

FBC APPROVED PRODUCTS LIST

PRODUCT CATEGORY	SUB CATEGORY	MANUFACTURER	APPROVAL No. & DATE	QA EXPIRATION DATE	MAXIMUM ALLOWABLE WIND SPEED	PARTIALLY ENCLOSED	ENCLOSED	OPEN
STRUCTURAL COMPONENTS	ROOF DECK	CAROLINA CARPORTS, INC. 28 Gauge AG Panel	FL16598-1-R6 12/15/20	04/05/27	180	180	180	180
STRUCTURAL COMPONENTS	STRUCTURAL WALL	CAROLINA CARPORTS, INC. 28 Gauge AG Panel	FL17021-1-R6 12/15/20	03/14/27	180	180	180	180
STRUCTURAL COMPONENTS	STRUCTURAL WALL	CAROLINA CARPORTS, INC. 28 Gauge Dutch Lip Wall Panel	FL17023-R6 12/15/20	03/14/27	N/A	164	164	143
STRUCTURAL COMPONENTS	FLOOD VENT	CRANVA SPACE DOOR SYSTEMS, INC. 16x8 Flood Vent	FL29622-1-R1 02/28/21	09/20/22	N/A	N/A	N/A	N/A
EXTERIOR DOORS	SWINGING	ELIJAH DOOR AND METAL COMPANY Series 402-14	FL17898-3-R2 02/28/21	09/26/25	N/A	139	139	139
EXTERIOR DOORS	SWINGING	ELIJAH DOOR AND METAL COMPANY Series 407	FL17898-5-R2 02/28/21	08/19/25	N/A	174	174	155
EXTERIOR DOORS	ROLL-UP	ASTA INDUSTRIES INC. Model 203 (12" Max. Width)	FL16688-1-R6 02/29/21	12/23/23	N/A	180	180	174
EXTERIOR DOORS	ROLL-UP	CAROLINA CARPORTS, INC. Steel Roll Up Sheet Door (12" Max. Width)	FL19006-1-R5 12/16/20	04/05/27	N/A	179	179	154
EXTERIOR DOORS	ROLL-UP	CAROLINA CARPORTS, INC. Steel Roll-Up Sheet Door - (6" Max. Width)	FL19005-2-R5 12/16/20	04/05/27	N/A	160	160	180
EXTERIOR DOORS	ROLL-UP	CAROLINA CARPORTS, INC. Steel Roll-Up Sheet Door - (6" Max. Width)	FL19008-3-R5 12/16/20	04/05/27	N/A	155	155	133
EXTERIOR DOORS	ROLL-UP	CAROLINA CARPORTS, INC. Steel Roll-Up Sheet Door - (10" Max. Width)	FL19004-4-R5 12/16/20	04/05/27	N/A	180	180	172
WINDOWS	SINGLE HUNG	PQT INDUSTRIES Model SH1700	FL21914-R28 11/11/20	10/17/23	N/A	180	180	178

NOTES:
1. DOORS AND WINDOWS SHOWN MAY BE SUBSTITUTED FOR DIFFERENT PRODUCT LINES AND/OR MODELS, PROVIDED THE FOLLOWING CONDITIONS ARE MET:
A. PRODUCT SHALL HAVE A VALID FBC PRODUCT APPROVAL.
B. COMPONENTS ARE INSTALLED ACCORDING TO MANUFACTURER'S INSTALLATION REQUIREMENTS.
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 ACCOMMODATE SUBSTITUTED PRODUCT.

GENERAL NOTES:
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.
2. THESE STRUCTURES ARE DESIGNED AS NON-HABITABLE UTILITY/STORAGE BUILDINGS (RISK CATEGORY II) 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 BEAT 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 60 KSI GALVANIZED STEEL. ALL FASTENERS SHALL BE GALVANIZED OR STAINLESS STEEL OR ZINC PLATED.
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 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.
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 A165, OR WITH SYNTHETIC FIBER REINFORCEMENT COMPLYING WITH ASTM C1116.
7. BASE RAIL GROUND ANCHOR ANCHORAGE SHALL BE INSTALLED ACCORDING TO THE ANCHORAGE SCHEDULE, 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 WE-JIT ANKR-TITE MODEL AT1252, OR SLEEVE ANCHOR MODEL HSA 1250, OR EQUIVALENT.
9. POSTRAFTER 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 R518.1 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 2000 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.
13. 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 5.

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

RISK CATEGORY	WIND EXPOSURE CATEGORY	ULTIMATE WIND SPEED (MPH)	NOMINAL WIND SPEED (MPH)	MAXIMUM POST / RAFTER SPACING (FEET)	AVERAGE FASTENER SPACING ON-CENTERS ALONG RAFTERS OR PURLINS, AND POSTS OR GIRTS (INCHES)
I	C	110 TO 150	89 TO 116	5.0	INTERIOR POSTS/RAFTERS 6 END POSTS/RAFTERS 6
		151 TO 180	117 TO 139	4.0	

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 framing.
2. Spacing hat channel roof framing 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.

GROUND ANCHOR SCHEDULE

ULTIMATE WIND SPEED (mph)	110	120	130	140	150	160	170	180
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								

30" Anchor Detail 1D
48" Anchor Detail 1C
60" Anchor Detail 1C

METAL CARPORT INSTALLATION PLANS AND DETAILS AND FRAMING AND FASTENER SPECIFICATIONS

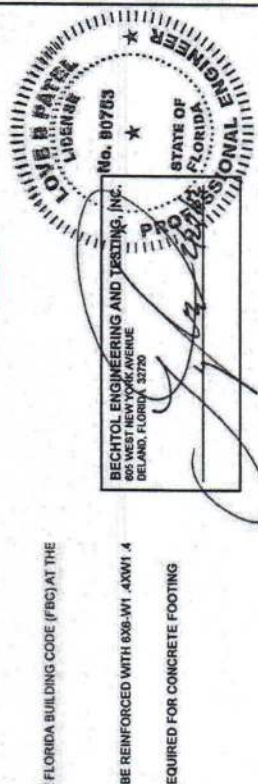
FOR CONSTRUCTION IN THE STATE OF FLORIDA

PREPARED FOR:
CAROLINA CARPORTS, INC.
P.O. BOX 1283
DOBSON, NORTH CAROLINA 27017

PREPARED BY:
BECHTOL ENGINEERING AND TESTING, INC.
605 WEST NEW YORK AVENUE
ROY DELAND, FLORIDA 32726
Certificate of Authorization No. 00009692

File Copy Code

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).

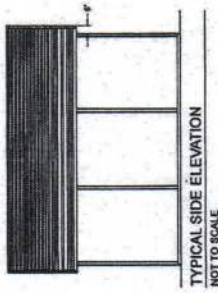


CAROLINA CARPORTS, INC.
GENERIC PLANS FOR USE IN THE STATE OF FLORIDA

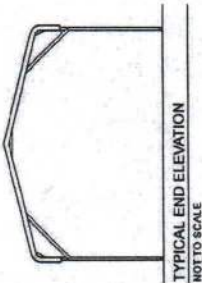
BECHTOL ENGINEERING AND TESTING, INC.
605 WEST NEW YORK AVENUE
ROY DELAND, FLORIDA 32726

