIREMENTS.

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

PANELS TO FRAMING WITH #12" x 3/4" SELF DRILLING FASTENERS WITH CONTROL SEAL G OF 8" FOR 29 GAUGE PANELS AND 6" FOR 26 GAUGE PANELS.

E #12 x 3/4" SELF DRILLING FASTENERS (SDF) UNLESS NOTED OTHERWISE.

BE SHOP WELDED UNLESS NOTED OTHERWISE.

INSTALL HELICAL ANCHORS ALONG SIDE BASE RAIL WITHIN 6" OF EACH CORNER POST AND ALONG THE BASE RAIL. INSTALL GROUND ANCHORS (#4 TREADED REBAR) BETWEEN THE EACH POST ALONG THE BASE RAIL. HELICAL ANCHORS AND GROUND ANCHORS ARE NOT S AND/OR CONCRETE SLAB CONSTRUCTION.

IN 6" OF EACH VERTICAL POST ALONG SIDE AND END BASE RAILS. USE ITW RAMSET/ STRONG-TIE STRONG BOLT-2 WEDGE ANCHORS, OR ITW REDHEAD TAPCON+ OR TITEN HD D EQUAL.

EVERY POST/RAFTER CONNECTION, EXCEPT FOR END WALLS AND HEADERS.

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

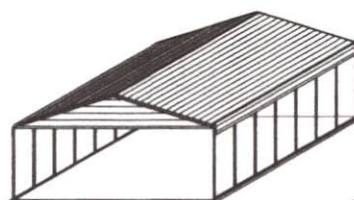
# STANDARD BUILDING DETAILS

## 12 ft to 24 ft SPAN

### LIGHT FRAME CONSTRUCTION

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

NOTE: THESE ARE 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:

THE CONCRETE SLAB AND FOUNDATION ARE CONSTRUCTED BY OTHERS. THE OWNER IS RESPONSIBLE FOR PROVIDING A SUITABLE SLAB AND FOUNDATION FOR THE PROPOSED STRUCTURE. THE CONCRETE DETAILS SHOWN ON THESE PLANS MAY BE USED, HOWEVER, THE LOCAL BUILDING CODE OFFICIALS MAY HAVE MORE RESTRICTIVE REQUIREMENTS. THE OWNER IS RESPONSIBLE FOR COORDINATING THE CONCRETE SLAB AND FOUNDATION STRENGTH AND DEPTH REQUIREMENTS WITH THE LOCAL BUILDING CODE OFFICIALS.

CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 3,000 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 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.

SOIL BEARING PRESSURE:  
THE ALLOWABLE SOIL BEARING PRESSURE IS BASED ON A PRESUMPTIVE ALLOWABLE BEARING PRESSURE OF 1,500 PSF IN ACCORDANCE WITH TABLE 1806.2 OF THE INTERNATIONAL BUILDING CODE.



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

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## METAL BUILDING INSTALLATION PLANS AND DETAILS

### AND

## FRAMING AND FASTENER SPECIFICATIONS

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 CODE, THE 2015 INTERNATIONAL RESIDENTIAL CODE, THE 2018 NORTH CAROLINA BUILDING CODE AND THE 2018 NORTH CAROLINA RESIDENTIAL CODE.

BUILDING CODE INFORMATION		
RISK CATEGORY	I	II
USE GROUP	U	S
CONSTRUCTION TYPE	IIB	

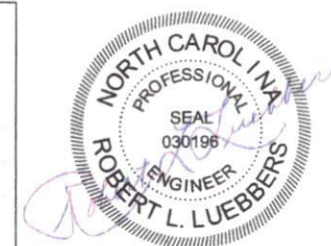
IMPORTANCE FACTORS		
WIND Iw	1.0	
SNOW Is	0.8	1.0
EARTHQUAKE Ie	1.0	

