| FBC APPROVED PRODUCTS LIST |                 |  |                            | MAXIMUM ALLOWABLE WIND SPEED |      |          | RAFTER FRAME, END POST, GROUNI |   |                         |                        |       |
|----------------------------|-----------------|--|----------------------------|------------------------------|------|----------|--------------------------------|---|-------------------------|------------------------|-------|
| PRODUCT CATEGORY           | SUB CATEGORY    | MANUFACTURER   | APPROVAL<br>No. & DATE     | QA<br>EXPIRATION<br>DATE     | OPEN | ENCLOSED | PARTIALLY<br>ENCLOSED          |   |                         |                        |       |
| STRUCTURAL COMPONENTS      | ROOF DECK       | CAROLINA CARPORTS, INC.<br>26 Gauge AG Panel                           | FL6596.1-R6<br>12/15/20    | 04/05/27                     | 180  | 180      | 180                            | WIND<br>RISK EXPOSU   |                         | ULTIMATE<br>WIND SPEED |       |
| STRUCTURAL COMPONENTS      | STRUCTURAL WALL | CAROLINA CARPORTS, INC.<br>26 Gauge AG Panel                           | FL6702.1-R6<br>12/15/20    | 03/14/27                     | 180  | 180      | 180                            | CATEGOR   |                         | (MPH)                  |       |
| STRUCTURAL COMPONENTS      | STRUCTURAL WALL | CAROLINA CARPORTS, INC.<br>26 Gauge Dutch Lap Wall Panel               | FL6702.3-R6<br>12/15/20 ** | 03/14/27                     | N/A  | 164      | 143                            | 1   | С                       | 110 TO 150             | -     |
| STRUCTURAL COMPONENTS      | FLOOD VENT      | CRAWL SPACE DOOR SYSTEMS, INC.<br>16x8 Flood Vent                      | FL29622.1-R1<br>02/28/21   | 09/30/22                     | N/A  | N/A      | N/A                            | NOTES: 1. Specifications applicable to 26 gauge me gauge hat channel roof purlins.  |                         |                        |       |
| EXTERIOR DOORS             | SWINGING        | ELIXIR DOOR AND METAL COMPANY<br>Series 402-14                         | FL17996.3-R2<br>02/28/21   | 08/26/25                     | N/A  | 139      | 139                            | Specifications applicable only for mean room requirements for other roof heights and/or applicable.      Analysis and a second sec |                         |                        |       |
| EXTERIOR DOORS             | SWINGING        | ELIXIR DOOR AND METAL COMPANY<br>Series 407                            | FL17996.5-R2<br>02/28/21   | 08/19/25                     | N/A  | 174      | 155                            | GROUND ANCHOR SCHEDULE ULTIMATE WIND SPEED (mph)  |                         |                        |       |
| EXTERIOR DOORS             | ROLL-UP         | ASTA INDUSTRIES INC.<br>Model 203 (12' Max. Width)                     | FL8888.1-R6<br>02/09/21    | 12/31/24                     | N/A  | 180      | 174                            | 12  | 120 130 14              | 0 150 160              | 1/0   |
| EXTERIOR DOORS             | ROLL-UP         | CAROLINA CARPORTS, INC.<br>Steel Roll Up Sheet Door (8' Max. Width)    | FL16806.2-R5<br>12/16/20   | 04/05/27                     | N/A  | 180      | 180                            | (feet) 16   | 30" Anchor<br>Detail 1D |                        |       |
| EXTERIOR DOORS             | ROLL-UP         | CAROLINA CARPORTS, INC.<br>Steel Roll-Up Sheet Door - (10' Max. Width) | FL16806.4-R5<br>12/16/20   | 04/05/27                     | N/A  | 180      | 172                            | HLQIM 20  |                         | 48" Anchor             |       |
| EXTERIOR DOORS             | ROLL-UP         | CAROLINA CARPORTS, INC.<br>Steel Roll-Up Sheet Door - (12' Max. Width) | FL16806.4-R5<br>12/16/20   | 04/05/27                     | N/A  | 179      | 154                            | 22 24 24 26 26  |                         | Detail 1C              |       |
| EXTERIOR DOORS             | ROLL-UP         | CAROLINA CARPORTS, INC.<br>Steel Roll-Up Sheet Door - (16' Max. Width) | FL4133.5<br>06/07/22       | 04/05/27                     | N/A  | 163      | 142                            | 26<br>28  |                         |                        | 60° A |
| WINDOWS                    | SINGLE HUNG     | CGI WINDOWS AND DOORS<br>Model SH 4000A                                | FL23358.2<br>12/16/20      | 02/28/33                     | N/A  | 174      | 156                            | 30  | 1C AND 1D SHOW          | VALON CHEET            | Deta  |

