

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 140	82 TO 108	30	4.0	29 gauge	8

NOTES: 1. Specifications applicable to 29 gauge metal panels fastened directly to 12 or 14 gauge steel tube bow frames.
2. Fasteners consist of #12–14 x $\frac{3}{4}$ " 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.

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	141 TO 150	113 TO 121	30	4.0	29 Gauge	8
B or C	151 TO 170	122 TO 136	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 $\frac{3}{4}$ " self–drilling screws with 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 (MWFRS), 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 $\frac{3}{4}$ " 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 $\frac{3}{4}$ " SELF DRILLING FASTENERS (SDF) UNLESS NOTED OTHERWISE. BOLTED CONNECTIONS SHALL BE $\frac{1}{2}$ " H.S. BOLTS, ASTM A325 OR SAE GRADE 5, UNLESS NOTED OTHERWISE.

ALL WELDED CONNECTIONS SHALL BE SHOP WELDED UNLESS NOTED OTHERWISE.

CONCRETE ANCHOR BOLTS SHALL BE ITW REDHEAD TAPCON+ SCREW ANCHOR OR TRUBOLT WEDGE ANCHOR OR SIMPSON STRONG–TIE TITEN HD SCREW ANCHOR OR STRONG BOLT–2 WEDGE ANCHOR OR AN APPROVED EQUAL. INSTALL ANCHOR BOLTS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

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.

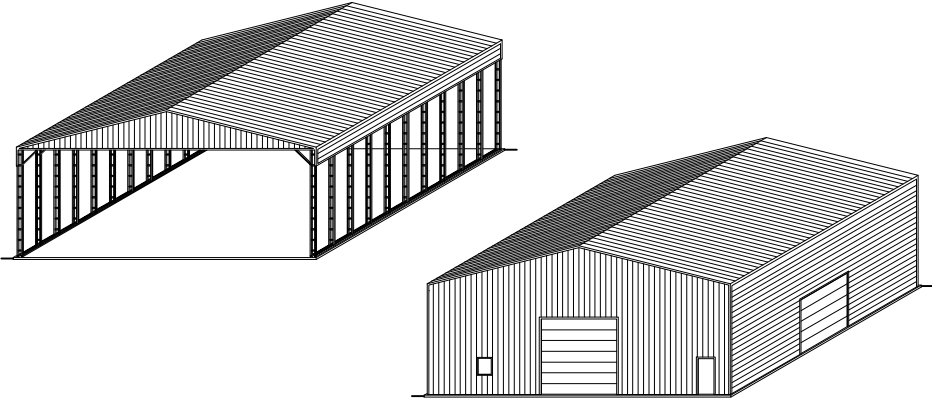
GALVANIZATION: METAL ACCESSORIES FOR USE IN EXTERIOR WALL CONSTRUCTION AND NOT DIRECTLY EXPOSED TO THE WEATHER SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 153, CLASS B–2. METAL PLATE CONNECTORS, SCREWS, BOLTS AND NAILS EXPOSED DIRECTLY TO THE WEATHER SHALL BE STAINLESS STEEL OR HOT DIPPED GALVANIZED.

STANDARD BUILDING
DETAILS
40 ft SPAN

LIGHT FRAME CONSTRUCTION

NOTE: USE $2\frac{1}{2}$ " x $2\frac{1}{2}$ " 14 Ga.
 $2\frac{1}{4}$ " x $2\frac{1}{4}$ " 12 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.



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 $1\frac{1}{2}$ " 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

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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.

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

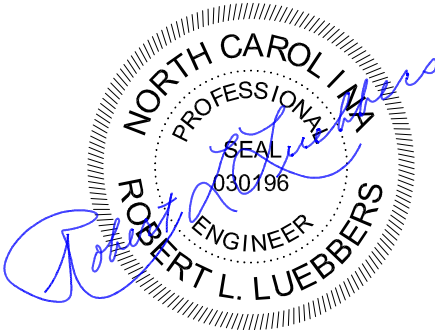
IMPORTANCE FACTORS	
WIND Iw	1.0
SNOW Is	1.0
EARTHQUAKE Ie	1.0

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	SEE TABLE 1
MIN. ULTIMATE WIND SPEED	
MAX. ULTIMATE WIND SPEED	
EXPOSURE CATEGORY	0.500
SEISMIC RESPONSE COEFFICIENT	