DATE: 2/21/2023
DRAWN: MAB
CHECKED: JTB/CJS
PROJECT: 032001
SHEET: 1 OF 6

BOW FRAME RAFTER OPEN CARPORT - HORIZONTAL ROOF



TYPICAL SIDE ELEVATION
NOT TO SCALE

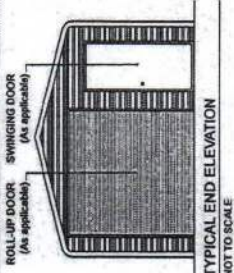


TYPICAL END ELEVATION
NOT TO SCALE

BOW FRAME RAFTER ENCLOSED BUILDING - HORIZONTAL ROOF

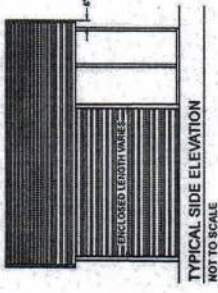


TYPICAL SIDE ELEVATION
NOT TO SCALE

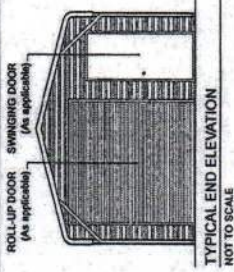


TYPICAL END ELEVATION
NOT TO SCALE

BOW FRAME RAFTER UTILITY BUILDING - HORIZONTAL ROOF

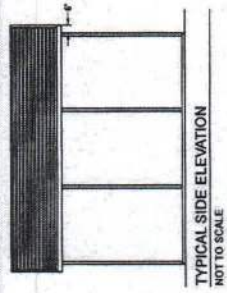


TYPICAL SIDE ELEVATION
NOT TO SCALE

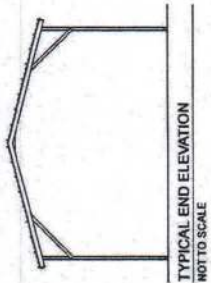


TYPICAL END ELEVATION
NOT TO SCALE

BOX EAVE FRAME RAFTER OPEN CARPORT - HORIZONTAL ROOF

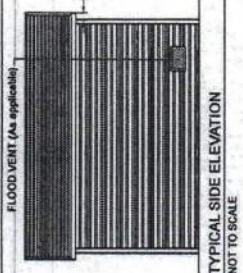


TYPICAL SIDE ELEVATION
NOT TO SCALE

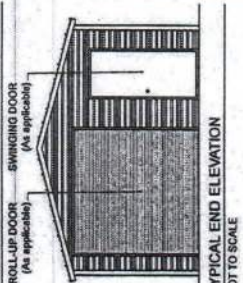


TYPICAL END ELEVATION
NOT TO SCALE

BOX EAVE FRAME RAFTER ENCLOSED BLDG - HORIZONTAL ROOF

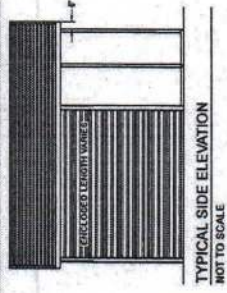


TYPICAL SIDE ELEVATION
NOT TO SCALE

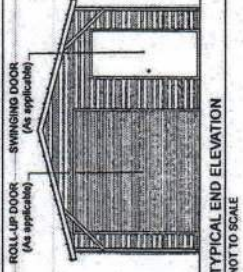


TYPICAL END ELEVATION
NOT TO SCALE

BOX EAVE FRAME RAFTER UTILITY BLDG - HORIZONTAL ROOF

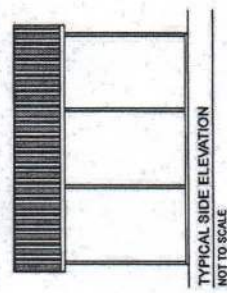


TYPICAL SIDE ELEVATION
NOT TO SCALE

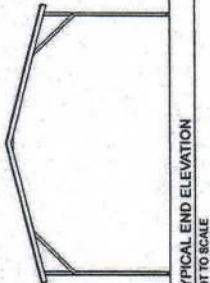


TYPICAL END ELEVATION
NOT TO SCALE

BOX EAVE FRAME RAFTER OPEN CARPORT - VERTICAL ROOF

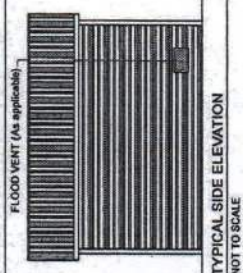


TYPICAL SIDE ELEVATION
NOT TO SCALE

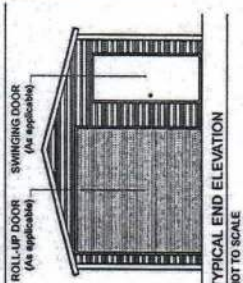


TYPICAL END ELEVATION
NOT TO SCALE

BOX EAVE FRAME RAFTER ENCLOSED BLDG - VERTICAL ROOF

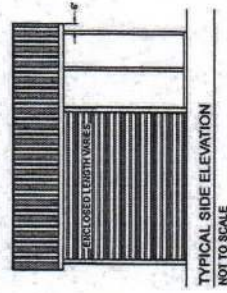


TYPICAL SIDE ELEVATION
NOT TO SCALE

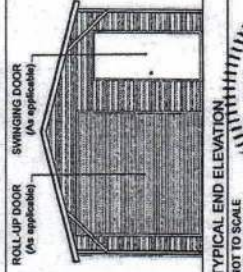


TYPICAL END ELEVATION
NOT TO SCALE

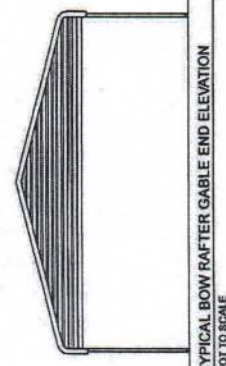
BOX EAVE FRAME RAFTER UTILITY BLDG - VERTICAL ROOF



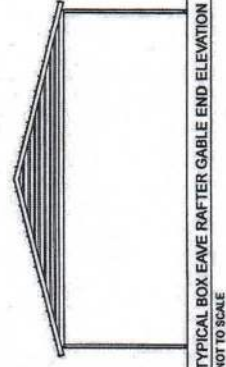
TYPICAL SIDE ELEVATION
NOT TO SCALE



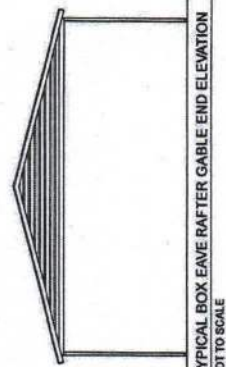
TYPICAL END ELEVATION
NOT TO SCALE



TYPICAL BOW RAFTER GABLE END ELEVATION
NOT TO SCALE



TYPICAL BOX EAVE RAFTER GABLE END ELEVATION
NOT TO SCALE



TYPICAL BOX EAVE RAFTER GABLE END ELEVATION
NOT TO SCALE

BECHTOL ENGINEERING AND TESTING, INC.
10000 W. UNIVERSITY BLVD
DELAND, FLORIDA 32720

[Signature]

Professional Engineer
No. 80783
STATE OF FLORIDA

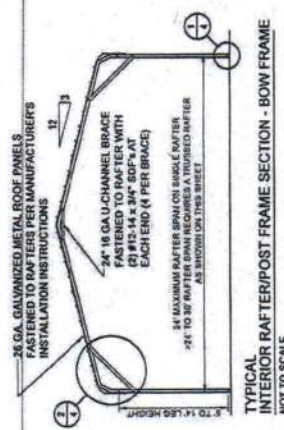
BECHTOL ENGINEERING
AND TESTING, INC.
10000 W. UNIVERSITY BLVD
DELAND, FLORIDA 32720

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

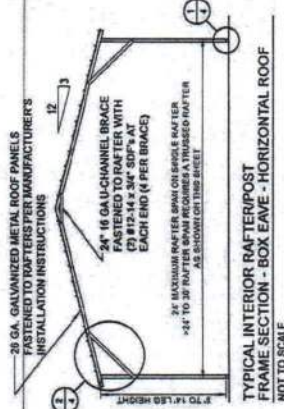
DATE	2/21/2023
ISSUE	NTS
PROJECT	AMB
DATE	1/24/20
PROJECT	TR / CS
PROJECT	TR / LP

BECHTOL ENGINEERING AND TESTING, INC.
10000 W. UNIVERSITY BLVD
DELAND, FLORIDA 32720

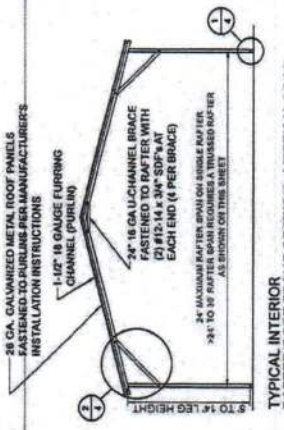
SHEET 7 OF 6



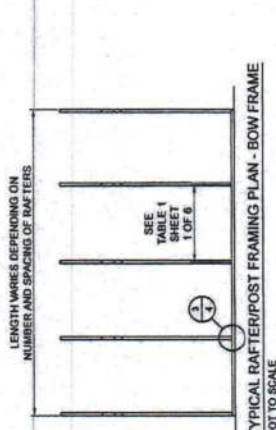
TYPICAL INTERIOR RAFTER/POST FRAME SECTION - BOW FRAME
NOT TO SCALE



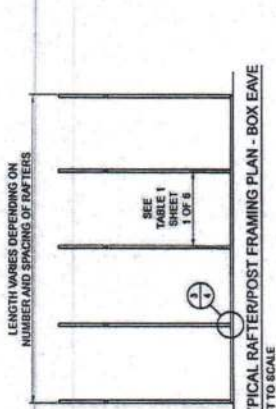
TYPICAL INTERIOR RAFTER/POST FRAME SECTION - BOX EAVE - HORIZONTAL ROOF
NOT TO SCALE