MANUALIM ALLOWADIE

TABLE 1 GROUND ANCHOR AND PANEL FASTENER SPACING SPECIFICATIONS

MAXIMUM

POST / RAFTER

SPACING

(FEET)

5.0

4.0

uge metal roof and wall panels fastened directly to 12 or 14 gauge steel tube framing, or 18

NOMINAL

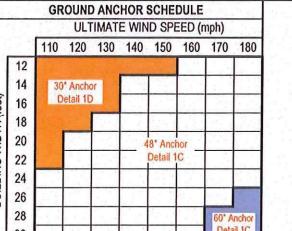
WIND SPEED

(MPH)

89 TO 116

117 TO 139

mean roof height of 20 feet or less, and roof slopes of 7° to 27° (1.5:12 to 6:12 pitch). Spacing is and/or slopes may vary.



#### METAL CARPORT INSTALLATION PLANS AND DETAILS AND FRAMING AND **FASTENER SPECIFICATIONS**

**AVERAGE FASTENER SPACING ON-CENTERS ALONG RAFTERS OR PURLINS, AND POSTS OR GIRTS** 

(INCHES)

POSTS/RAFTERS POSTS/RAFTERS

END

6

6

INTERIOR

FOR CONSTRUCTION IN THE STATE OF FLORIDA

PREPARED FOR: CAROLINA CARPORTS, INC. P.O. BOX 1263 DOBSON, NORTH CAROLINA 27017

PREPARED BY: BECHTOL ENGINEERING AND TESTING, INC. 605 WEST NEW YORK AVENUE DELAND, FLORIDA 32720 Certificate of Authorization No. 00005492

#### SUBSTITUTED PRODUCT. MAXIMUM POST SPACING FOR DUTCH LAP IS 4.0

A. PRODUCT SHALL HAVE A VALID FBC PRODUCT APPROVAL.

B. COMPONENTS ARE INSTALLED ACCORDING TO MANUFACTURER'S INSTALLATION REQUIREMENTS

- **GENERAL NOTES:** THESE PLANS PERTAIN ONLY TO THE STRUCTURE, INCLUDING MAIN WIND FORCE RESISTING SYSTEM, COMPONENTS AND CLADDING, AND BASE RAIL ANCHORAGE. OTHER DESIGN ISSUES, INCLUDING BUT NOT LIMITED TO PLUMBING, ELECTRICAL, INGRESS/EGRESS, PROPERTY SET-BACKS, FINISH FLOOR ELEVATION AND SLOPE, OR OTHER LOCAL ZONING REQUIREMENTS ARE THE RESPONSIBILITY OF OTHERS.
- THESE STRUCTURES ARE DESIGNED AS NON-HABITABLE UTILITY/STORAGE BUILDINGS (RISK CATEGORY I) CAPABLE OF SUPPORTING DEAD LOAD OF THE STRUCTURE AND APPLICABLE LIVE AND WIND LOADS. IMPROVEMENTS NOT SPECIFICALLY ADDRESSED HEREIN, INCLUDING DOORS, WINDOWS, OR OTHER COMPONENTS NOT LISTED IN THE FBC APPROVED PRODUCTS LIST (THIS SHEET), AND NOT PROVIDED AND INSTALLED BY CAROLINA CARPORTS, INC., WHICH EXERT ADDITIONAL LOADS ON THE STRUCTURE SHALL BE AT THE OWNER'S RISK. BECHTOL ENGINEERING AND TESTING, INC., SHALL NOT BE RESPONSIBLE FOR STRUCTURAL DAMAGE OR FAILURE DUE TO THE APPLICATION OF ADDITIONAL LOADS.
- 3. ALL STEEL TUBING SHALL BE 50 KSI GALVANIZED STEEL. ALL FASTENERS SHALL BE GALVANIZED OR STAINLESS STEEL OR ZINC PLATED.

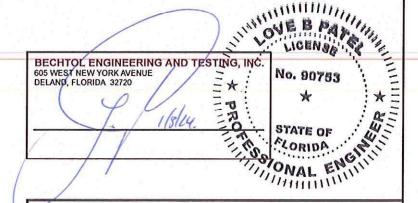
1. DOORS AND WINDOWS SHOWN MAY BE SUBSTITUTED FOR DIFFERENT PRODUCT LINES AND/OR MODELS, PROVIDED THE FOLLOWING CONDITIONS ARE MET

- ALL COMPONENTS AND CLADDING SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND SHALL MEET THE DESIGN PRESSURES REQUIRED BY THE FLORIDA BUILDING CODE (FBC) AT THE LOCATION OF THE BUILDING WITHIN THE STATE OF FLORIDA.
- 5. ALL FIELD FRAMING CONNECTIONS SHALL BE #12-14 x 3/4" SELF DRILLING SCREWS WITHOUT CONTROL SEAL WASHER. ALL SHOP FRAMING CONNECTIONS SHALL BE WELDED.

