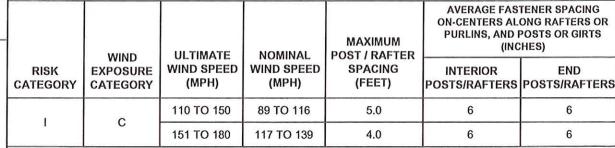
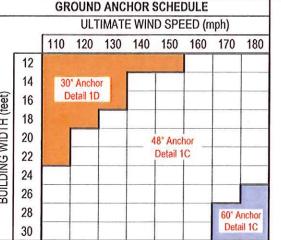
	FBC APP	ROVED PRODUCTS LIST			IVI	WIND SPE		
PRODUCT CATEGORY	SUB CATEGORY	MANUFACTURER	APPROVAL No. & DATE	QA EXPIRATION DATE	OPEN	ENCLOSED	PARTIALLY ENCLOSED	
STRUCTURAL COMPONENTS	ROOF DECK	CAROLINA CARPORTS, INC. 26 Gauge AG Panel	FL6596.1-R6 12/15/20	04/05/27	180	180	180	
STRUCTURAL COMPONENTS	STRUCTURAL WALL	CAROLINA CARPORTS, INC. 26 Gauge AG Panel	FL6702.1-R6 12/15/20	03/14/27	180	180	180	C
STRUCTURAL COMPONENTS	STRUCTURAL WALL	CAROLINA CARPORTS, INC. 26 Gauge Dutch Lap Wall Panel	FL6702.3-R6 12/15/20 **	03/14/27	N/A	164	143	
STRUCTURAL COMPONENTS	FLOOD VENT	CRAWL SPACE DOOR SYSTEMS, INC. 16x8 Flood Vent	FL29622.1 05/15/19	09/30/22	N/A	N/A	N/A	N
EXTERIOR DOORS	SWINGING	ELIXIR DOOR AND METAL COMPANY Series 402-14	FL17996.3-R1 02/04/18	09/14/20	N/A	156	138	_
EXTERIOR DOORS	SWINGING	ELIXIR DOOR AND METAL COMPANY Series 407	FL17996.5-R1 02/04/18	09/14/20	N/A	165	147	
EXTERIOR DOORS	ROLL-UP	ASTA INDUSTRIES INC. Model 203 (12' Max. Width)	FL8888.1-R6 12/29/20 *	12/31/21	N/A	180	174	
EXTERIOR DOORS	ROLL-UP	CAROLINA CARPORTS, INC. Steel Roll Up Sheet Door (12' Max. Width)	FL16806.1-R5 12/16/20	04/05/29	N/A	158	138	(feet)
EXTERIOR DOORS	ROLL-UP	CAROLINA CARPORTS, INC. Steel Roll-Up Sheet Door - (8' Max. Width)	FL16806.2-R5 12/16/20	04/05/27	N/A	180	180	WIDTH
EXTERIOR DOORS	ROLL-UP	CAROLINA CARPORTS, INC. Steel Roll-Up Sheet Door - (16' Max. Width)	FL16806.3-R5 12/16/20	04/05/27	N/A	155	133	BUILDING
EXTERIOR DOORS	ROLL-UP	CAROLINA CARPORTS, INC. Steel Roll-Up Sheet Door - (10' Max. Width)	FL16806.4-R5 12/16/20	04/05/27	N/A	180	172	BUII
WINDOWS	SINGLE HUNG	MI WINDOWS AND DOORS Model 185SH	FL17499.1-R8 11/27/20	10/17/23	N/A	175	157	-

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



NOTES: 1. Specifications applicable to 26 gauge metal roof and wall panels fastened directly to 12 or 14 gauge steel tube framing, or 18 gauge hat channel roof purlins.

 Specifications applicable only for mean roof height of 20 feet or less, and roof slopes of 7° to 27° (1.5:12 to 6:12 pitch). Spacing requirements for other roof heights and/or slopes may vary.