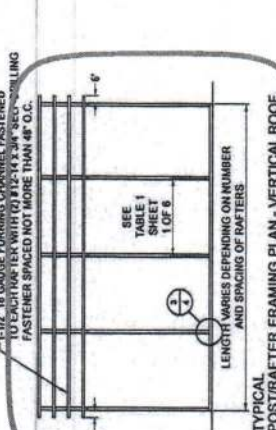
TYPICAL INTERIOR RAFTER/POST FRAME SECTION - VERTICAL ROOF
NOT TO SCALE



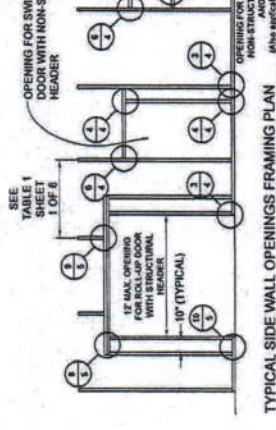
TYPICAL RAFTER/POST FRAMING PLAN - BOW FRAME
NOT TO SCALE



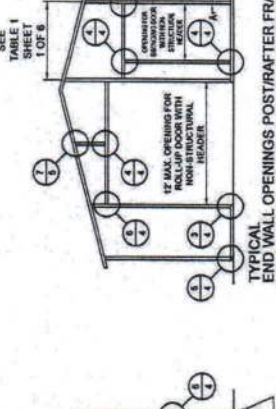
TYPICAL RAFTER/POST FRAMING PLAN - BOX EAVE
NOT TO SCALE



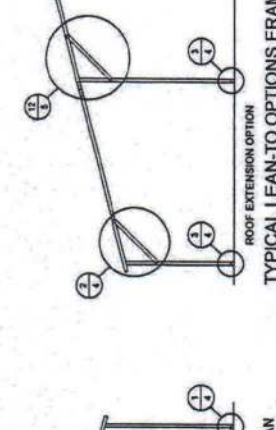
TYPICAL POST/RAFTER FRAMING PLAN - VERTICAL ROOF
NOT TO SCALE



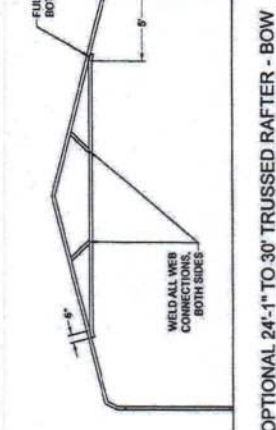
TYPICAL SIDE WALL OPENINGS FRAMING PLAN
NOT TO SCALE



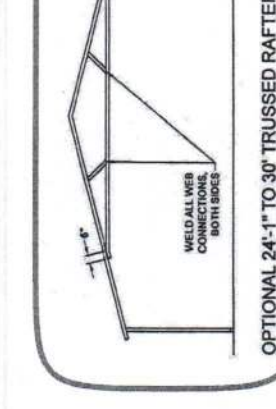
TYPICAL SIDE WALL OPENINGS POST/RAFTER FRAMING PLAN
NOT TO SCALE



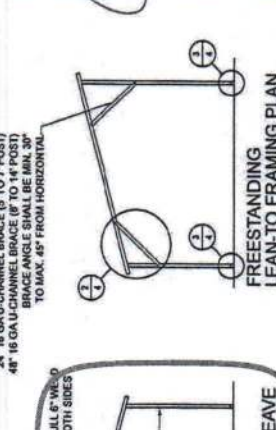
ROOF EXTENSION OPTION
NOT TO SCALE



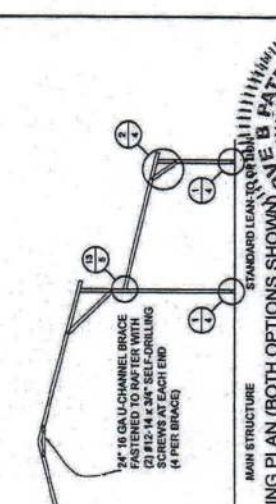
OPTIONAL 24-1\"/>



OPTIONAL 24-1\"/>



FREESTANDING LEAN-TO FRAMING PLAN
NOT TO SCALE



MAIN STRUCTURE
NOT TO SCALE

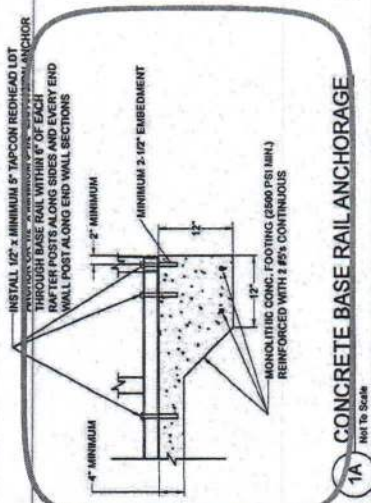
BECHTOL ENGINEERING AND TESTING, INC.
605 WEST NEW YORK AVENUE
DELAND, FLORIDA 32720

Professional Engineer
No. 90783
STATE OF FLORIDA

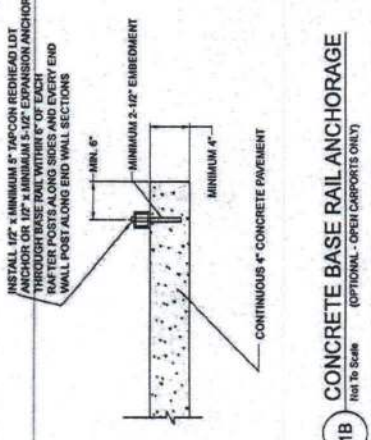
CAROLINA CARPORTS, INC.
GENERIC PLANS FOR USE IN THE STATE OF FLORIDA

DATE	2/1/2023
BY	NIS
CHECKED	TB/CS
PROJECT	023001
ISSUED FOR	TB/JUP

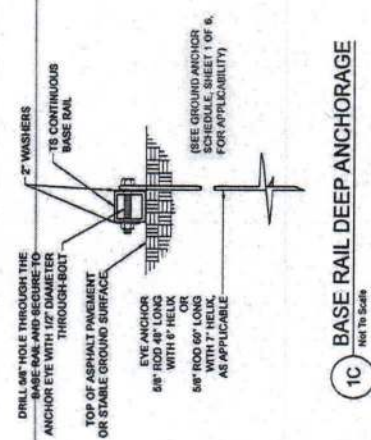
BECHTOL ENGINEERING AND TESTING, INC.
CORPORATE OFFICE: 605 WEST NEW YORK AVENUE, DELAND, FLORIDA 32720



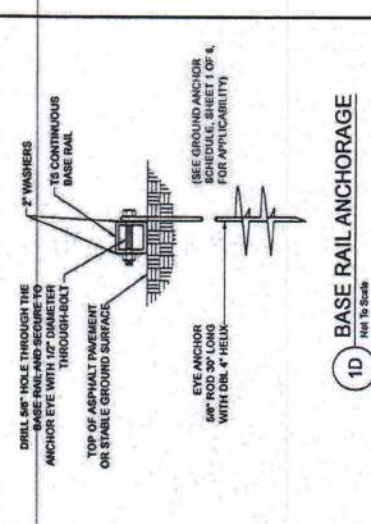
1A CONCRETE BASE RAIL ANCHORAGE
Not To Scale



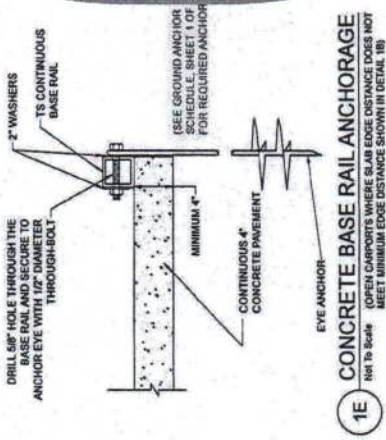
1B CONCRETE BASE RAIL ANCHORAGE
(OPTIONAL - OPEN CARPORTS ONLY)
Not To Scale



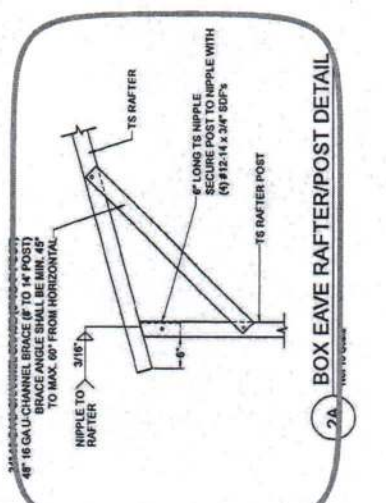
1C BASE RAIL DEEP ANCHORAGE
Not To Scale



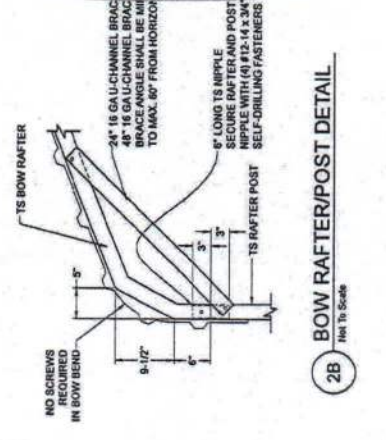
1D BASE RAIL ANCHORAGE
Not To Scale



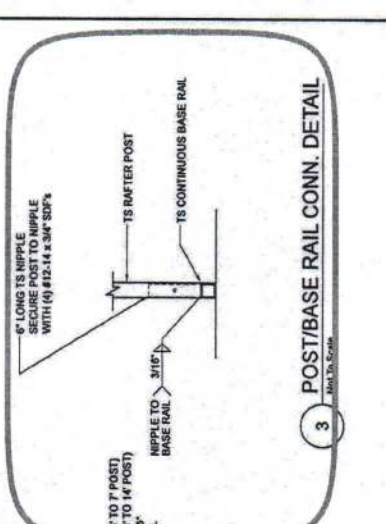
1E CONCRETE BASE RAIL ANCHORAGE
Not To Scale
USE ALL DIMENSIONS UNLESS SHOWN OTHERWISE. DISTANCE DOES NOT MEET MINIMUM EDGE DISTANCE SHOWN IN DETAIL 1B.



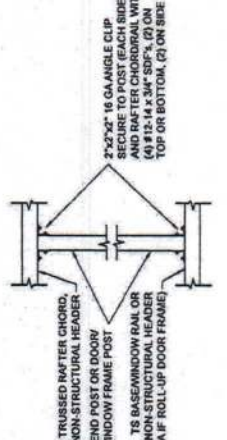
2A BOX EAVE RAFTER/POST DETAIL
Not To Scale



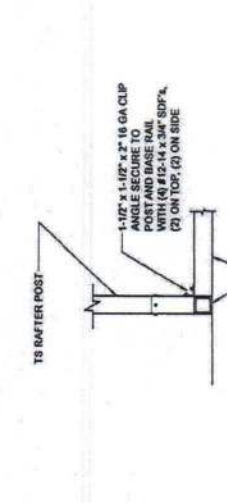
2B BOW RAFTER/POST DETAIL
Not To Scale



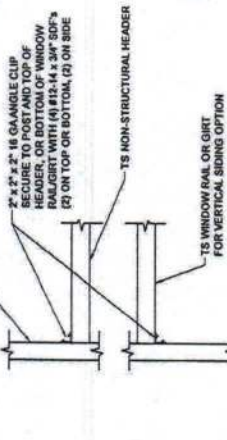
3 POST/BASE RAIL CONN. DETAIL
Not To Scale