2. FRAMING CONNECTIONS FOR DOOR AND WINDOW FRAMES REMAIN THE SAME FOR SUBSTITUTED PRODUCTS. HEADERS AND WINDOW RAILS MAY BE RAISED OR LOWERED AS NECESSARY TO ACCOMODATE

- CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI AT 28 DAYS. THE REINFORCING STEEL SHALL BE MINIMUM GRADE 40. CONCRETE SLAB FOUNDATIONS SHALL BE REINFORCED WITH 6X6-W1.4XW1.4 WELDED WIRE FABRIC COMPLYING WITH ASTM A 185, OR WITH SYNTHETIC FIBER REINFORCEMENT COMPLYING WITH ASTM C1116.
- BASE RAIL GROUND ANCHOR REQUIREMENTS: ONE WITHIN 6" OF EVERY POST LOCATION, AND BOTH SIDES OF OPENINGS WHERE BASE RAIL IS ABSENT. GROUND ANCHORS ARE NOT REQUIRED FOR CONCRETE FOOTING AND/OR CONCRETE SLAB CONSTRUCTION. SEE GROUND ANCHOR SCHEDULE (THIS SHEET) FOR SPECIFIC GROUND ANCHOR SIZE REQUIREMENTS.
- CONCRETE ANCHORS SHALL BE TAPCON REDHEAD LDT 1/2" x 5" OR EQUIVALENT OR WEJ-IT ANKR-TITE MODEL AT1252, OR SLEEVE ANCHOR MODEL HSA 1260, OR EQUIVALENT.
- POST/RAFTER BRACING: BRACE ON EVERY POST/RAFTER CONNECTION, EXCEPT FOR END WALLS.
- SLAB FOUNDATION SUBGRADE SOILS SHALL BE TERMITE TREATED AND COVERED WITH 6 MIL VAPOR RETARDER PER SECTION R318.1 OF THE FBC EIGHTH EDITION (2023) RESIDENTIAL, AND SECTION 1816.1 OF THE FBC EIGHTH EDITION (2023) - BUILDING. MINIMUM ALLOWABLE FOUNDATION SOIL CONTACT BEARING PRESSURE OF 2,000 PSF IS ASSUMED.
- 11. 14 GA FRAMING: 2-1/2" x 2-1/2" TUBE STEEL (TS) WITH 2-1/4" x 2-1/4" TS NIPPLES. 12 GA FRAMING: 2-1/4" x 2-1/4" TS WITH 2" x 2" TS NIPPLES.
- 12. ENCLOSED AREAS REQUIRING FLOOD OPENINGS MUST HAVE A MINIMUM OF TWO (2) OPENINGS ON EXTERIOR WALLS. OPENINGS SHOULD BE INSTALLED ON AT LEAST TWO (2) SIDES OF ENCLOSED AREA, WITH BASE OF OPENINGS SET WITHIN 1-FOOT OF THE HIGHER OF INTERIOR OR EXTERIOR GRADE. REQUIRED TOTAL NUMBER OF FLOOD VENTS NOTED IN THE FBC APPROVED PRODUCTS LIST SHALL BE BASED ON ONE (1) FLOOD VENT PER EVERY 305 SQUARE FEET OF ENCLOSED AREA. SEE TYPICAL FLOOD VENT FRAMING PLAN, SHEET 5 OF 6.