DESIGN LOADS		
MIN. DEAD LOAD	5	PSF
MIN. FLOOR LIVE LOAD	125	PSF
MIN. ROOF LIVE LOAD	20	PSF
MIN. GROUND SNOW LOAD	10	PSF
MAX. GROUND SNOW LOAD	SEE TABLE 1	
MIN. ULTIMATE WIND SPEED		
MAX. ULTIMATE WIND SPEED		
EXPOSURE CATEGORY	D2	
MAX. SEISMIC DESIGN CATEGORY		

Project Location:

Name: Helen Moss  
Address: 4133 Abbatoir Rd.  
City: Angier State: NC  
Zip: 27501

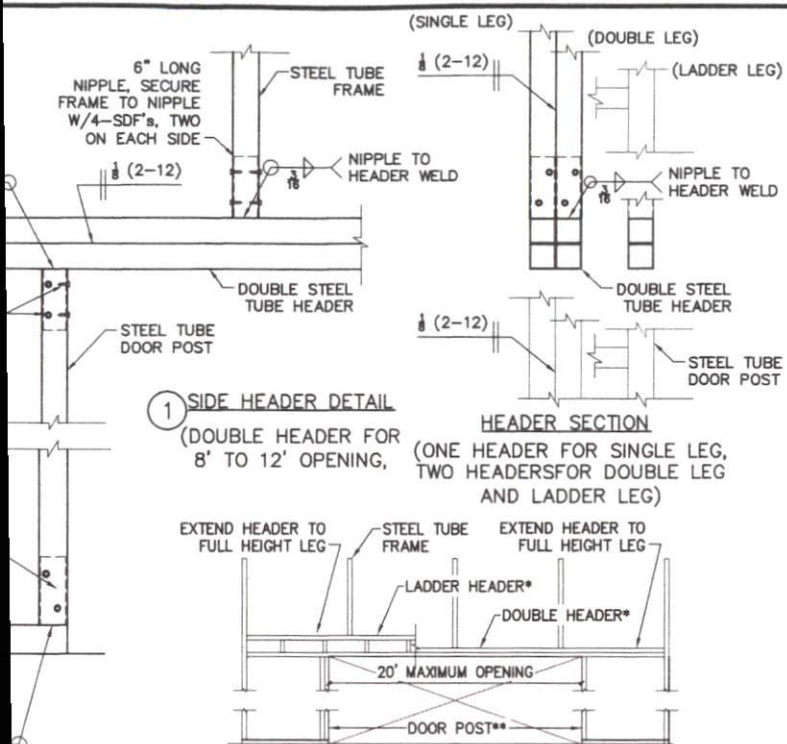
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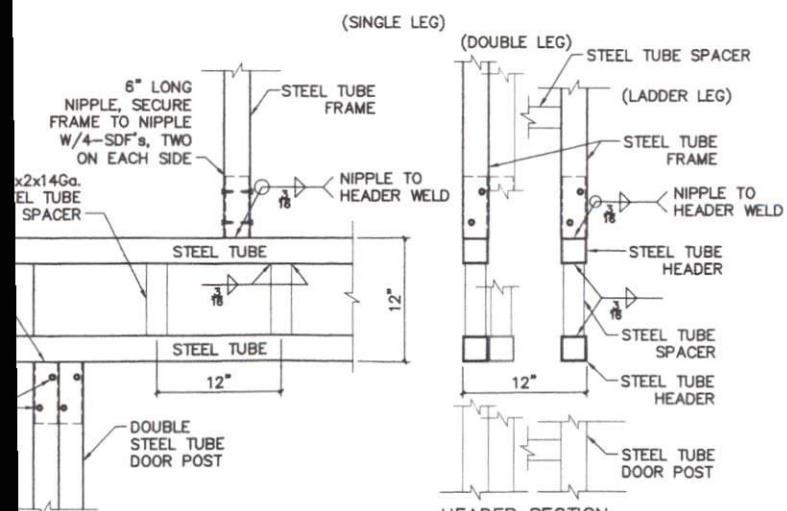
SHEET 1 OF 4