DETAILS 1C AND 1D SHOWN ON SHEET 4 OF 6

MAXIMUM ALLOWABLE

" MAXIMUM POST SPACING FOR DUTCH LAP IS 4.0"

METAL CARPORT INSTALLATION PLANS AND DETAILS AND FRAMING AND FASTENER SPECIFICATIONS

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

GENERAL NOTES:

A PRODUCT SHALL HAVE A VALID FBC PRODUCT APPROVAL

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

- 1. 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
- 3. ALL STEEL TUBING SHALL BE 50 KSI GALVANIZED STEEL. ALL FASTENERS SHALL BE GALVANIZED OR STAINLESS STEEL

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

- 4. 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
- 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 ACCOMPDIATE

- 6. 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.
- 7. 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 TYPE GROUND ANCHOR REQUIREMENTS.
- 8. 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.
- 9. POST/RAFTER BRACING: BRACE ON EVERY POST/RAFTER CONNECTION, EXCEPT FOR END WALLS.
- 10. SLAB FOUNDATION SUBGRADE SOILS SHALL BE TERMITE TREATED AND COVERED WITH 6 MIL VAPOR RETARDER PER SECTION R318.1 OF THE FBC SEVENTH EDITION (2020) RESIDENTIAL, AND SECTION 1816.1 OF THE FBC SEVENTH EDITION (2020) 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, SEVENTH EDITION (2020).

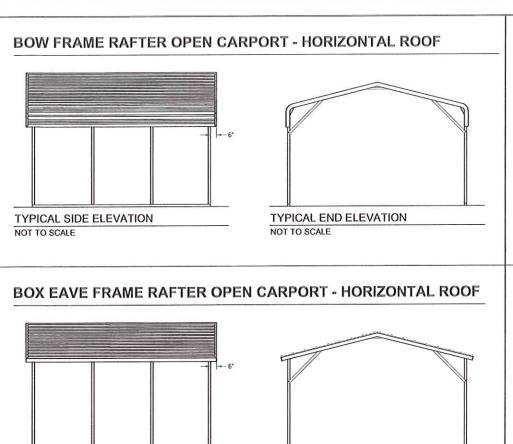


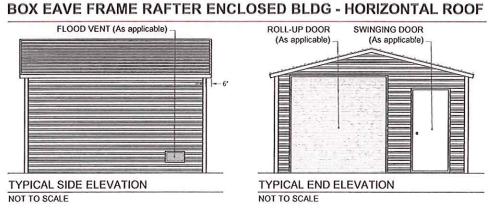
CAROLINA CARPORTS, INC.

GENERIC PLANS FOR USE IN THE STATE OF FLORIDA

	BECHTOL ENGINEERING
CONSULTING GE	OTECHNICAL, ENVIRONMENTAL, AND MATERIALS TESTING ENGINEERS

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	AFRIOVES: TB	SHEET 1 OF 6





BOW FRAME RAFTER ENCLOSED BUILDING - HORIZONTAL ROOF

ROLL-UP DOOR

(As applicable)

TYPICAL END ELEVATION

NOT TO SCALE

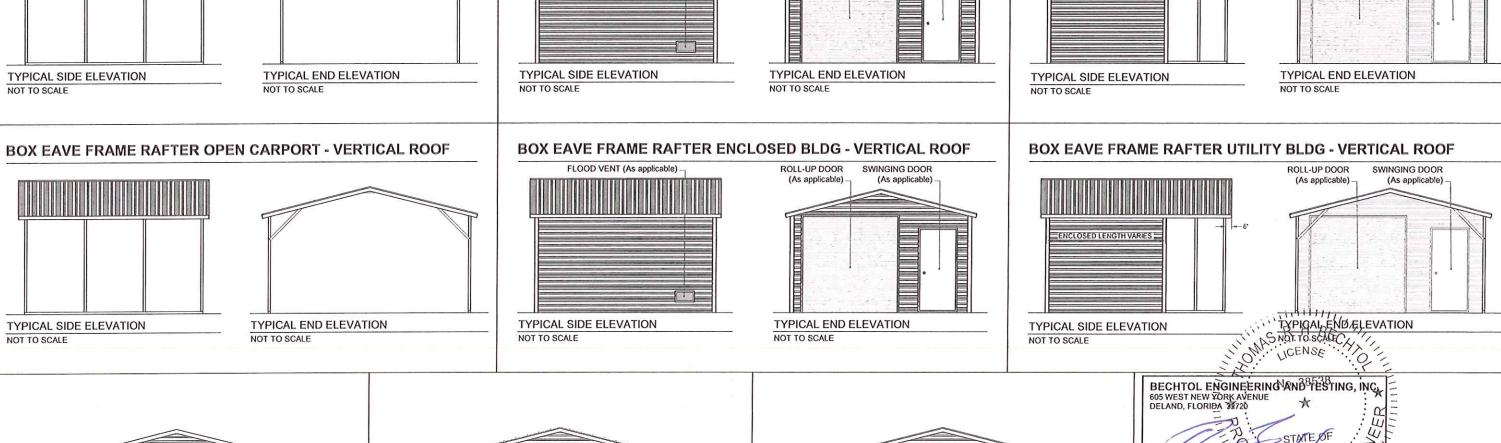
SWINGING DOOR

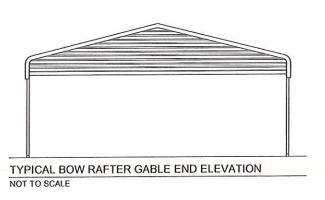
(As applicable)