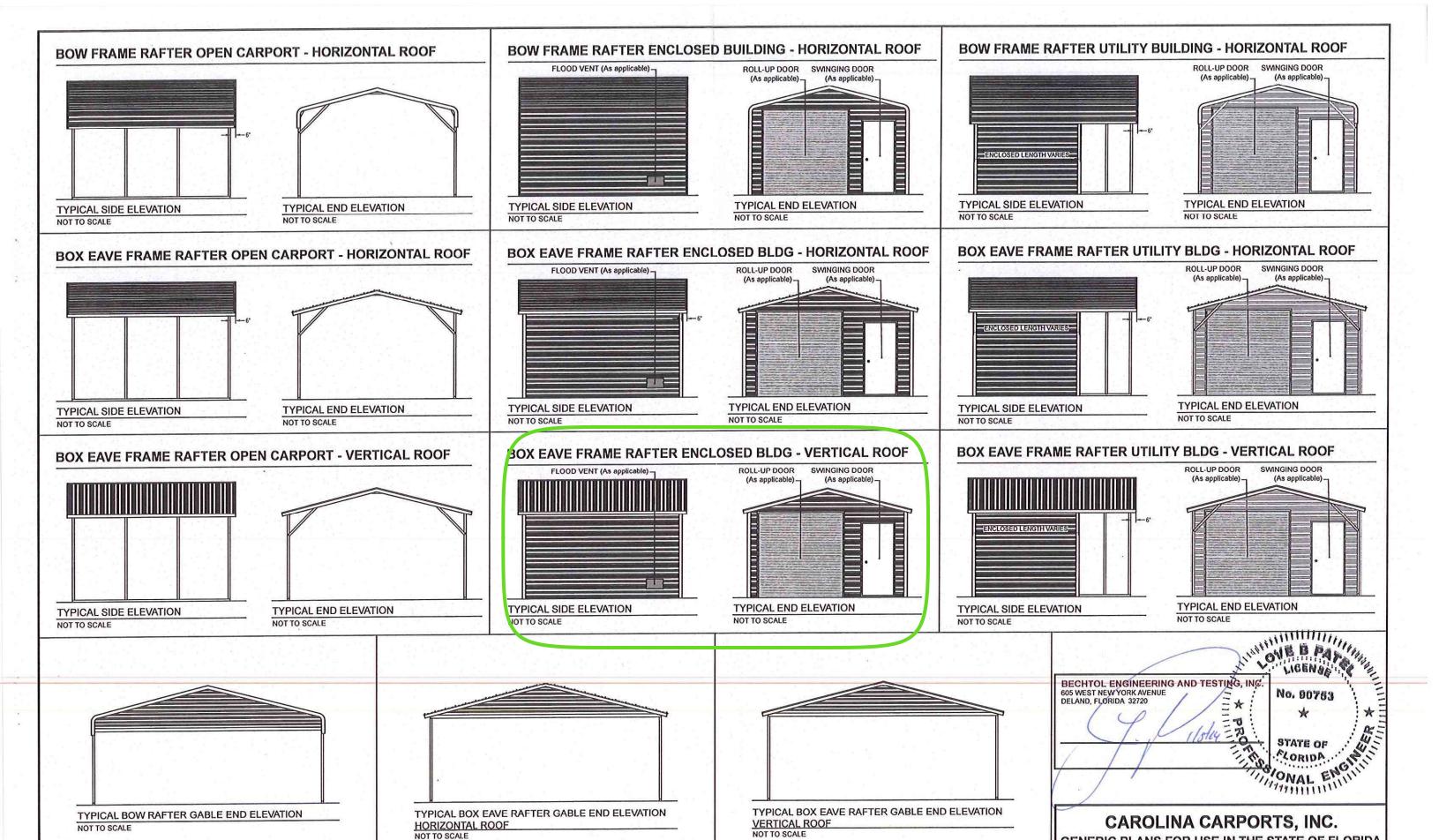
THIS IS TO CERTIFY THAT THE CALCULATIONS AND SPECIFICATIONS HEREIN HAVE BEEN PREPARED BY THE UNDERSIGNED PROFESSIONAL ENGINEER, AND ARE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 1609 OF THE FLORIDA BUILDING CODE, EIGHTH EDITION (2023).



### CAROLINA CARPORTS, INC. GENERIC PLANS FOR USE IN THE STATE OF FLORIDA

|  | BECHTOL ENGINEERING                                    |
|--|--|
|  | AND TESTING, Inc.                                      |
| CONSULTING CECTED<br>Caraficial of Authorization | HNICAL, ENMIRONMENTAL, AND MATERIALS TESTING ENGINEERS |

|  | reco           | DATE 1/1/2024  |  |  |  |  |
|--|----------------|----------------|--|--|--|--|
|  | DELANA MKB/CS  | SCALE NTS      |  |  |  |  |
|  | O-ECIED TB/CS  | FROJ NO G24001 |  |  |  |  |
|  | APPROVED TB/LP | SHEET 1 OF 6   |  |  |  |  |