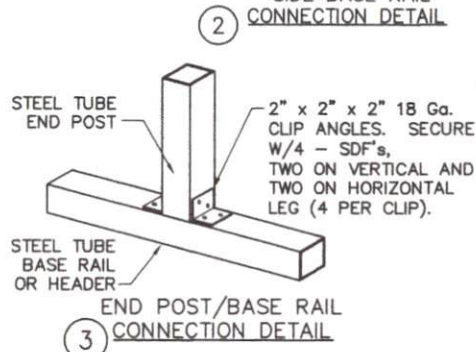
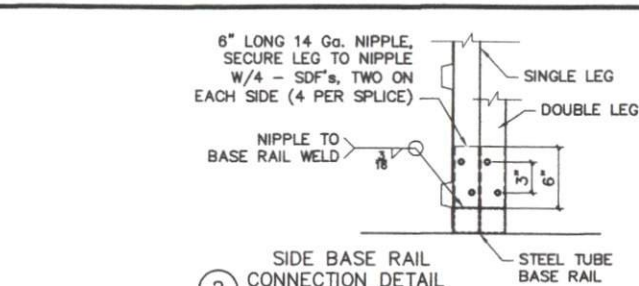


L DETAIL

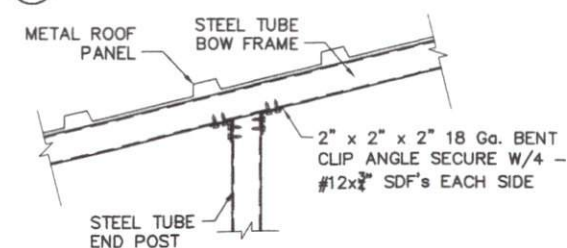
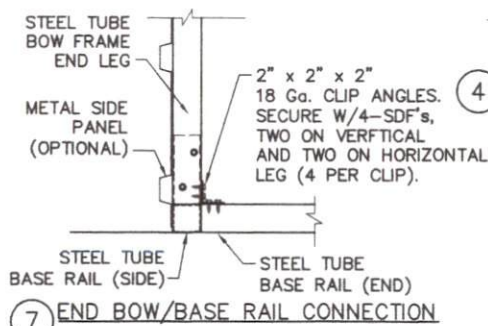
\* USE DOUBLE HEADER TO 12' DOOR, USE LADDER HEADER TO 20' DOOR \*\* USE SINGLE DOOR POST TO 12' DOOR, USE DOUBLE DOOR POST TO 20' DOOR.



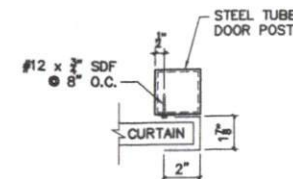
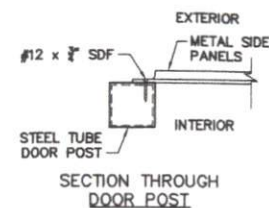
(ONE HEADER FOR SINGLE LEG, TWO HEADERS FOR DOUBLE LEG AND LADDER LEG)



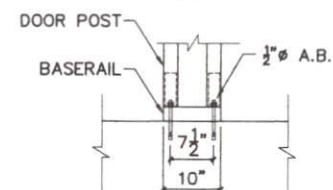
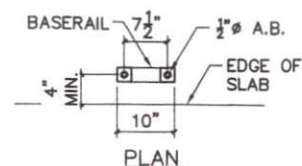
NOTE: FRAME-OUTS FOR DOORS AND WINDOWS MAY BE ADJUSTED AS NEEDED TO ACCOMMODATE DOOR AND WINDOW CASINGS AND HARDWARE TO ENSURE A PROPER FIT.