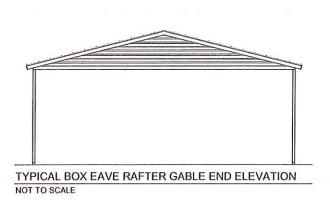
FLOOD VENT (As applicable) -

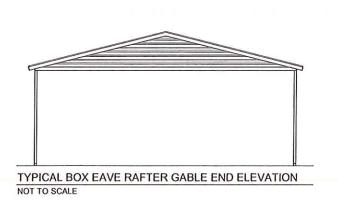
TYPICAL SIDE ELEVATION

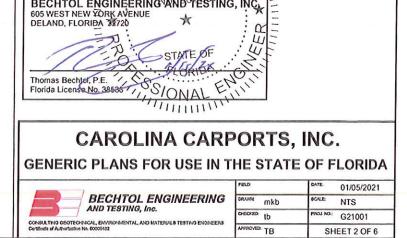
NOT TO SCALE











BOW FRAME RAFTER UTILITY BUILDING - HORIZONTAL ROOF

BOX EAVE FRAME RAFTER UTILITY BLDG - HORIZONTAL ROOF

ENCLOSED LENGTH VARIES

TYPICAL SIDE ELEVATION

ENCLOSED LENGTH VARIES

NOT TO SCALE

ROLL-UP DOOR

(As applicable)

TYPICAL END ELEVATION

NOT TO SCALE

ROLL-UP DOOR

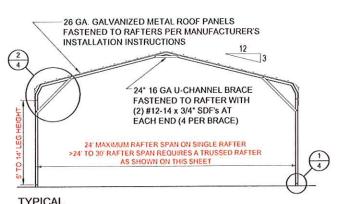
(As applicable)

SWINGING DOOR

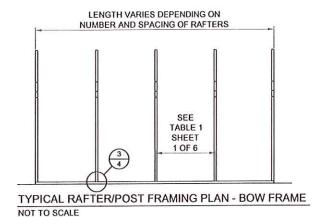
SWINGING DOOR

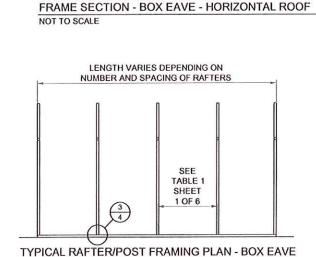
(As applicable)

(As applicable)



INTERIOR RAFTER/POST FRAME SECTION - BOW FRAME NOT TO SCALE





- 26 GA. GALVANIZED METAL ROOF PANELS FASTENED TO RAFTERS PER MANUFACTURER'S

24" 16 GA U-CHANNEL BRACE

FASTENED TO RAFTER WITH

(2) #12-14 x 3/4" SDF's AT

24' MAXIMUM RAFTER SPAN ON SINGLE RAFTER >24' TO 30' RAFTER SPAN REQUIRES A TRUSSED RAFTER

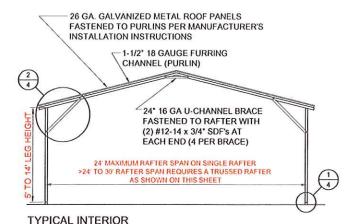
AS SHOWN ON THIS SHEET

EACH END (4 PER BRACE)

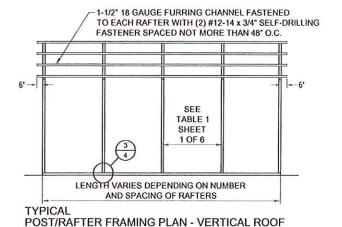
INSTALLATION INSTRUCTIONS

TYPICAL INTERIOR RAFTER/POST

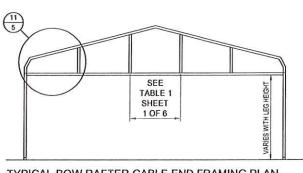
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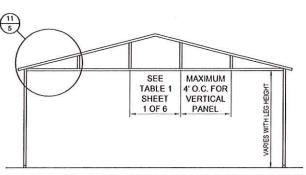
TYPICAL INTERIOR RAFTER/POST FRAME SECTION - VERTICAL ROOF NOT TO SCALE