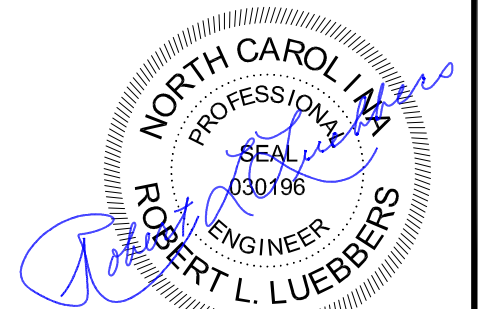
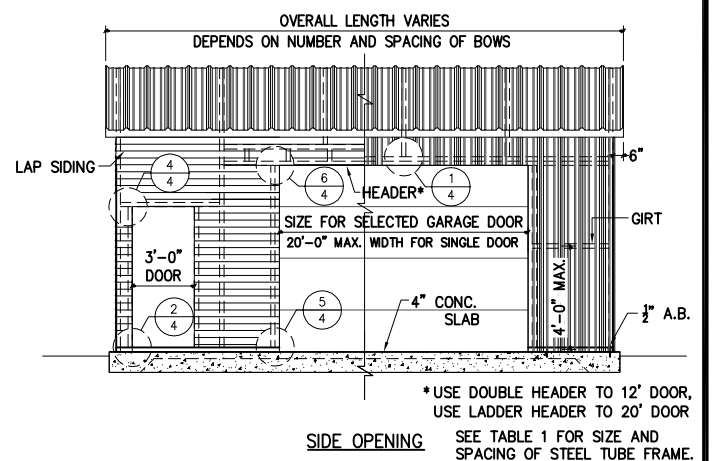