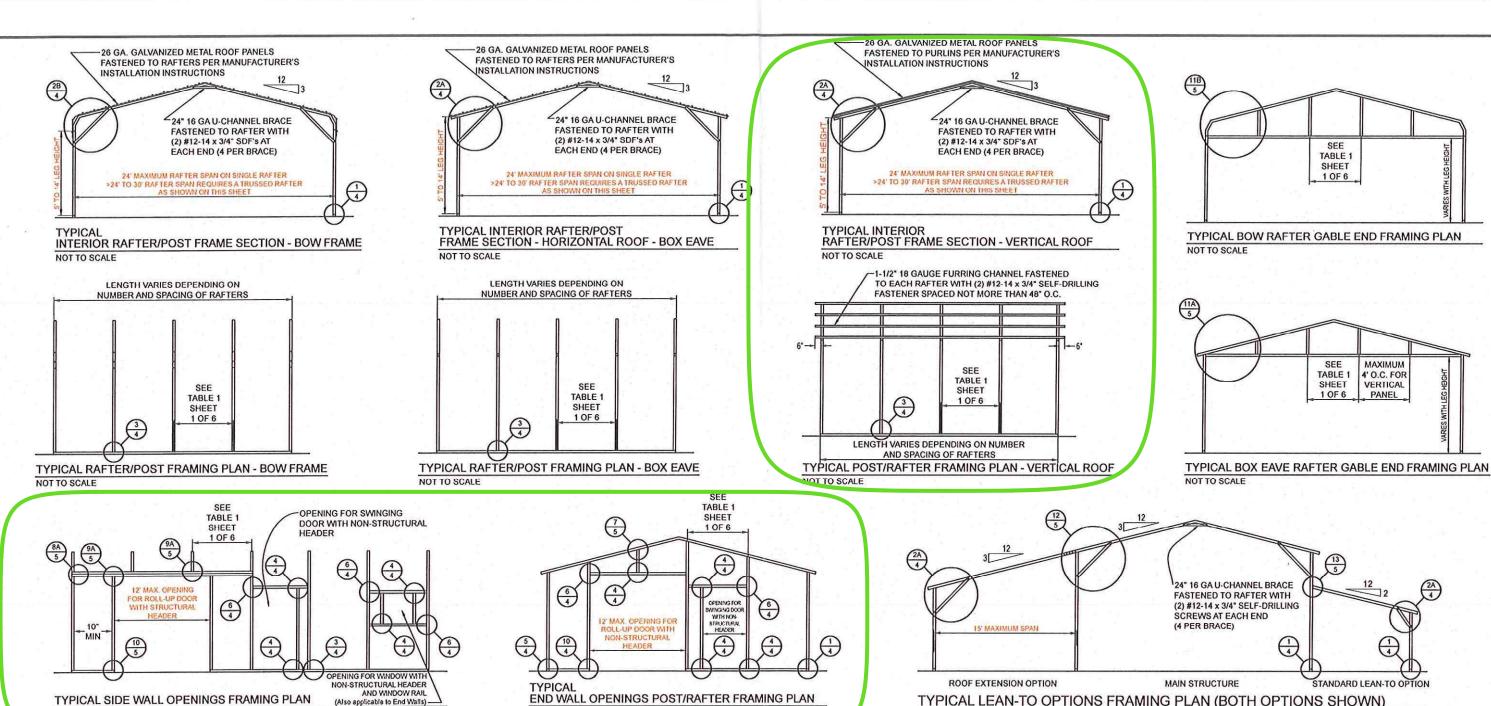
BECHTOL ENGINEERING AND TESTING, Inc.

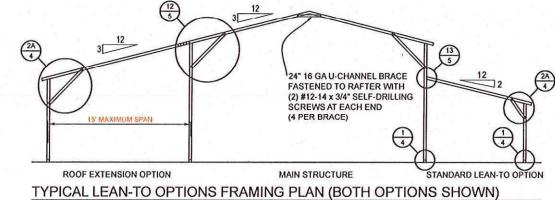
CONSULTING ACCOTECUTACAL, EMPROAMENTAL, NO MATERIALS TESTING DEGREERS

CONSULTING ACCOTECUTACAL, EMPROAMENTAL, NO MATERIALS TESTING DEGREERS

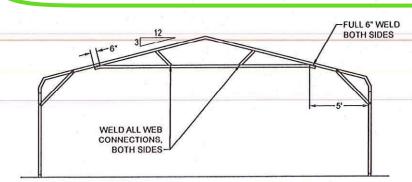
CONSULTING ACCOTECUTACAL, EMPROAMENTAL, NO MATERIALS TESTING DEGREERS

TESTING TO THE CONSULTING ACCOUNTY TO THE CONSULT TO T



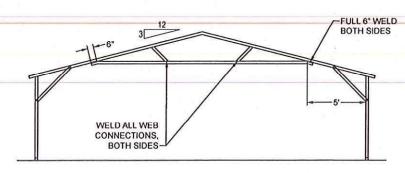


NOT TO SCALE (BOX EAVE RAFTER SHOWN, ONLY STANDARD LEAN-TO IS APPLICABLE TO BOW FRAME RAFTER)

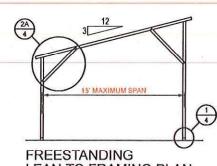


NOT TO SCALE

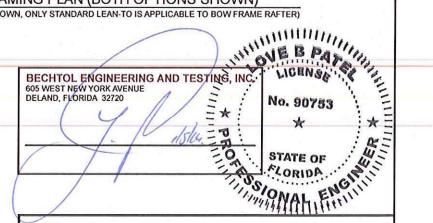
OPTIONAL 24'-1" TO 30' TRUSSED RAFTER - BOW NOT TO SCALE