END POST TO BOW FRAME CONNECTION



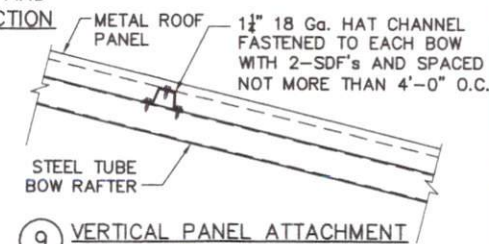
SECTION THROUGH ROLL-UP DOOR POST



MINIMUM DISTANCE BETWEEN DOORWAYS

(12\"/>

ENDWALL TO HEADER AND GIRT TO POST CONNECTION



06/17/2025

SHEET 4 OF 4

DRILL  $\frac{3}{4}$ " HOLE  
THROUGH BASE RAIL  
AND SECURE WITH  
 $\frac{1}{2}$ " H.S. BOLT

STEEL TUBE  
BASE RAIL

2" WASHERS

emented sands,  
cobbles, caliche,  
and clays.

se sands, sandy  
silt, and clays.

dense sands, firm to  
alluvial fill and  
medium dense sands,  
and silt, alluvial fill.

BE APPROVED FOR  
2, 3, AND 4.

for installation of Mobile Homes"

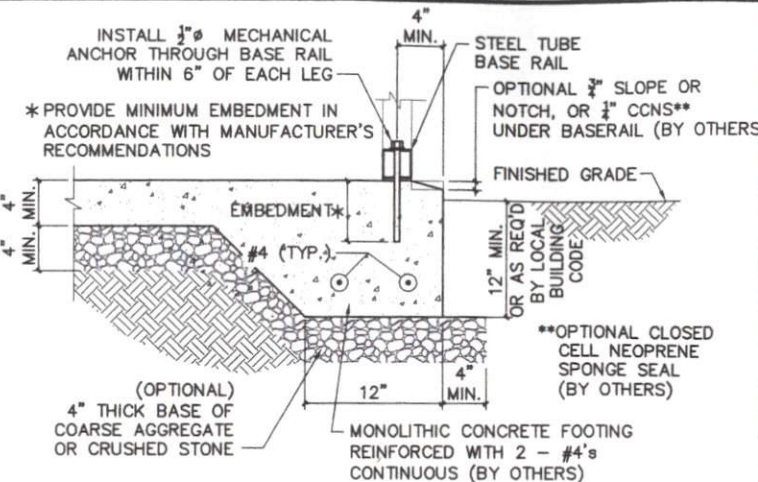
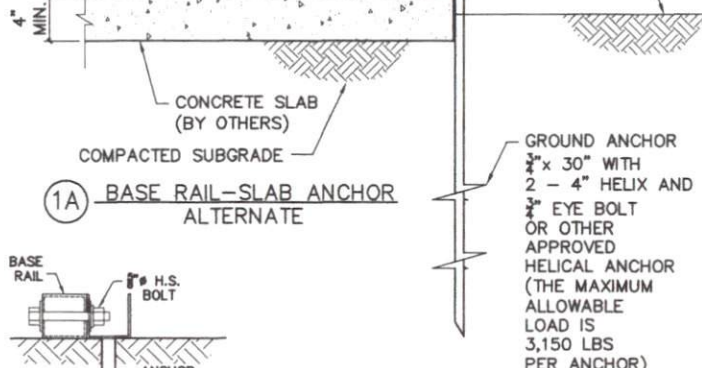
HELICAL ANCHOR  
 $\frac{3}{4}$ " x 30" WITH  
2 - 4" HELIX AND  
 $\frac{3}{4}$ " EYE BOLT  
OR OTHER  
APPROVED  
HELICAL ANCHOR  
(THE MAXIMUM  
ALLOWABLE  
LOAD IS  
3,150 LBS  
PER ANCHOR)