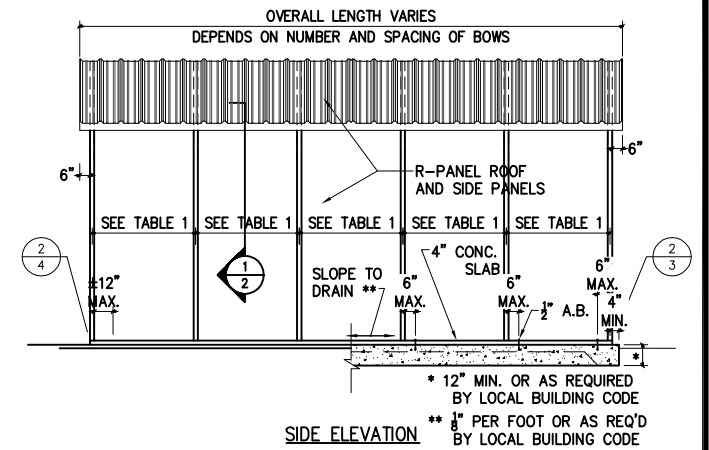
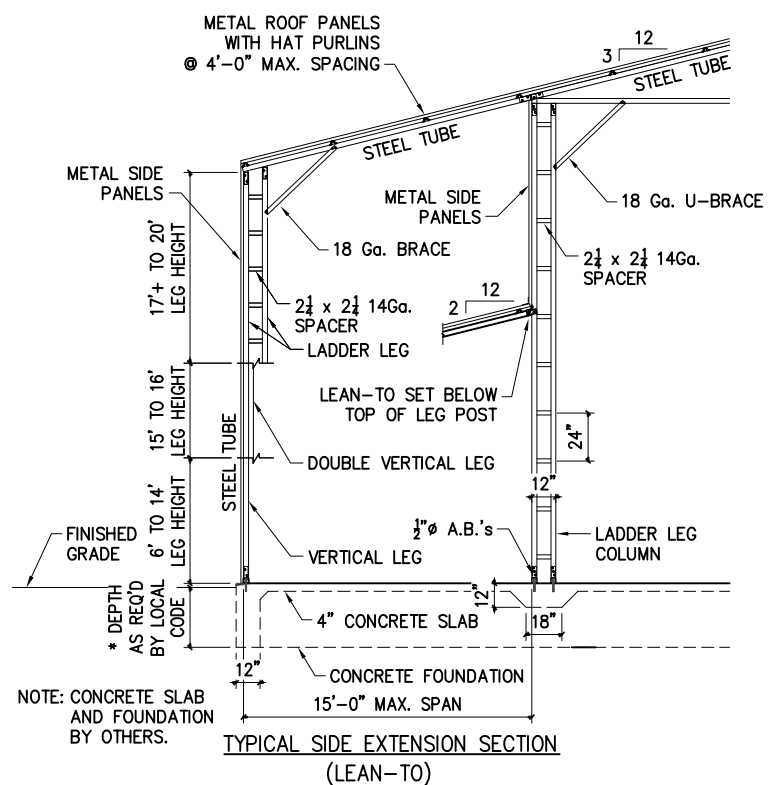
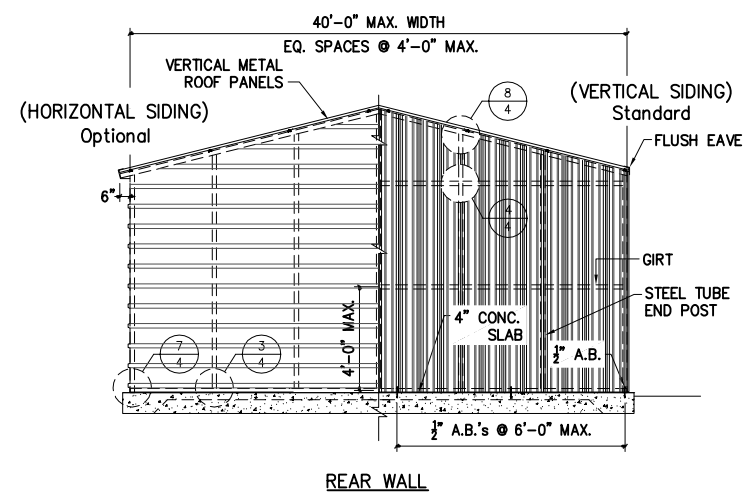