4 POST TO RAIL, TRUSS CHORD, OR NON-STRUCTURAL HEADER CONN. DETAIL
Not To Scale



5 END POST/BASE RAIL CONN.
Not To Scale



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

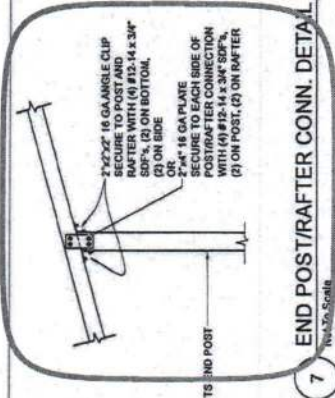
LOUIS B. FAYETTE
REGISTERED PROFESSIONAL ENGINEER
No. 80785
STATE OF FLORIDA

BECHTOL ENGINEERING AND TESTING, INC.
10000 W. BOULEVARD
DELAND, FLORIDA 32720

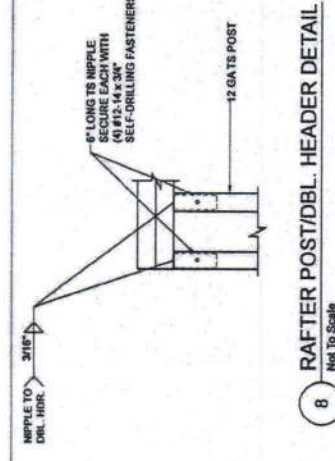
CAROLINA CARPORTS, INC.
GENERIC PLANS FOR USE IN THE STATE OF FLORIDA

DATE	2/21/2003
PROJECT	NTS
DRAWN BY	AMK
CHECKED BY	TR/CSS
PROJECT NO.	020001
ISSUED BY	TR/JP
SHEET	4 OF 8

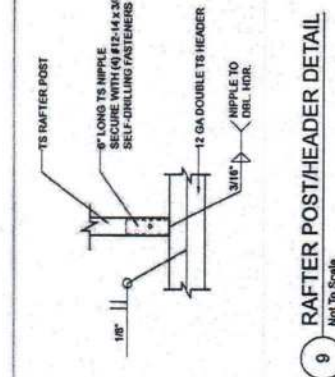
BECHTOL ENGINEERING AND TESTING, INC.
10000 W. BOULEVARD
DELAND, FLORIDA 32720



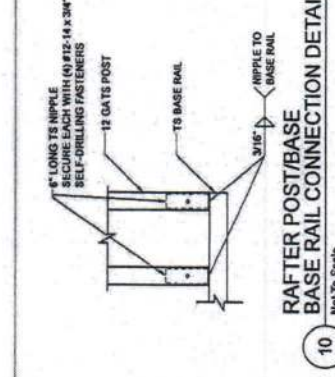
7 **END POST/RAFTER CONN. DETAIL**
Not To Scale



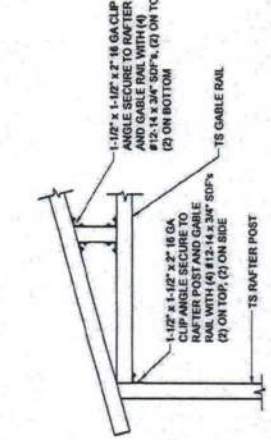
8 **RAFTER POST/DBL. HEADER DETAIL**
Not To Scale



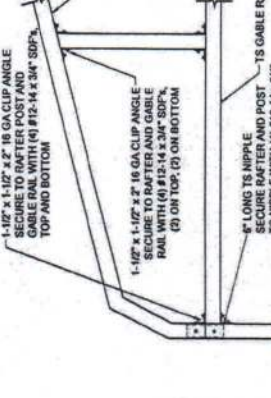
9 **RAFTER POST/HEADER DETAIL**
Not To Scale



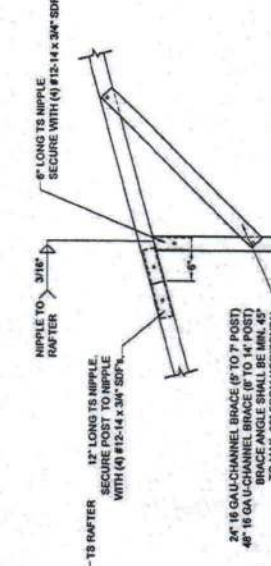
10 **RAFTER POST/BASE BASE RAIL CONNECTION DETAIL**
Not To Scale



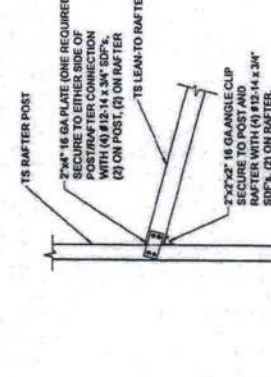
11A **GABLE RAIL TO RAFTER POST CONNECTION DETAIL**
Not To Scale



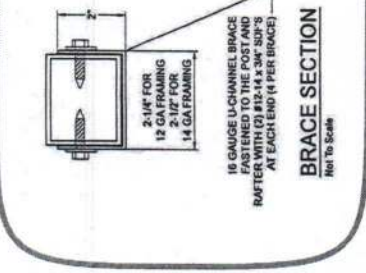
11B **GABLE RAIL TO RAFTER POST CONNECTION DETAIL**
Not To Scale



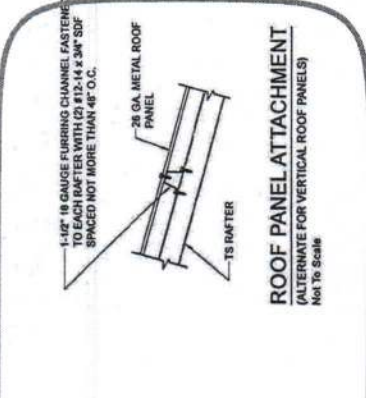
12 **SIDE EXTENSION RAFTER/POST DETAIL**
Not To Scale



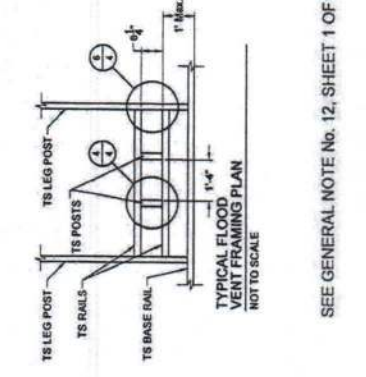
13 **POST / LEAN-TO RAFTER CONN. DETAIL**
Not To Scale



11A **BRACE SECTION**
Not To Scale



11B **ROOF PANEL ATTACHMENT**
(ALTERNATE FOR VERTICAL ROOF PANELS)
Not To Scale



12 **TYPICAL FLOOD VENT FRAMING PLAN**
NOT TO SCALE

LORENZO PATEL
Professional Engineer
No. 90753
STATE OF FLORIDA

BECHTEL ENGINEERING AND TESTING, INC.
805 WEST NEWYORK AVENUE
DELAND, FLORIDA 32720

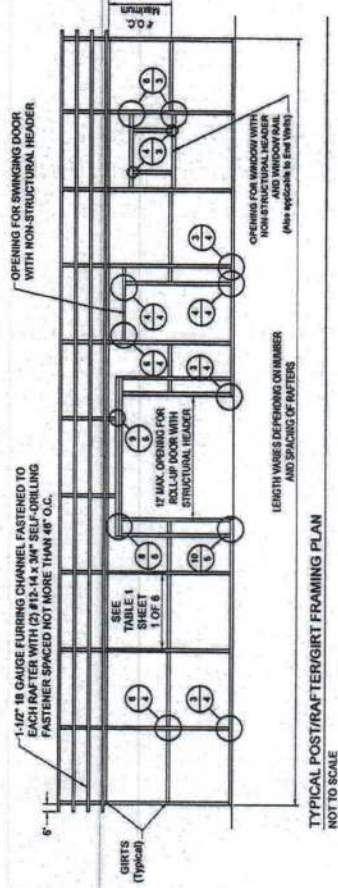
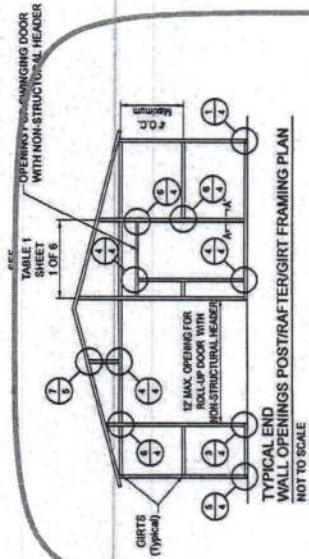
CAROLINA CARPORTS, INC.
GENERIC PLANS FOR USE IN THE STATE OF FLORIDA

DATE	2/21/2023
BY	NTS
PROJECT	TS / CS
FIGURE	G2001
ISSUED FOR	TS / UP

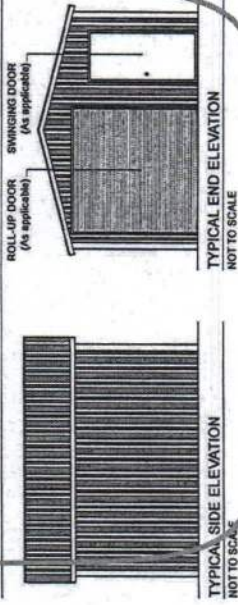
BECHTEL ENGINEERING AND TESTING, INC.
3000 W. UNIVERSITY AVENUE, SUITE 100, DEERFIELD BEACH, FLORIDA 33442
CONTACT: (561) 993-8800

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

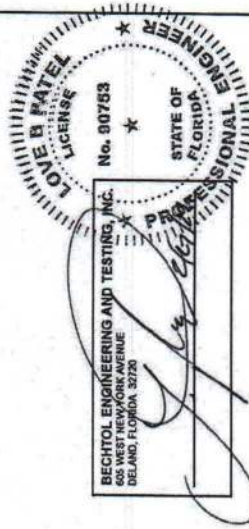
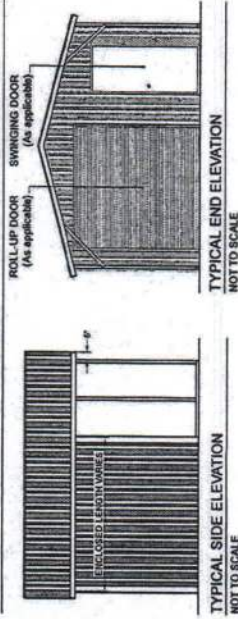
VERTICAL SIDE OPTION



BOX EAVE FRAME ENCLOSED BLDG - VERTICAL SIDES



BOX EAVE FRAME RAFTER UTILITY BLDG - VERTICAL SIDES



BECHTOL ENGINEERING AND TESTING, INC.
605 WEST NEWYORK AVENUE
DELAND, FLORIDA 32720

CAROLINA CARPORTS, INC.