DRILL  $\frac{3}{4}$ " HOLE THROUGH  
THE BASE RAIL AND  
SECURE TO ANCHOR EYE  
WITH  $\frac{1}{2}$ " THROUGH BOLT

STEEL TUBE  
BASE RAIL

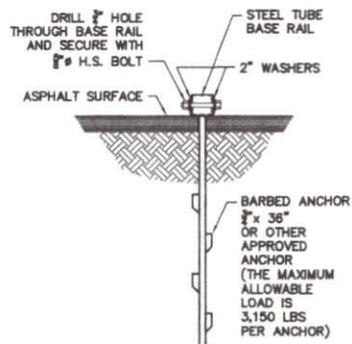
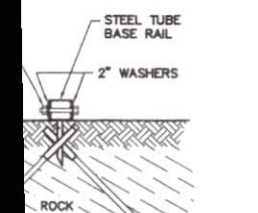
2" WASHERS

FINISHED GRADE

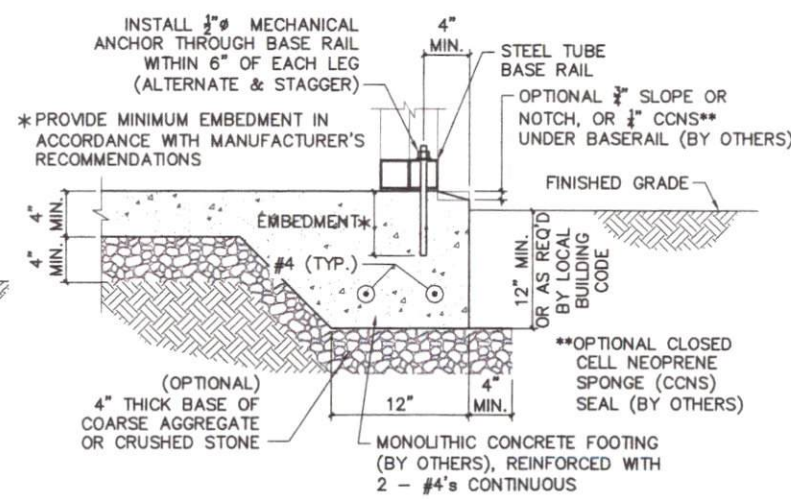


2 CONCRETE BASE RAIL ANCHORAGE  
(SINGLE LEG)

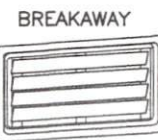
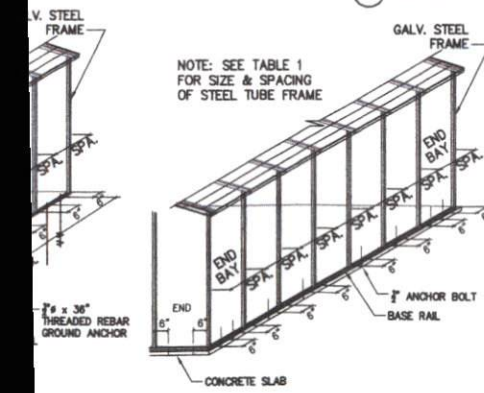
1 SOIL BASE RAIL ANCHOR DETAIL



2C ALTERNATE BASE RAIL ANCHORAGE



2B CONCRETE BASE RAIL ANCHORAGE  
(DOUBLE LEG)