OPTIONAL 24'-1" TO 30' TRUSSED RAFTER - BOX EAVE NOT TO SCALE



LEAN-TO FRAMING PLAN NOT TO SCALE



SEE

TABLE 1 SHEET

1 OF 6

TABLE 1

1 OF 6

MAXIMUM

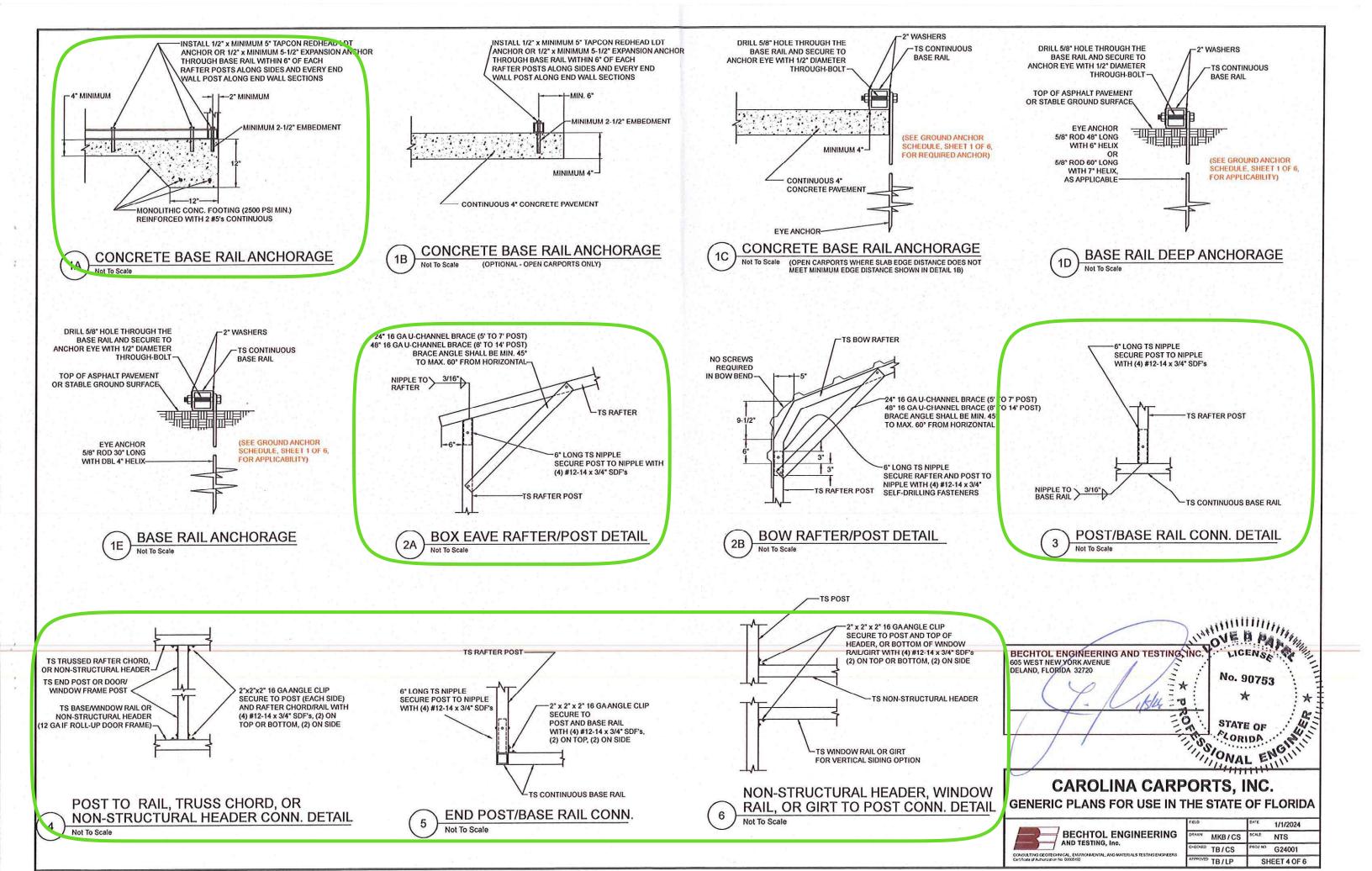
4' O.C. FOR

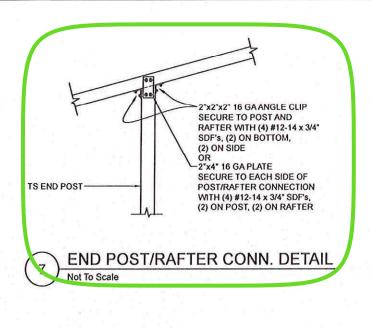
VERTICAL

PANEL

## CAROLINA CARPORTS, INC. GENERIC PLANS FOR USE IN THE STATE OF FLORIDA

|                                  | FELD           |        | CATE 1/1/2024 |        |  |
|----------------------------------|----------------|--------|---------------|--------|--|
| BECHTOL ENGINEERING              | DRAWN          | MKB/CS | SCALE         | NTS    |  |
| AND TESTING, Inc.                | O-EO-EO        | TB/CS  | PROJ NO:      | G24001 |  |
| Central of American No. 00005432 | APPROVED TB/LP |        | SHEET 3 OF 6  |        |  |





DBL TS STRUCTURAL HEADER WITH 7" SPACERS WELDED BOTH SIDES

TS POST

(4) #12-14 x 3/4"

SECURE EACH WITH

MINIMUM 6" LONG TS NIPPLE

SELF-DRILLING FASTENERS

7" TS SPACER

WITH 7" SPACERS

STRUCTURAL HEADER TO

POST CONNECTION DETAIL

Not To Scale

\_WELDED BOTH SIDES

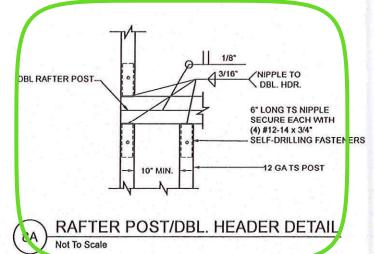
MAXIMUM 2' O.C.