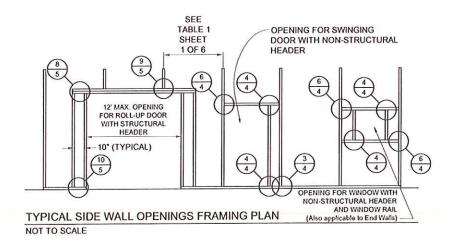
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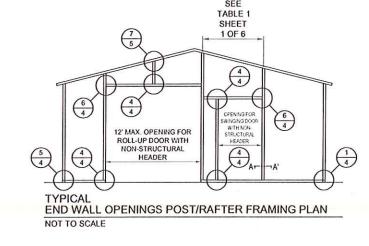


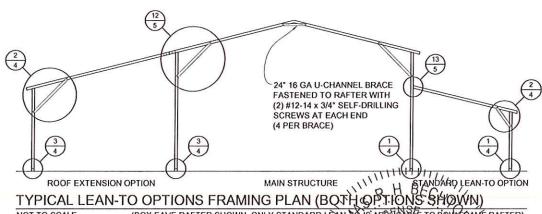
TYPICAL BOW RAFTER GABLE END FRAMING PLAN NOT TO SCALE



TYPICAL BOX EAVE RAFTER GABLE END FRAMING PLAN NOT TO SCALE

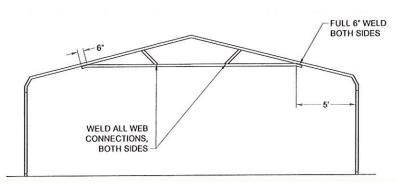




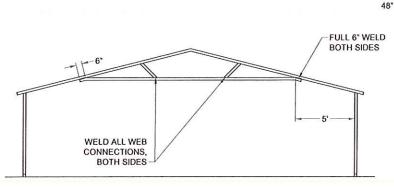


(BOX EAVE RAFTER SHOWN, ONLY STANDARD LEAN TO IS ARRUGABLE TO BOW FRAME RAFTER) NOT TO SCALE

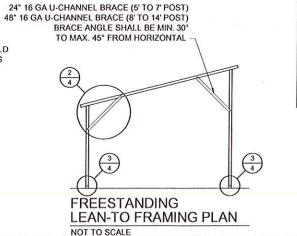
605 WEST NEW YORK AVENUE DELAND, FLORIDA, 32720;







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



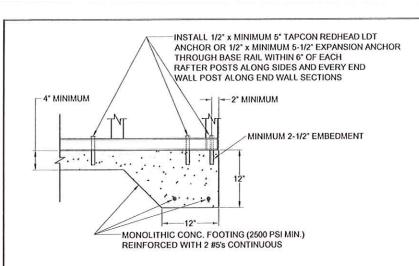
Thomas Bechtol, P.E. Florida License No. 38538

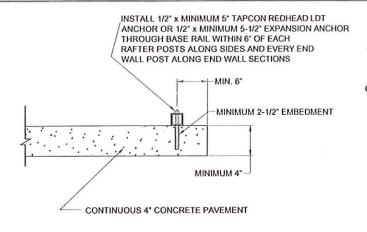
BECHTOL ENGINEERING AND SESTING, INC.

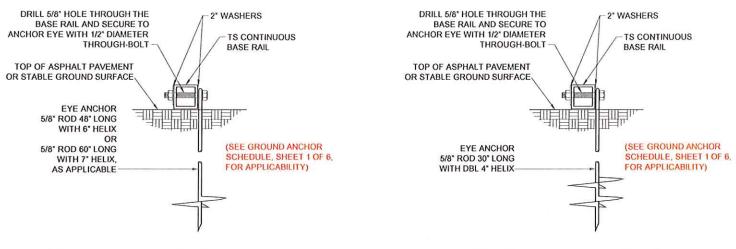
CAROLINA CARPORTS, INC. GENERIC PLANS FOR USE IN THE STATE OF FLORIDA

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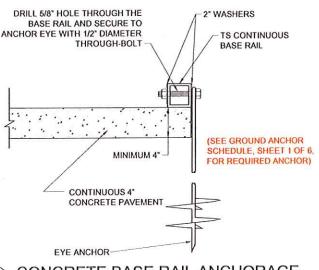