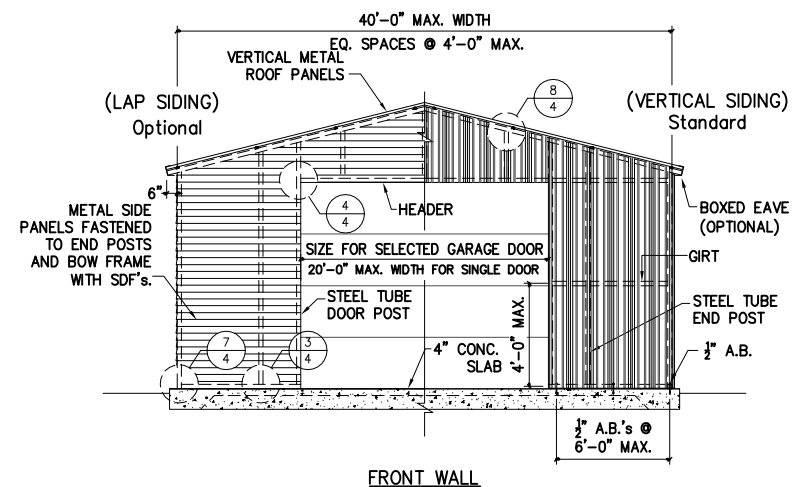
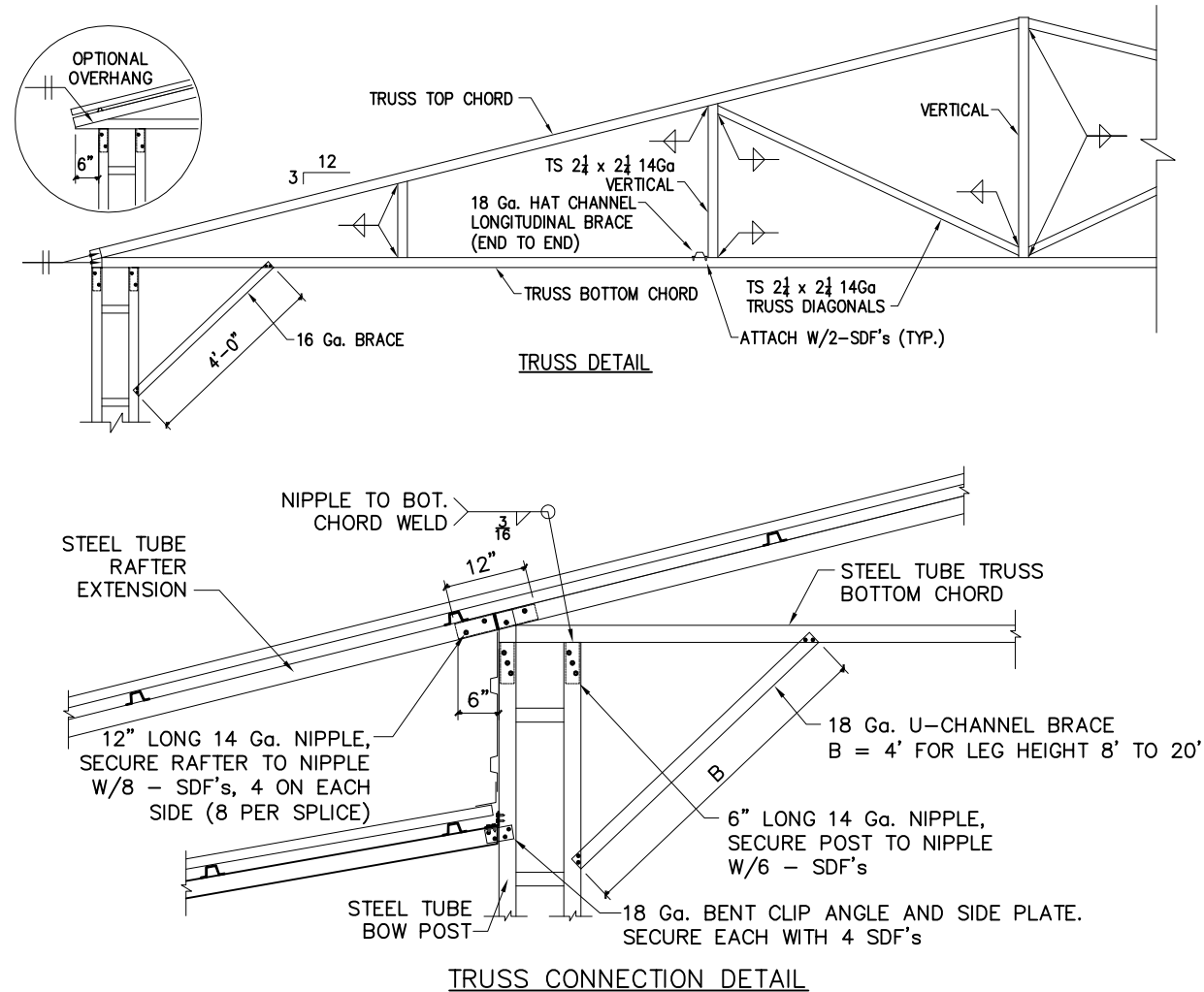