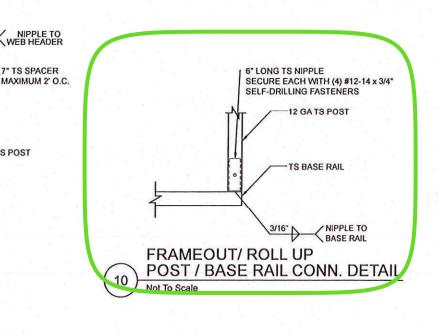
DBL TS STRUCTURAL HEADER

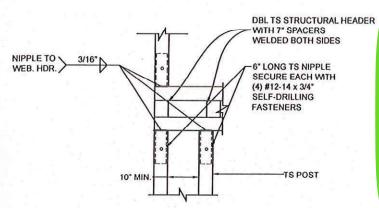
NIPPLE TO 3/16" WEB HEADER

9B

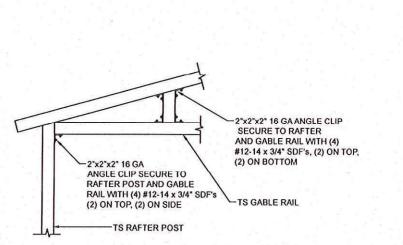
Not To Scale



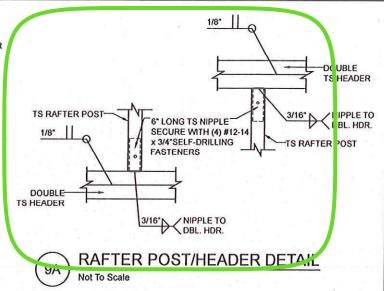


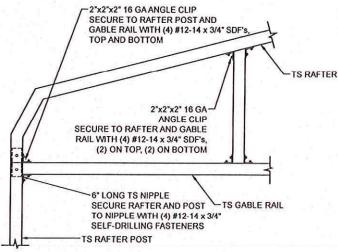


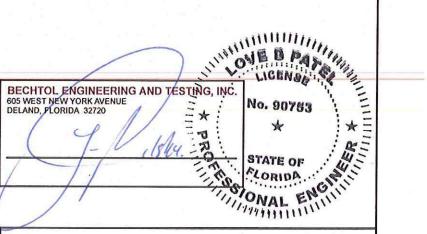
RAFTER POST/WEB HEADER DETAIL 8B



GABLE RAIL TO RAFTER POST CONNECTION DETAIL Not To Scale



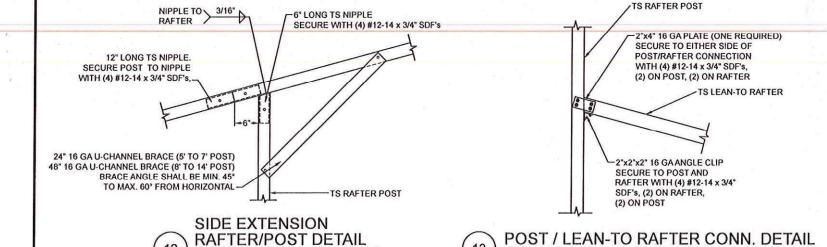




GABLE RAIL TO RAFTER POST

CONNECTION DETAIL

11B

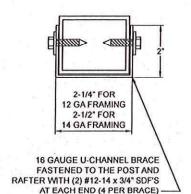


7" TS SPACER

TS POST

CAROLINA CARPORTS, INC. GENERIC PLANS FOR USE IN THE STATE OF FLORIDA

|                                      | FELD    |        | CATE 1/1/2024 |            |  |
|--------------------------------------|---------|--------|---------------|------------|--|
| BECHTOL ENGINEERING                  | DEANN   | MKB/CS | SCALE         | NTS        |  |
| AND TESTING, Inc.                    | O-EO/ED | TB/CS  | PROJ NO       | G24001     |  |
| Centrals of Autorization to 00005492 |         | TB/LP  | SH            | EET 5 OF 6 |  |