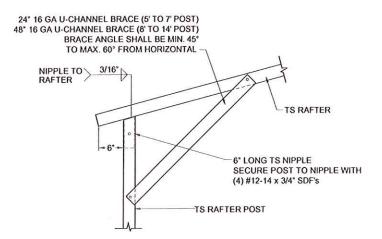




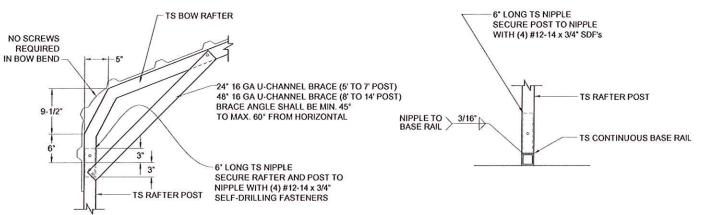


1D BASE RAIL ANCHORAGE Not To Scale







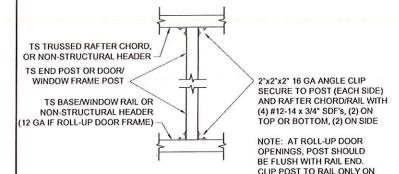


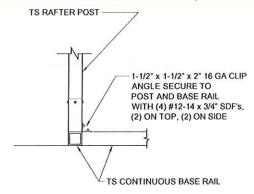
CONCRETE BASE RAIL ANCHORAGE NOI TO Scale (OPEN CARPORTS WHERE SLAB EDGE DISTANCE DOES NOT MEET MINIMUM EDGE DISTANCE SHOWN IN DETAIL 1B)

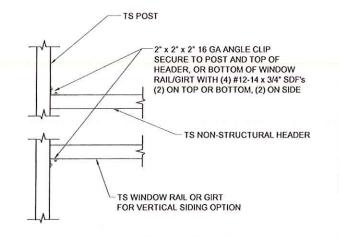


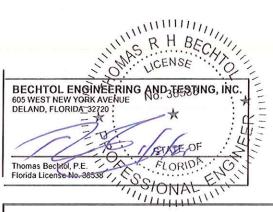
POST/BASE RAIL CONN. DETAIL

Not To Scale









POST TO RAIL, TRUSS CHORD, OR NON-STRUCTURAL HEADER CONN. DETAIL

Not To Scale

SIDE OPPOSITE THE OPENING

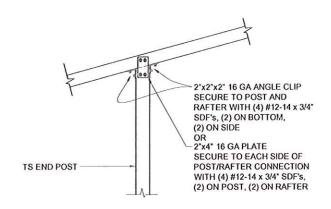
5 END POST/BASE RAIL CONN.

Not To Scale

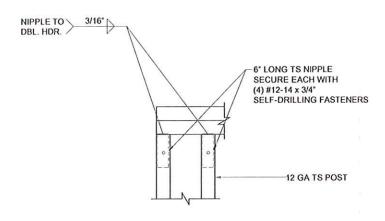
NON-STRUCTURAL HEADER, WINDOW RAIL, OR GIRT TO POST CONN. DETAIL Not To Scale

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

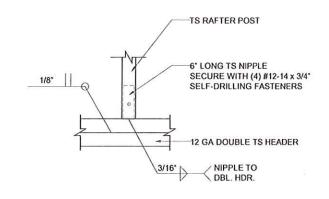
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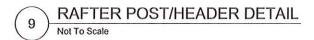


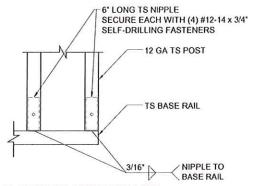




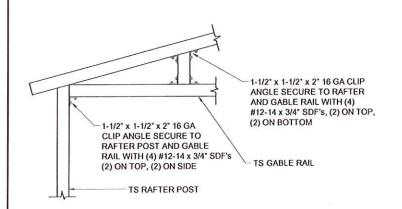




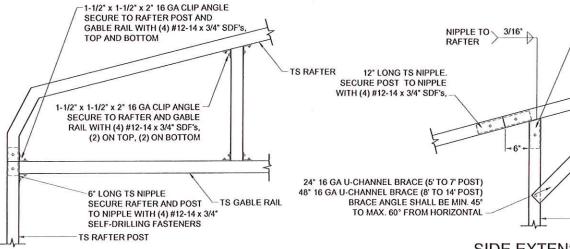




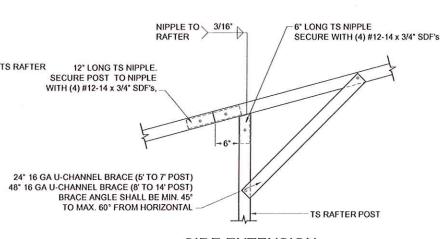
RAFTER POST/BASE BASE RAIL CONNECTION DETAIL