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

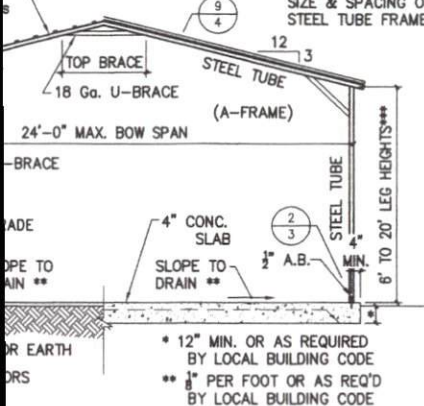
OR Approved Equal  
FLOOD VENTS



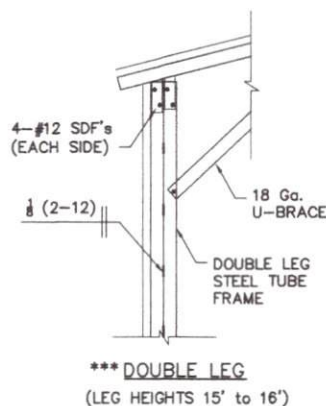
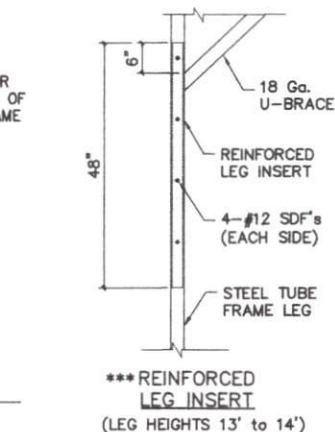
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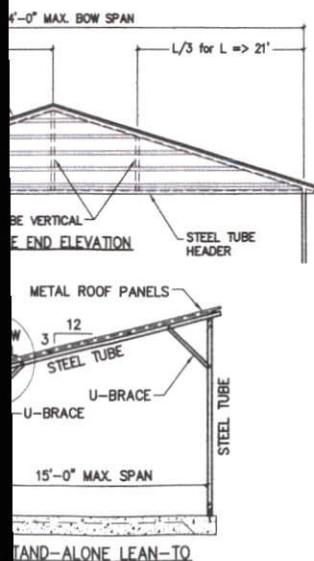
NOTE: SEE TABLE 1 FOR  
SIZE & SPACING OF  
STEEL TUBE FRAME



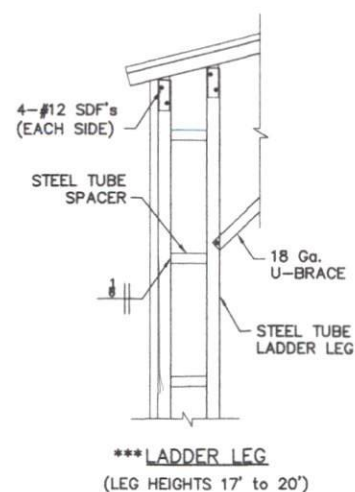
TYPICAL BOW SECTION



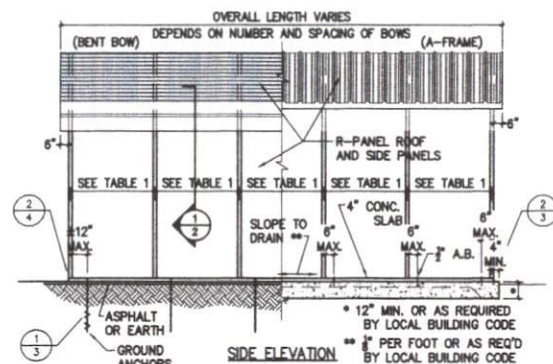
\*\*\* DOUBLE LEG  
(LEG HEIGHTS 15' to 16')