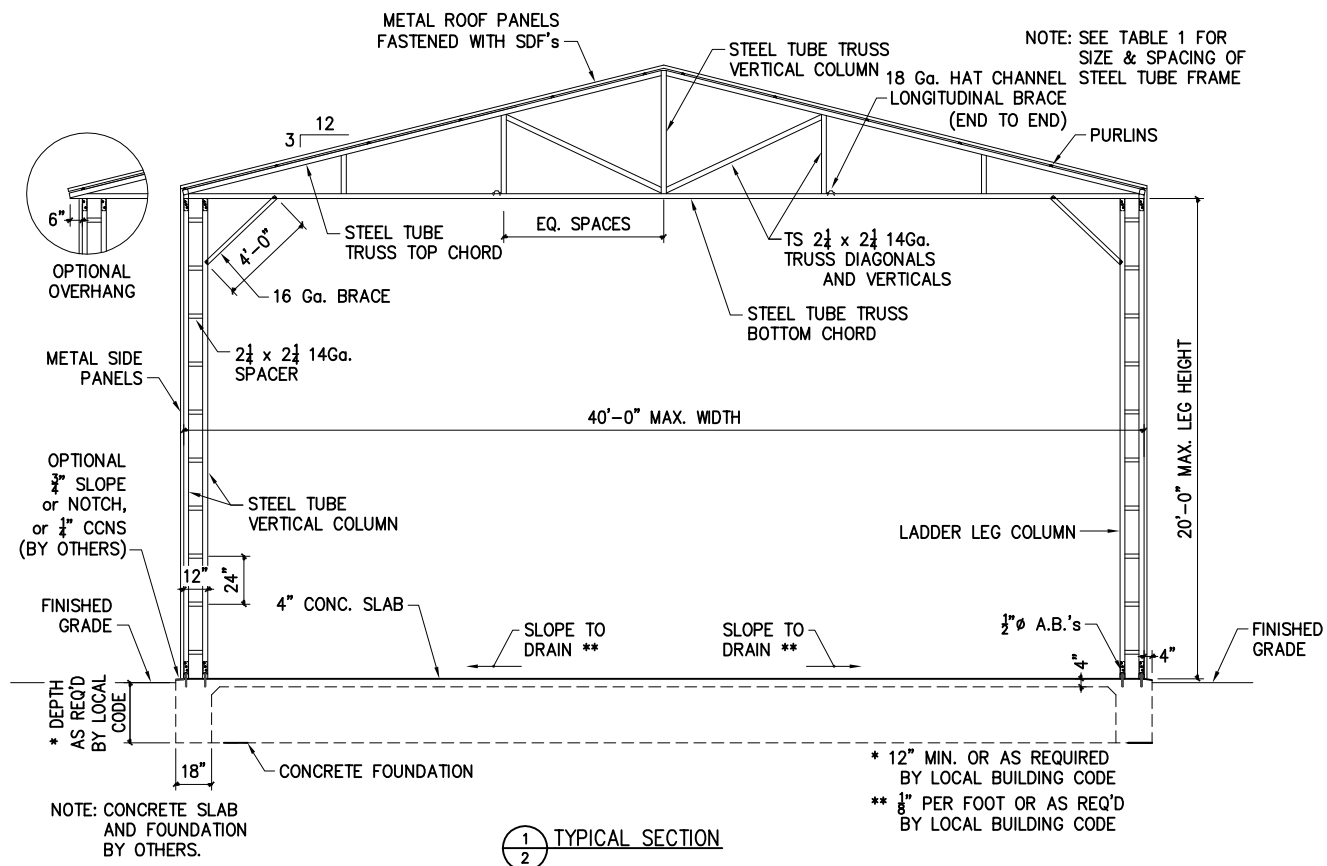
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permit for:

State: NC
Zip:

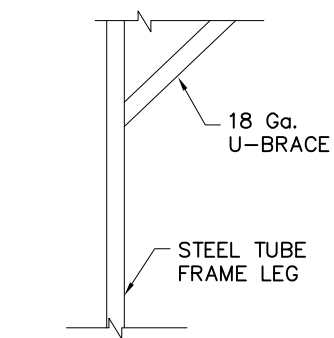
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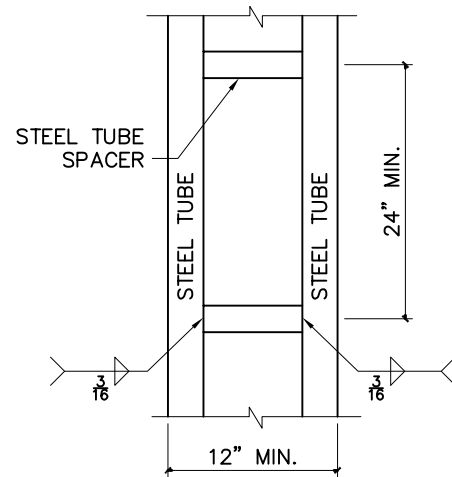
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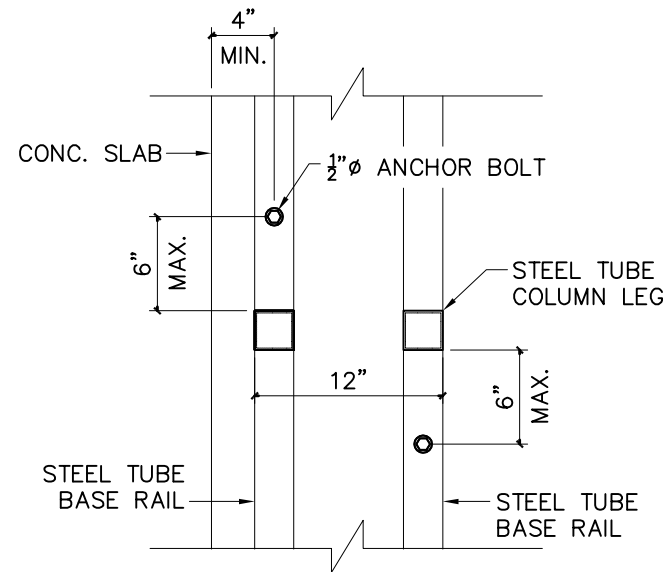
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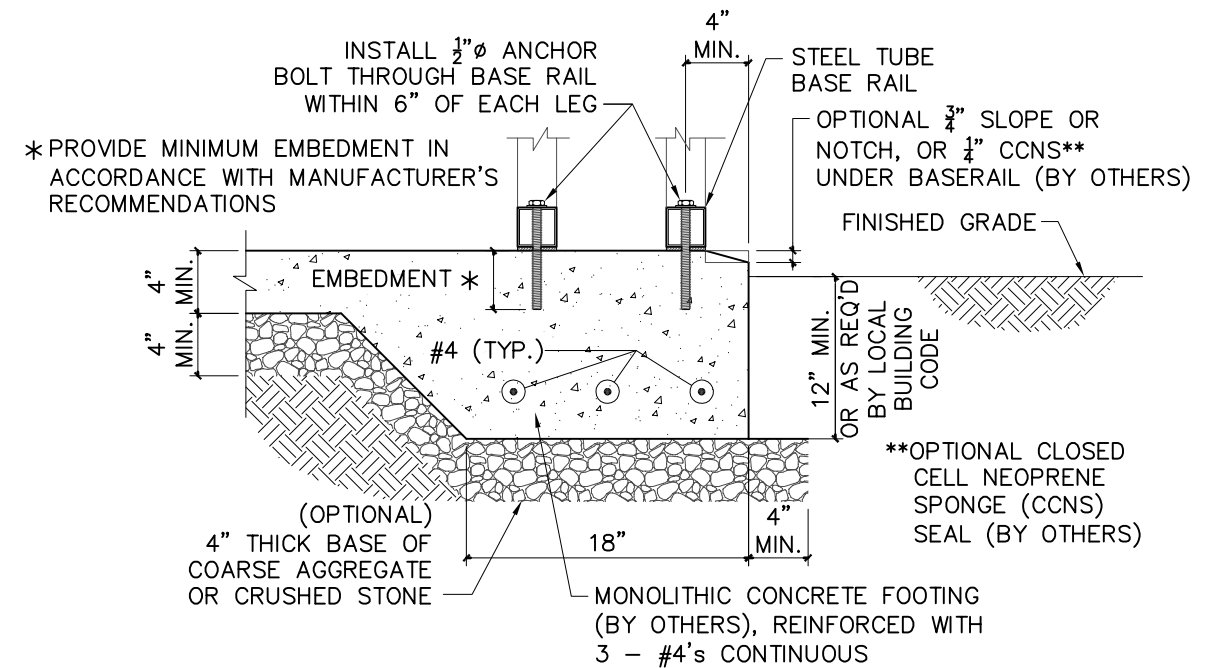
SINGLE LEG
(LEG HEIGHTS 8' to 12')
LEAN-TO ONLY