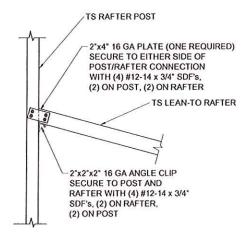
GABLE RAIL TO RAFTER POST CONNECTION DETAIL 11A Not To Scale



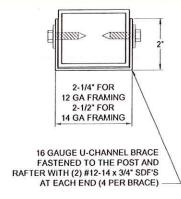




SIDE EXTENSION RAFTER/POST DETAIL 12



POST / LEAN-TO RAFTER CONN. DETAIL 13

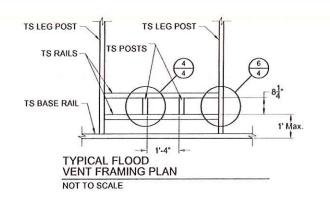


BRACE SECTION Not To Scale

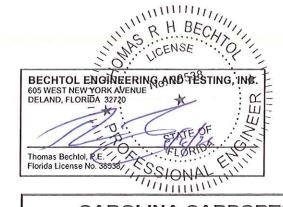
1-1/2" 18 GAUGE FURRING CHANNEL FASTENED TO EACH RAFTER WITH (2) #12-14 x 3/4" SDF SPACED NOT MORE THAN 48" O.C. 26 GA. METAL ROOF PANEL TS RAFTER

ROOF PANEL ATTACHMENT

(ALTERNATE FOR VERTICAL ROOF PANELS) Not To Scale



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

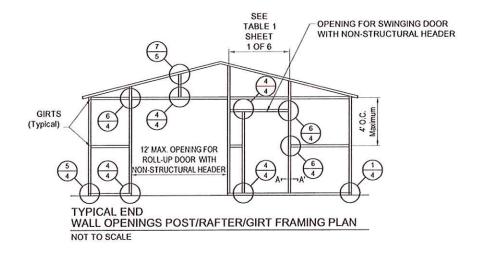


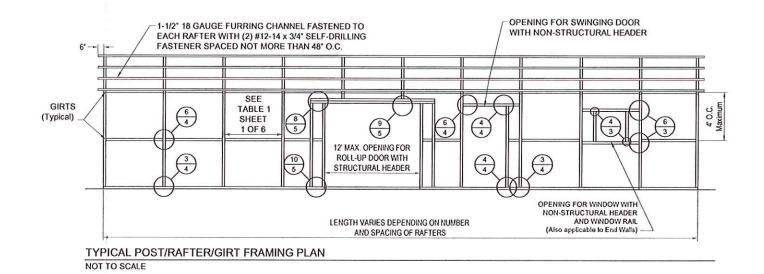
CAROLINA CARPORTS, INC. GENERIC PLANS FOR USE IN THE STATE OF FLORIDA

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CONSULTING GEOTECHNICAL, ENVIRONMENTAL, AND MATERIALS TESTING ENGINEERS	L

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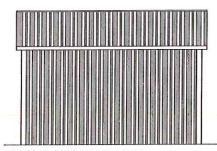
VERTICAL SIDE OPTION



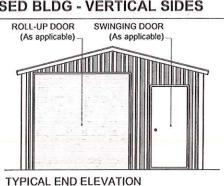


BOX EAVE FRAME RAFTER ENCLOSED BLDG - VERTICAL SIDES

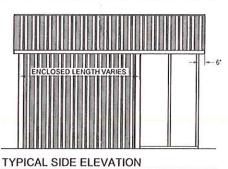
NOT TO SCALE



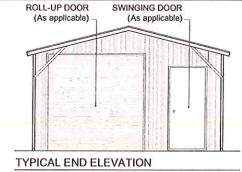
TYPICAL SIDE ELEVATION NOT TO SCALE



BOX EAVE FRAME RAFTER UTILITY BLDG - VERTICAL SIDES







NOT TO SCALE

BECHTOL ENGINEERING AND TESTING, INC 605 WEST NEW YORK AVENUE NO. 38538 DELAND, FLORIDA 3272D Thomas Bechto, P.E. Florida License No. 38538 WOUND THE WAY

CAROLINA CARPORTS, INC.

GENERIC PLANS FOR USE IN THE STATE OF FLORIDA



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