GENERIC PLANS FOR USE IN THE STATE OF FLORIDA

DATE	2/21/2023
OWNER	MAG NTS
ENGINEER	TD/CS
PROJECT NO.	032001
ISSUE	TS / LP
SHEET 6 OF 6	

BECHTOL ENGINEERING AND TESTING, INC.

QUALITY PROFESSIONAL ENGINEERING, ARCHITECTURAL, AND SPECIALTY CONSULTING

FBC APPROVED PRODUCTS LIST

PRODUCT CATEGORY	SUB CATEGORY	MANUFACTURER	APPROVAL No. & DATE	QA EXPIRATION DATE	MAXIMUM ALLOWABLE WIND SPEED	PARTIALLY ENCLOSED
STRUCTURAL COMPONENTS	ROOF DECK	CAROLINA CARPORTS, INC. 26 Gauge AG Panel	FL6596.1-R6 12/15/20	04/05/27	160	160
STRUCTURAL COMPONENTS	STRUCTURAL WALL	CAROLINA CARPORTS, INC. 26 Gauge AG Panel	FL702.1-R6 12/15/20	03/14/27	160	160
STRUCTURAL COMPONENTS	STRUCTURAL WALL	CAROLINA CARPORTS, INC. 26 Gauge Dutch Lap Wall Panel	FL702.3-R6 12/15/20 **	03/14/27	N/A	143
STRUCTURAL COMPONENTS	FLOOD VENT	CRAWL SPACE DOOR SYSTEMS, INC. 16x8 Flood Vent	FL2622.1-R1 02/28/21	09/30/22	N/A	N/A
EXTERIOR DOORS	SWINGING	ELKIR DOOR AND METAL COMPANY Series 402-14	FL17996.3-R2 02/28/21	06/26/25	N/A	139
EXTERIOR DOORS	SWINGING	ELKIR DOOR AND METAL COMPANY Series 407	FL17996.5-R2 02/28/21	08/19/25	N/A	174
EXTERIOR DOORS	ROLL-UP	ASTA INDUSTRIES INC. Model 202 (12" Max. Width)	FL3688.1-R6 02/29/21	12/31/23	N/A	160
EXTERIOR DOOR	ROLL-UP	CAROLINA CARPORTS, INC. Steel Roll-Up Sheet Door (12" Max. Width)	FL3305.1-R5 12/16/20	04/05/27	N/A	179
EXTERIOR DOORS	ROLL-UP	CAROLINA CARPORTS, INC. Steel Roll-Up Sheet Door - (6" Max. Width)	FL3306.2-R5 12/16/20	04/05/27	N/A	160
EXTERIOR DOORS	ROLL-UP	CAROLINA CARPORTS, INC. Steel Roll-Up Sheet Door - (16" Max. Width)	FL3306.3-R5 12/16/20	04/05/27	N/A	155
EXTERIOR DOORS	ROLL-UP	CAROLINA CARPORTS, INC. Steel Roll-Up Sheet Door - (10" Max. Width)	FL3306.4-R5 12/16/20	04/05/27	N/A	160
WINDOWS	SINGLE HUNG	PGT INDUSTRIES Model SH7706	FL239.4-R28 11/16/20	10/17/23	N/A	160

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

RISK CATEGORY	WIND EXPOSURE CATEGORY	ULTIMATE WIND SPEED (MPH)	NOMINAL WIND SPEED (MPH)	MAXIMUM POST / RAFTER SPACING (FEET)	AVERAGE FASTENER SPACING ON-CENTERS ALONG RAFTERS OR PURLINS, AND POSTS OR GIRTS (INCHES)	
					INTERIOR POSTS/RAFTERS	END POSTS/RAFTERS
I	C	110 TO 150	80 TO 116	5.0	6	6
		151 TO 180	117 TO 139	4.0	6	6

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 half channel roof purlins.
2. Specifications applicable only for mean roof height of 20 feet or less, and roof slopes of 7° to 27° (1.6:12 to 6:12 pitch). Spacing requirements for other roof heights and/or slopes may vary.

GROUND ANCHOR SCHEDULE

ULTIMATE WIND SPEED (mph)	ANCHOR SCHEDULE
110	12
120	14
130	16
140	18
150	20
160	22
170	24
180	26
	28
	30

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 1283
 DOBSON, NORTH CAROLINA 27017
 PREPARED BY:
 BECHTOL ENGINEERING AND TESTING, INC.
 605 WEST NEW YORK AVENUE
 DELAND, FLORIDA 32720
 Certificate of Authorization No. 00005492

DETAILS 1C AND 1D SHOWN ON SHEET 4 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).

BECHTOL ENGINEERING AND TESTING, INC.
 605 WEST NEW YORK AVENUE
 DELAND, FLORIDA 32720
 No. 80783
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER

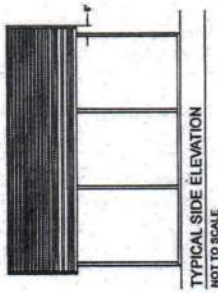
CAROLINA CARPORTS, INC.
 GENERIC PLANS FOR USE IN THE STATE OF FLORIDA

PROJECT	21212023
DATE	NTS
SCALE	1/8" = 1'-0"
CONTRACT	TB/CS
DRAWING	G33001
APPROVED BY	TB/JP
DATE	

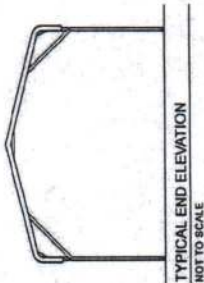
BECHTOL ENGINEERING AND TESTING, INC.
 605 WEST NEW YORK AVENUE
 DELAND, FLORIDA 32720

- 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 1) 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.
 - ALL STEEL TUBING SHALL BE 50 KSI GALVANIZED STEEL. ALL FASTENERS SHALL BE GALVANIZED OR STAINLESS STEEL OR ZINC PLATED.
 - 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.
 - 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.
 - CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI AT 28 DAYS. THE REINFORCING STEEL SHALL BE MINIMUM GRADE 40. CONCRETE SLAB FOUNDATIONS SHALL BE REINFORCED WITH 6#6-W1 4'XW1 4' WELDED WIRE FABRIC COMPLYING WITH ASTM A 195, OR WITH SYNTHETIC FIBER REINFORCEMENT COMPLYING WITH ASTM C1116.
 - BASE RAIL GROUND ANCHOR CONNECTIONS SHALL BE #12-14 x 3/4" SELF DRILLING SCREWS WITHOUT CONTROL SEAL WASHER, 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.
 - CONCRETE ANCHORS SHALL BE TAPCON REDHEAD LDT 1/2" x 5" OR EQUIVALENT OR WELT-IT ANKR-TITE MODEL AT1262, 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 TERMITES TREATED AND COVERED WITH 6 MIL VAPOR BARRIER PER SECTION R318.1 OF THE FBC SEVENTH EDITION (2020). RESIDENTIAL, AND SECTION 1616.1 OF THE FBC SEVENTH EDITION (2020) - BUILDING. MINIMUM ALLOWABLE FOUNDATION SOIL CONTACT BEARING PRESSURE OF 2,000 PSF IS ASSUMED.
 - 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.
 - 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.