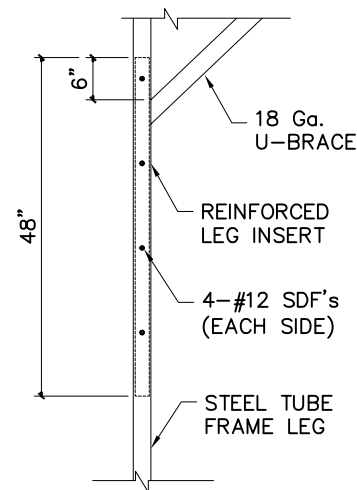
LADDER LEG COLUMN



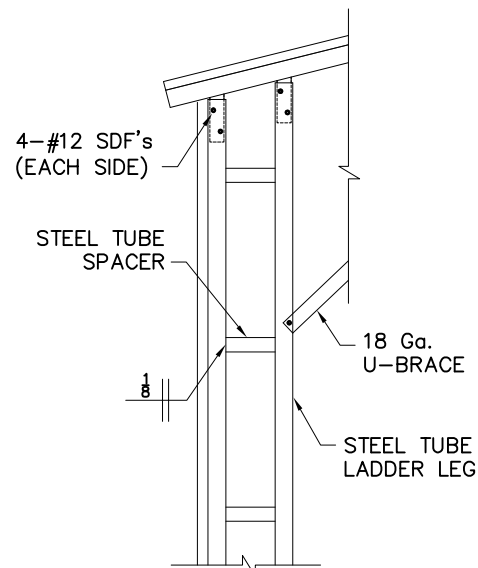
LADDER LEG - BASE RAIL CONNECTION



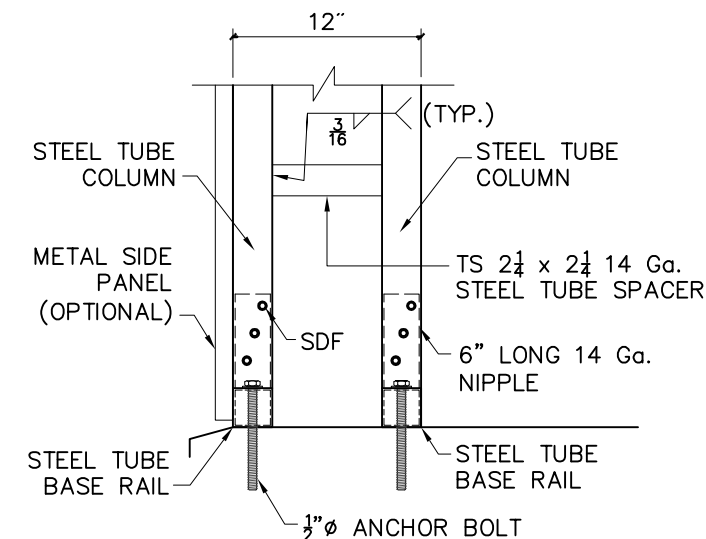
2 CONCRETE BASE RAIL ANCHORAGE
(LADDER LEG)



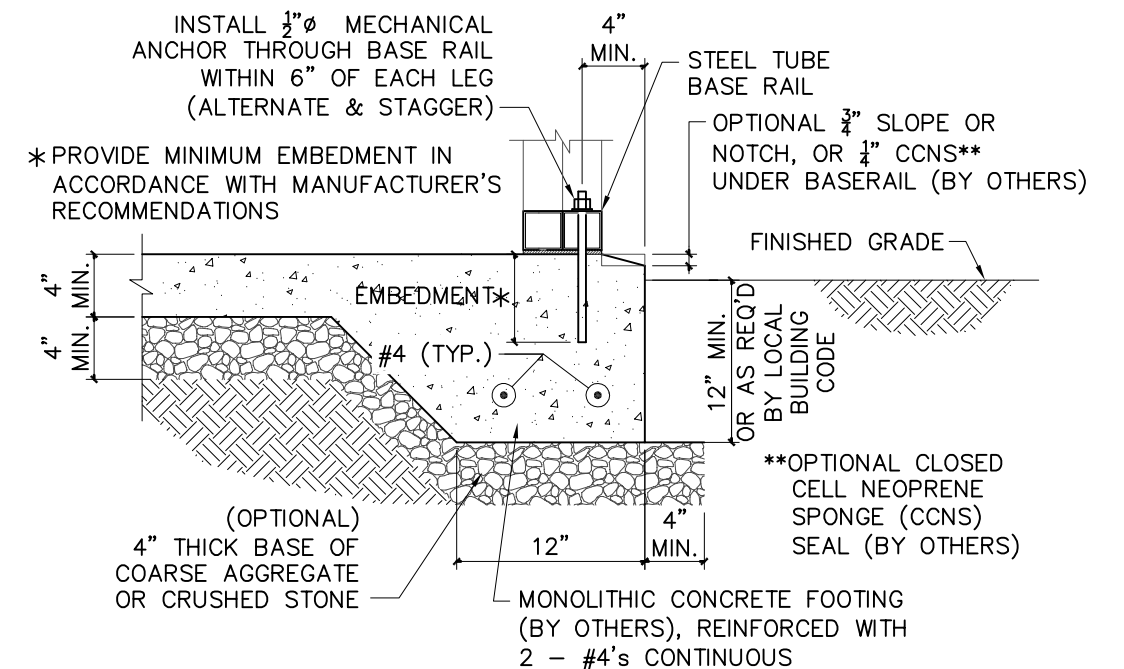
REINFORCED LEG INSERT
(LEG HEIGHTS 13' to 14')
LEAN-TO ONLY