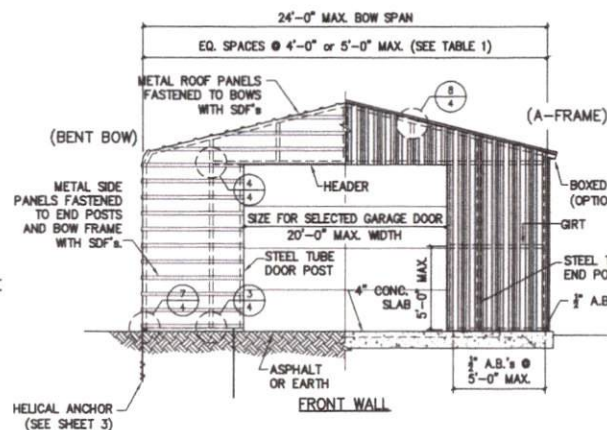
TAND-ALONE LEAN-TO



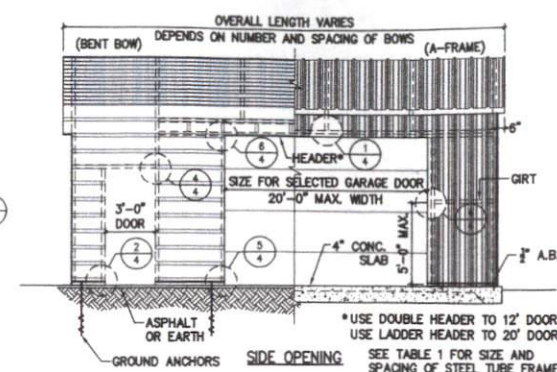
\*\*\* LADDER LEG  
(LEG HEIGHTS 17' to 20')



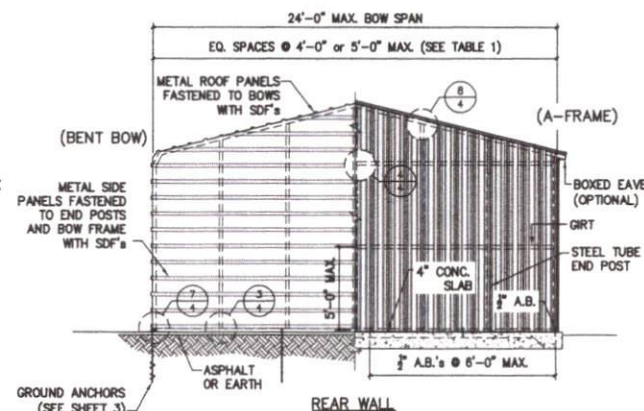
**SIDE ELEVATION**



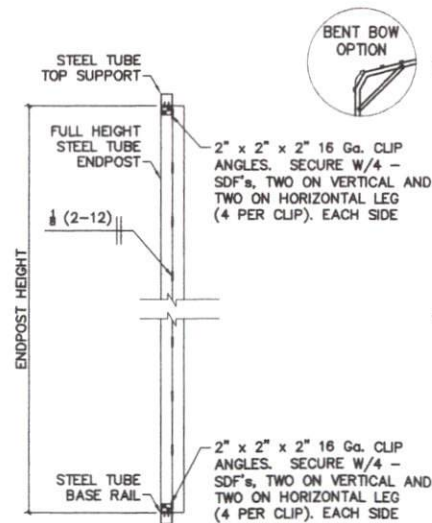
FRONT WALL



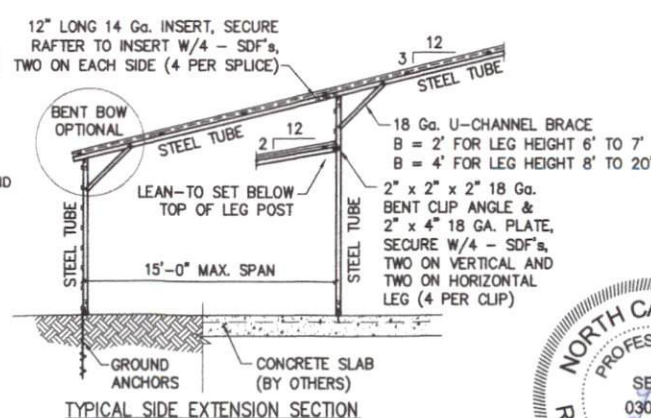
SIDE OPENING



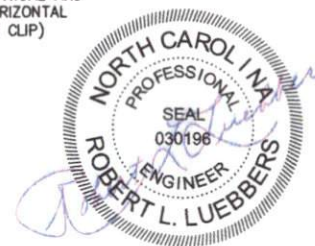
REAR WALL



DOUBLE ENDPOST



TYPICAL SIDE EXTENSION SECTION



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