BOW FRAME RAFTER OPEN CARPORT - HORIZONTAL ROOF



TYPICAL SIDE ELEVATION
NOT TO SCALE

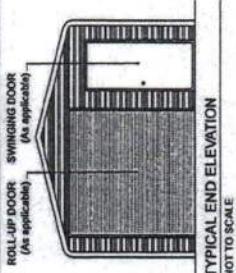


TYPICAL END ELEVATION
NOT TO SCALE

BOW FRAME RAFTER ENCLOSED BUILDING - HORIZONTAL ROOF

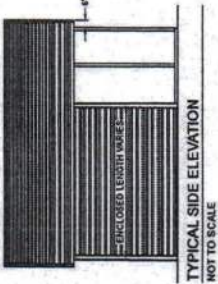


TYPICAL SIDE ELEVATION
NOT TO SCALE

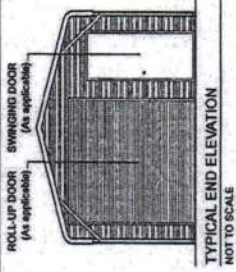


TYPICAL END ELEVATION
NOT TO SCALE

BOW FRAME RAFTER UTILITY BUILDING - HORIZONTAL ROOF

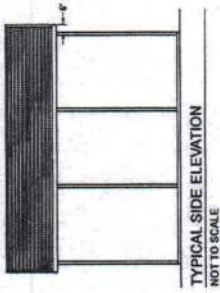


TYPICAL SIDE ELEVATION
NOT TO SCALE

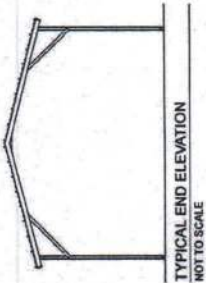


TYPICAL END ELEVATION
NOT TO SCALE

BOX EAVE FRAME RAFTER OPEN CARPORT - HORIZONTAL ROOF

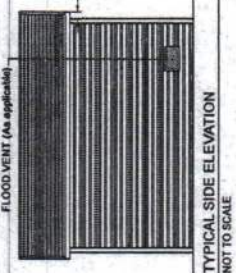


TYPICAL SIDE ELEVATION
NOT TO SCALE

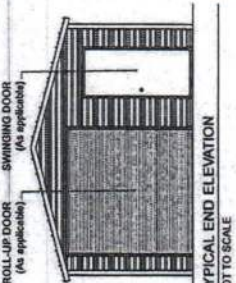


TYPICAL END ELEVATION
NOT TO SCALE

BOX EAVE FRAME RAFTER ENCLOSED BLDG - HORIZONTAL ROOF

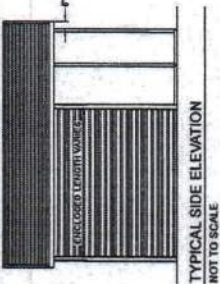


TYPICAL SIDE ELEVATION
NOT TO SCALE

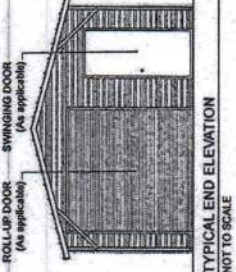


TYPICAL END ELEVATION
NOT TO SCALE

BOX EAVE FRAME RAFTER UTILITY BLDG - HORIZONTAL ROOF

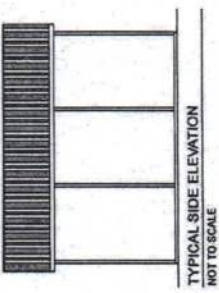


TYPICAL SIDE ELEVATION
NOT TO SCALE

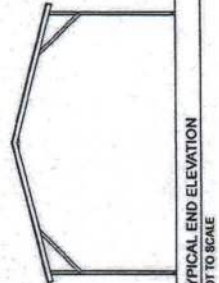


TYPICAL END ELEVATION
NOT TO SCALE

BOX EAVE FRAME RAFTER OPEN CARPORT - VERTICAL ROOF

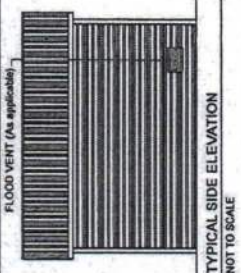


TYPICAL SIDE ELEVATION
NOT TO SCALE

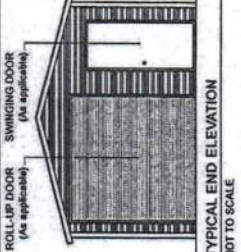


TYPICAL END ELEVATION
NOT TO SCALE

BOX EAVE FRAME RAFTER ENCLOSED BLDG - VERTICAL ROOF

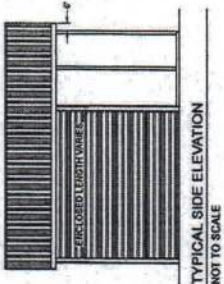


TYPICAL SIDE ELEVATION
NOT TO SCALE

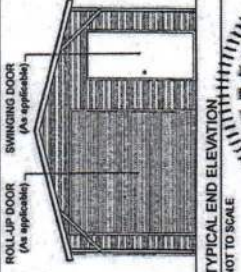


TYPICAL END ELEVATION
NOT TO SCALE

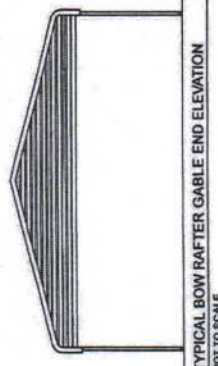
BOX EAVE FRAME RAFTER UTILITY BLDG - VERTICAL ROOF



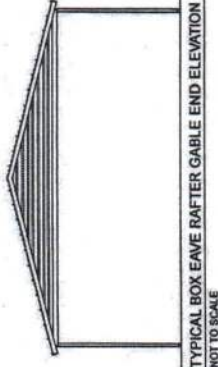
TYPICAL SIDE ELEVATION
NOT TO SCALE



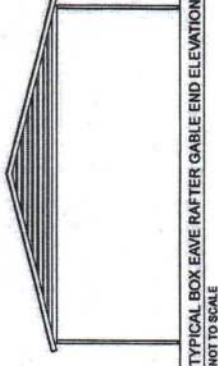
TYPICAL END ELEVATION
NOT TO SCALE



TYPICAL BOW RAFTER GABLE END ELEVATION
NOT TO SCALE



TYPICAL BOX EAVE RAFTER GABLE END ELEVATION
NOT TO SCALE



TYPICAL BOX EAVE RAFTER GABLE END ELEVATION
NOT TO SCALE

BECHTOL ENGINEERING AND TESTING, INC.
10000 W. UNIVERSITY BLVD.
DELAND, FLORIDA 32720



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

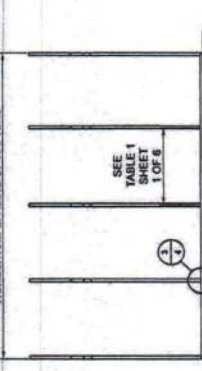
DATE	2/21/2023
DESIGNER	MBG
CHECKER	NTS
PROJECT	TR / CS
DRAWING NO.	G22001
REVISION	TR / LP
SHEET 7 OF 6	

BECHTOL ENGINEERING AND TESTING, INC.
10000 W. UNIVERSITY BLVD.
DELAND, FLORIDA 32720

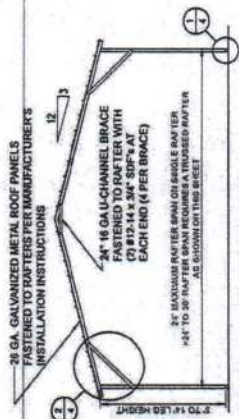


TYPICAL INTERIOR RAFTER/POST FRAME SECTION - BOW FRAME
NOT TO SCALE

LENGTH VARIES DEPENDING ON NUMBER AND SPACING OF RAFTERS

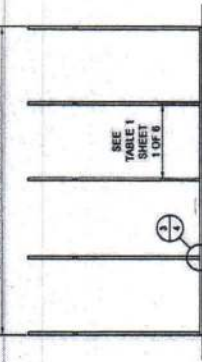


TYPICAL RAFTER/POST FRAMING PLAN - BOW FRAME
NOT TO SCALE



TYPICAL INTERIOR RAFTER/POST FRAME SECTION - BOX EAVE - HORIZONTAL ROOF
NOT TO SCALE

LENGTH VARIES DEPENDING ON NUMBER AND SPACING OF RAFTERS

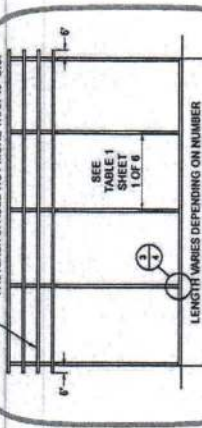


TYPICAL RAFTER/POST FRAMING PLAN - BOX EAVE
NOT TO SCALE

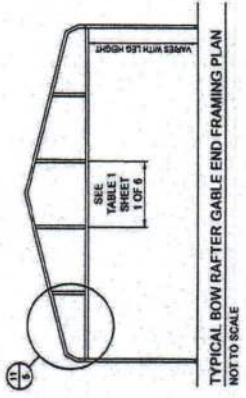


TYPICAL INTERIOR RAFTER/POST FRAME SECTION - VERTICAL ROOF
NOT TO SCALE

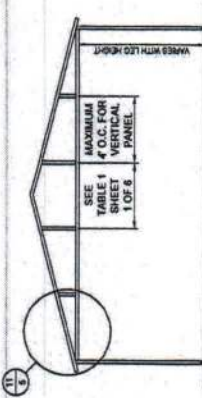
LENGTH VARIES DEPENDING ON NUMBER AND SPACING OF RAFTERS



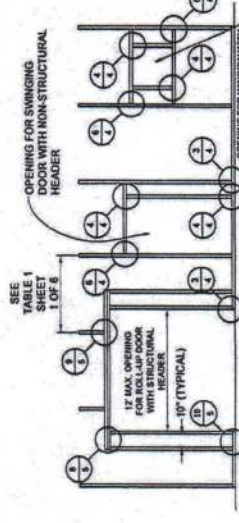
TYPICAL POST/RAFTER FRAMING PLAN - VERTICAL ROOF
NOT TO SCALE



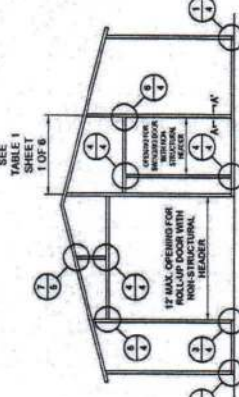
TYPICAL BOW RAFTER GABLE END FRAMING PLAN
NOT TO SCALE



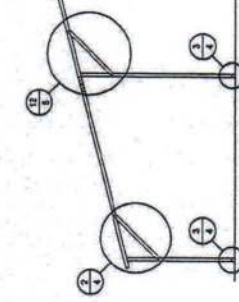
TYPICAL BOX EAVE RAFTER GABLE END FRAMING PLAN
NOT TO SCALE



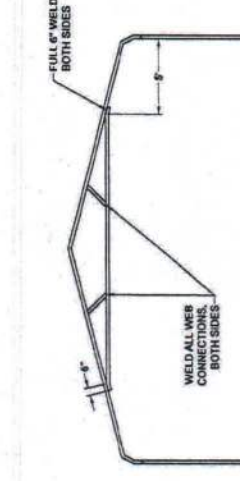
TYPICAL SIDE WALL OPENINGS FRAMING PLAN
NOT TO SCALE



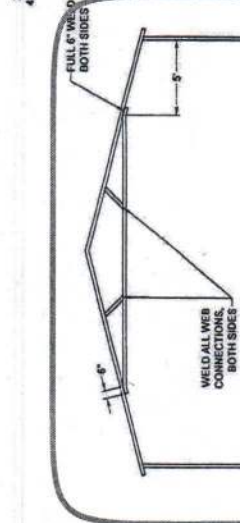
TYPICAL END WALL OPENINGS POST/RAFTER FRAMING PLAN
NOT TO SCALE



ROOF EXTENSION OPTION
NOT TO SCALE



OPTIONAL 24'-1\"/>



OPTIONAL 24'-1\"/>

STANDARD LEAN-TO OPTION
TYPICAL LEAN-TO OPTIONS FRAMING PLAN (BOTH OPTIONS SHOWN)
NOT TO SCALE (BOX EAVE RAFTER SHOWN, ONLY STANDARD LEAN-TO IS APPLICABLE TO BOW FRAMING OPTION)