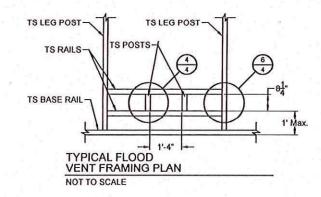


**BRACE SECTION** 

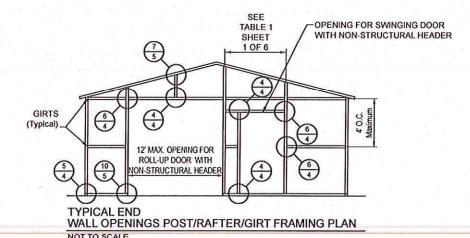
# 1-1/2" 18 GAUGE FURRING CHANNEL FASTENED TO EACH RAFTER WITH (2) #12-14 x 3/4" SDF SPACED NOT MORE THAN 48" O.C. 26 GA. METAL ROOF PANEL

## ROOF PANEL ATTACHMENT

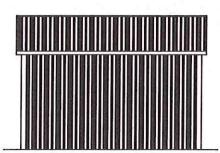
(ALTERNATE FOR VERTICAL ROOF PANELS)
Not To Scale



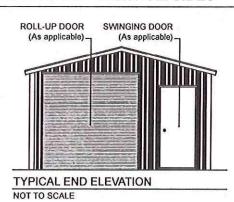
#### SEE GENERAL NOTE No. 12, SHEET 1 OF 6.



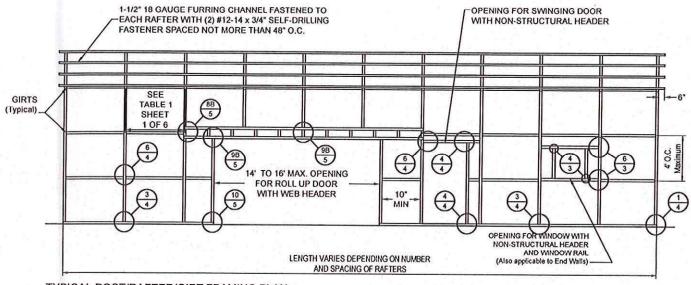
#### **BOX EAVE FRAME RAFTER ENCLOSED BLDG - VERTICAL SIDES**



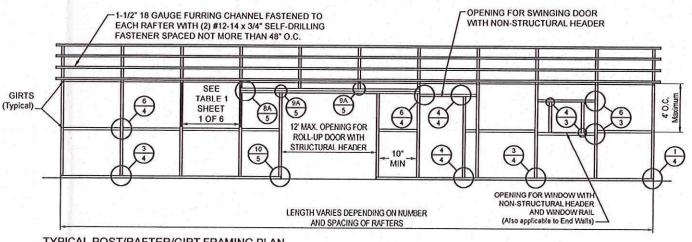
TYPICAL SIDE ELEVATION NOT TO SCALE



# **VERTICAL SIDE OPTION**

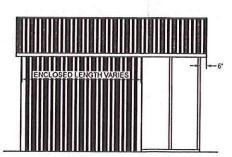


TYPICAL POST/RAFTER/GIRT FRAMING PLAN

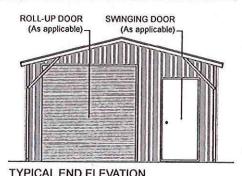


TYPICAL POST/RAFTER/GIRT FRAMING PLAN

#### **BOX EAVE FRAME RAFTER UTILITY BLDG - VERTICAL SIDES**



TYPICAL SIDE ELEVATION
NOT TO SCALE



TYPICAL END ELEVATION
NOT TO SCALE



# CAROLINA CARPORTS, INC. GENERIC PLANS FOR USE IN THE STATE OF FLORIDA