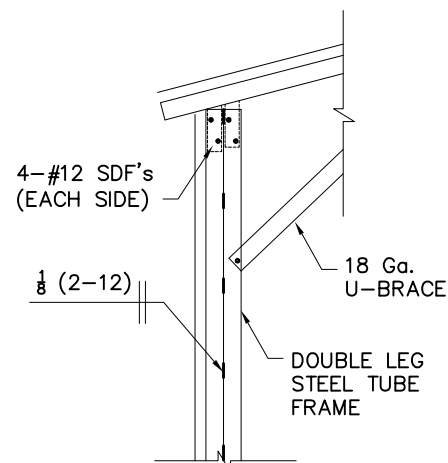
LADDER LEG
(LEG HEIGHTS 17' to 20')



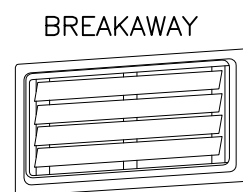
2A LADDER LEG/BASE RAIL CONNECTION



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

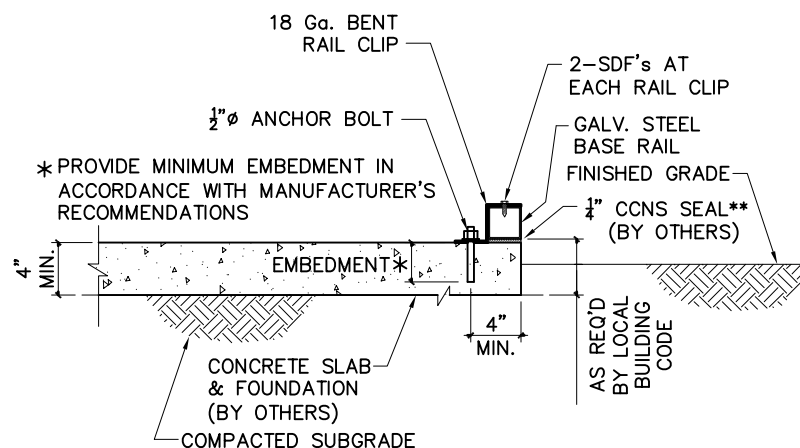


DOUBLE LEG
(LEG HEIGHTS 15' to 16')
LEAN-TO ONLY

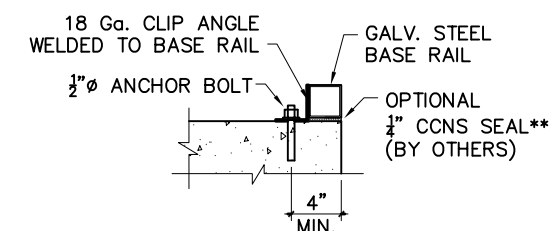


CRAWL SPACE DOOR SYSTEMS, INC.
5741 Bayside Road, #105
Virginia Beach, VA 23455
Engineered Flood Vent
Model CSBA816

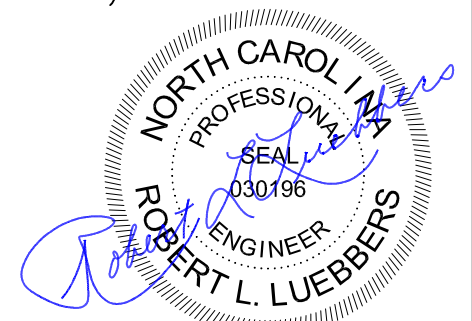
OR Approved Equal
FLOOD VENTS



2C ALTERNATE BASE RAIL ANCHORAGE
LEAN-TO ONLY



2D ALTERNATE BASE RAIL CLIP
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04/07/2023