BECHTEL ENGINEERING AND TESTING, INC.
605 WEST NEW YORK AVENUE
DELAND, FLORIDA 32726

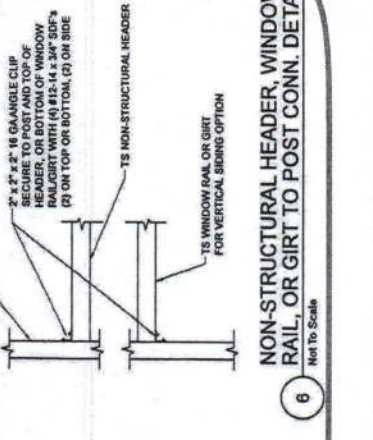
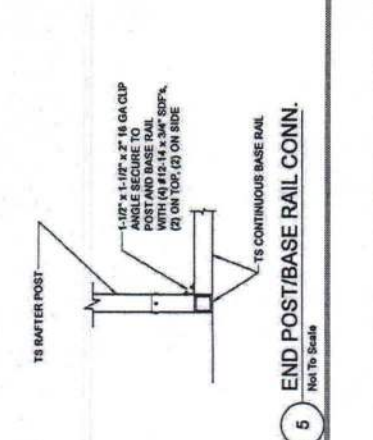
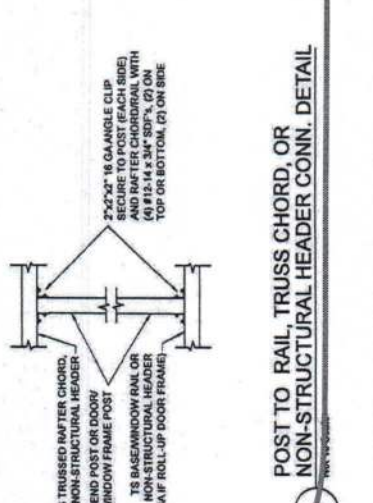
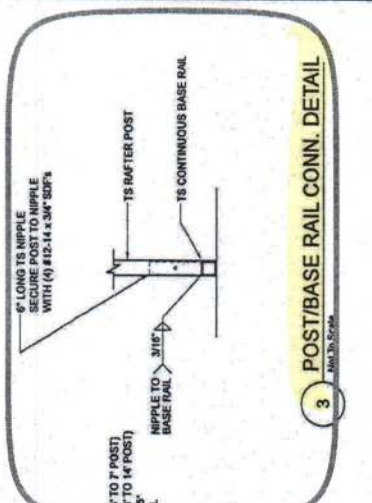
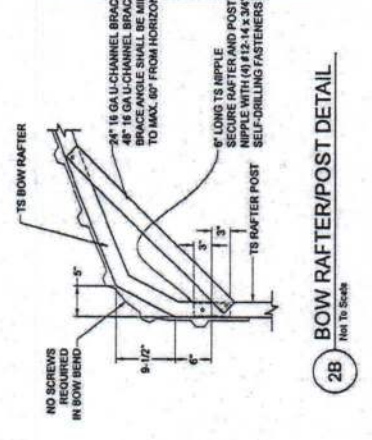
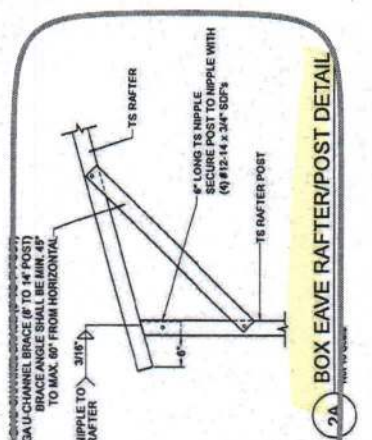
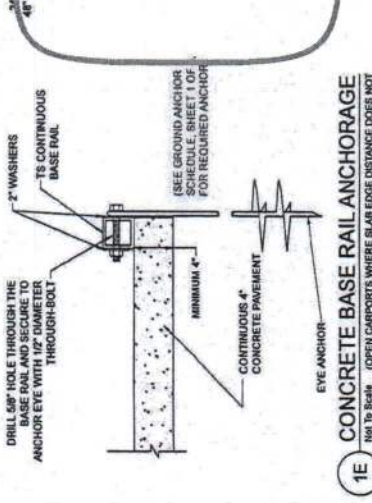
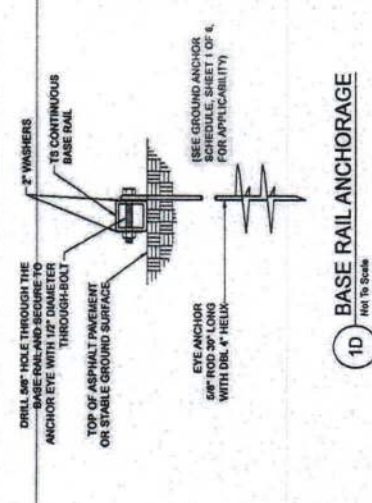
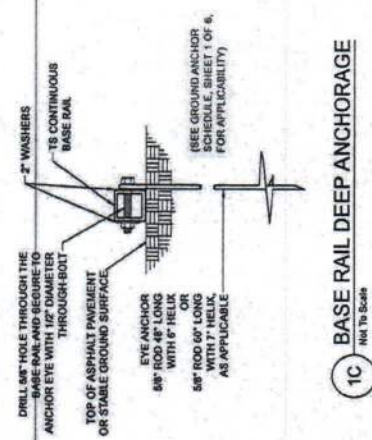
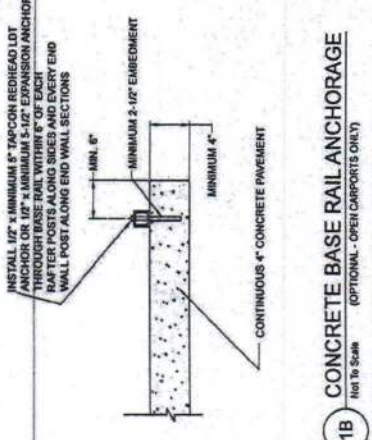
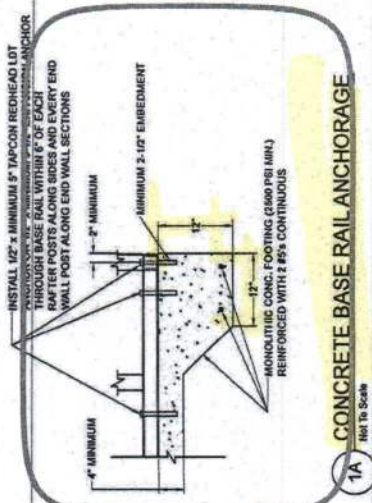
No. 90783

STATE OF FLORIDA
PROFESSIONAL ENGINEER

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

BECHTEL ENGINEERING AND TESTING, INC.
605 WEST NEW YORK AVENUE
DELAND, FLORIDA 32726

DATE: 2/21/2023
DRAWN: MKG
CHECKED: NIS
PROJECT: TB/CS
SHEET: 033001
TOTAL SHEETS: TB/JP
SHEET 3 OF 6



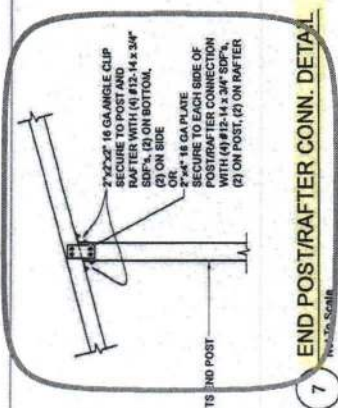
BECHTOL ENGINEERING AND TESTING, INC.
 10000 W. BOYD AVENUE
 DELAND, FLORIDA 32720

LOUIS B. PATER
 No. 019753
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER

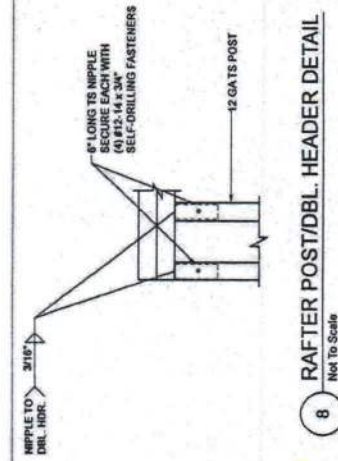
CAROLINA CARPORTS, INC.
 GENERIC PLANS FOR USE IN THE STATE OF FLORIDA

DATE	2/21/2003
SCALE	NTS
PROJECT	G20001
ISSUED BY	TB/CS
APPROVED BY	TB/JP
SHEET	4 OF 6

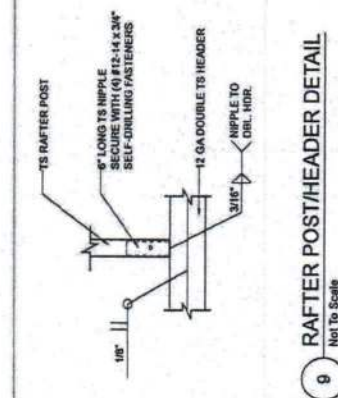
BECHTOL ENGINEERING AND TESTING, INC.
 10000 W. BOYD AVENUE
 DELAND, FLORIDA 32720



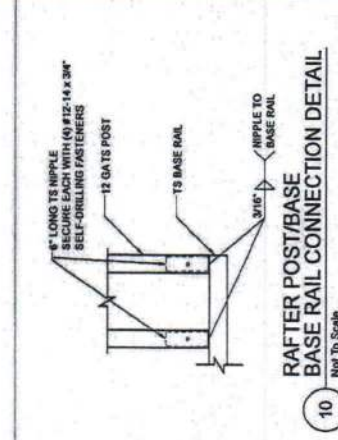
7 Not To Scale
END POST/RAFTER CONN. DETAIL



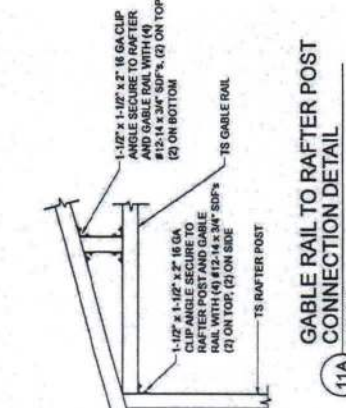
8 Not To Scale
RAFTER POST/DBL. HEADER DETAIL



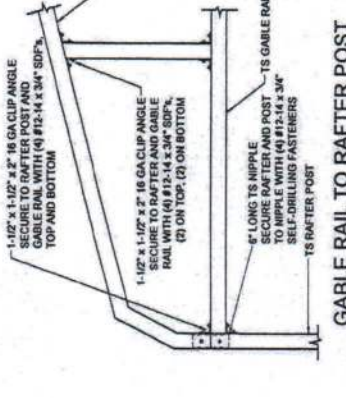
9 Not To Scale
RAFTER POST/HEADER DETAIL



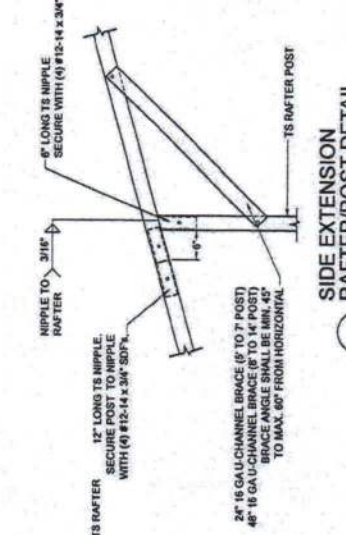
10 Not To Scale
RAFTER POST/BASE BASE RAIL CONNECTION DETAIL



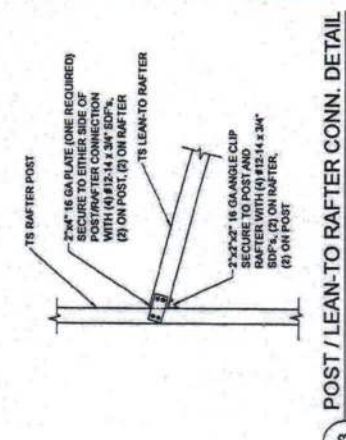
11A Not To Scale
GABLE RAIL TO RAFTER POST CONNECTION DETAIL



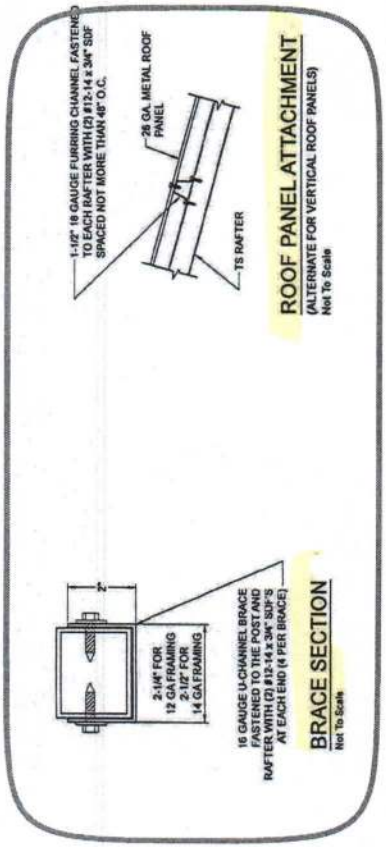
11B Not To Scale
GABLE RAIL TO RAFTER POST CONNECTION DETAIL



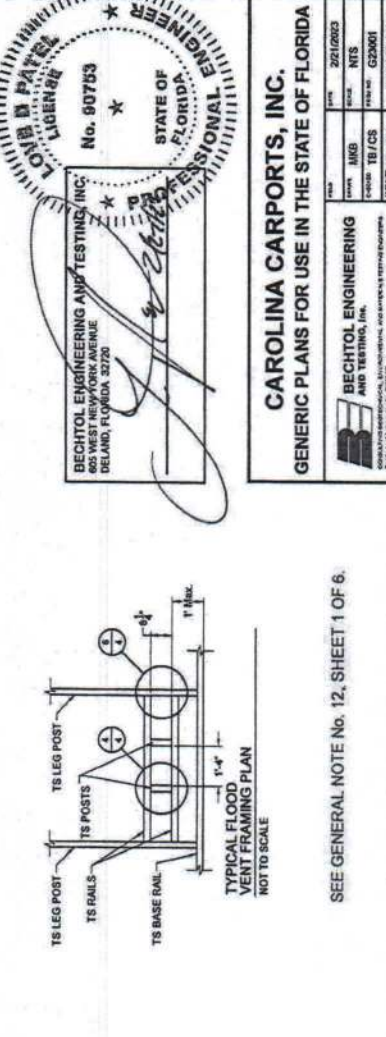
12 Not To Scale
SIDE EXTENSION RAFTER/POST DETAIL



13 Not To Scale
POST / LEAN-TO RAFTER CONN. DETAIL



Not To Scale
BRACE SECTION



NOT TO SCALE
TYPICAL FLOOD VENT FRAMING PLAN



Not To Scale
ROOF PANEL ATTACHMENT
 (ALTERNATE FOR VERTICAL ROOF PANELS)

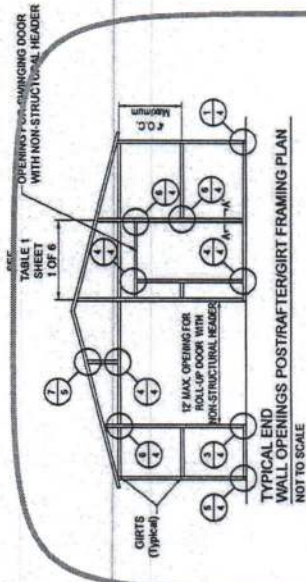
BECHTOL ENGINEERING AND TESTING, INC.
 605 WEST HENRY AVENUE
 DELAND, FLORIDA 32720
 No. 90753
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER
 LOUIS B. RAYNE
 LICENSE NO. 10098

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

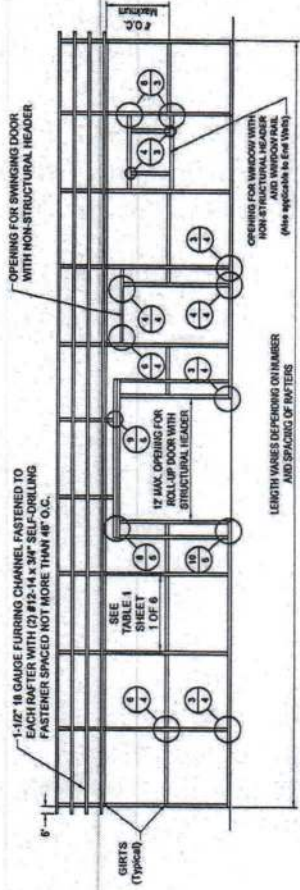
DATE	2/21/2003
PROJECT	NTS
DESIGNER	AMB
REVISION	TS / CS
DATE	02/20/01
BY	TS / LP

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

VERTICAL SIDE OPTION

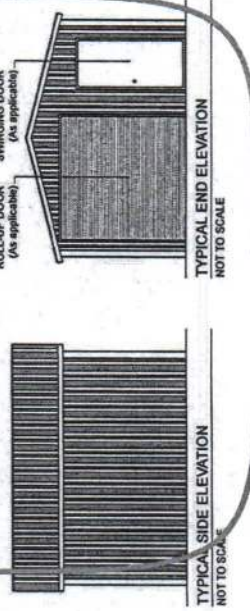


TYPICAL END WALL POSTRAFTER/GIRT FRAMING PLAN
NOT TO SCALE



TYPICAL POST/RAFTER/GIRT FRAMING PLAN
NOT TO SCALE

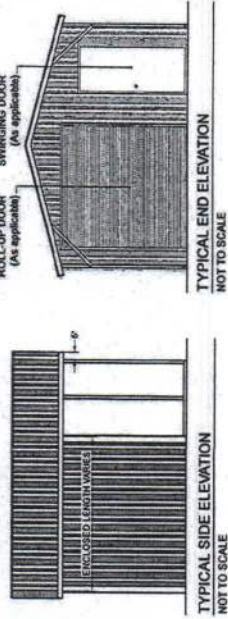
BOX EAVE FRAME RAFTER ENCLOSED BLDG - VERTICAL SIDES



TYPICAL SIDE ELEVATION
NOT TO SCALE

TYPICAL END ELEVATION
NOT TO SCALE

BOX EAVE FRAME RAFTER UTILITY BLDG - VERTICAL SIDES



TYPICAL SIDE ELEVATION
NOT TO SCALE

TYPICAL END ELEVATION
NOT TO SCALE

LOVE B. PATEL
LICENSE
No. 90753
STATE OF FLORIDA
PROFESSIONAL ENGINEER

BECHTOL ENGINEERING AND TESTING, INC.
REGISTERED PROFESSIONAL ENGINEERING FIRM
DELAWARE, FLORIDA, 32226

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

DATE	2/12/2023
DESIGNER	NTS
CHECKER	MBB
PROJECT	TE / CS
ISSUED BY	TE / IP
BECHTOL ENGINEERING AND TESTING, INC. 10000 W. UNIVERSITY BLVD., SUITE 400 GREENSBORO, NC 27409	
SHEET	6 OF 6