

85

FBC APPROVED PRODUCTS LIST

PRODUCT CATEGORY	SUB CATEGORY	MANUFACTURER	APPROVAL No. & DATE	EXPIRATION DATE	MAXIMUM ALLOWABLE WIND SPEED		
					OPEN	ENCLOSED	PARTIALLY ENCLOSED
STRUCTURAL COMPONENTS	ROOF DECK	CAROLINA CARPORTS, INC. 26 Gauge AG Panel	FL1656-1-R6 12/15/20	04/05/27	180	180	180
STRUCTURAL COMPONENTS	STRUCTURAL WALL	CAROLINA CARPORTS, INC. 26 Gauge AG Panel	FL1670-1-R6 12/15/20	03/14/27	180	180	180
STRUCTURAL COMPONENTS	STRUCTURAL WALL	CAROLINA CARPORTS, INC. 26 Gauge Dutch Lap Wall Panel	FL1670-2-R6 12/15/20	03/14/27	N/A	164	143
STRUCTURAL COMPONENTS	FLOOD VENT	CRANF, SPACE DOOR SYSTEMS, INC. 16x6 Flood Vent	FL16622-1-R1 02/28/21	09/30/22	N/A	N/A	N/A
EXTERIOR DOORS	SWINGING	ELUXIR DOOR AND METAL COMPANY Series 402-14	FL17096-3-R2 02/28/21	08/26/25	N/A	139	139
EXTERIOR DOORS	SWINGING	ELUXIR DOOR AND METAL COMPANY Series 407	FL17096-5-R2 02/28/21	08/19/25	N/A	174	155
EXTERIOR DOORS	ROLL-UP	ASTA INDUSTRIES INC. Model 203 (12' Max. Width)	FL1688-1-R6 02/09/21	12/31/23	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	04/05/27	N/A	179	154
EXTERIOR DOORS	ROLL-UP	CAROLINA CARPORTS, INC. Steel Roll Up Sheet Door - (6' Max. Width)	FL16806-2-R5 12/16/20	04/05/27	N/A	180	180
EXTERIOR DOORS	ROLL-UP	CAROLINA CARPORTS, INC. Steel Roll Up Sheet Door - (10' Max. Width)	FL16806-3-R5 12/16/20	04/05/27	N/A	155	133
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
WINDOWS	SINGLE HUNG	PGT INDUSTRIES Model 51770	FL1239-4-R28 11/11/20	10/17/23	N/A	180	178

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 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.
3. ALL STEEL TUBING SHALL BE 50 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. BEAL W/SHIELD. ALL SHOP FRAMING CONNECTIONS SHALL BE WELDED.
6. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2800 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 C 1119.
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 WELT ANKR-TITE MODEL AT1252, OR SLEEVE ANCHOR MODEL HSA 1250, OR EQUIVALENT.
9. POST/RAFTER BRACING: BRACE ON EVERY POST/RAFTER CONNECTION, EXCEPT FOR END WALLS.
10. SLAB FOUNDATION SUBGRADE SOILS SHALL BE FIRM/TRENTED AND COVERED WITH 6 MIL VAPOR RETARDER PER SECTION R316.1 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. 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.

TABLE 1
RAFTER FRAME, END POST, GROUND ANCHOR AND PANEL FASTENER 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
1	C	110 TO 150	89 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 hat channel roof purlins.
2. 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.

GROUND ANCHOR SCHEDULE

BUILDING WIDTH (feet)		ULTIMATE WIND SPEED (mph)									
		110	120	130	140	150	160	170	180		
12	30' Anchor Detail 1D										
14	30' Anchor Detail 1D										
16	30' Anchor Detail 1D										
18	30' Anchor Detail 1D										
20	30' Anchor Detail 1D										
22	40' Anchor Detail 1C										
24	40' Anchor Detail 1C										
26	40' Anchor Detail 1C										
28	40' Anchor Detail 1C										
30	40' Anchor Detail 1C										

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

PREPARED FOR:
CAROLINA CARPORTS, INC.
P.O. BOX 1263
DOBSON, NORTH CAROLINA 27025

BECHTOL ENGINEERING AND TESTING, INC.
605 WEST NEW YORK AVENUE
DELMAR, FLORIDA 33720
Certificate of Registration No. 00004942

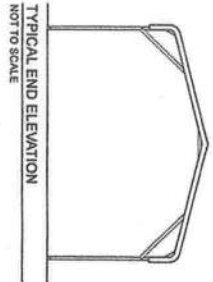
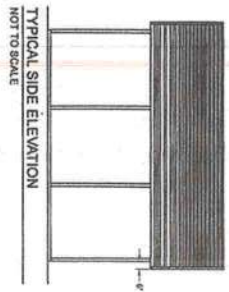


BECHTOL ENGINEERING AND TESTING, INC.
605 WEST NEW YORK AVENUE
DELMAR, FLORIDA 33720
No. 00703

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

DATE	2/27/2023
DESIGN	LMG
CHECK	NTS
REVISION	7B/CS
PROJECT	181P
SHEET	1 OF 6

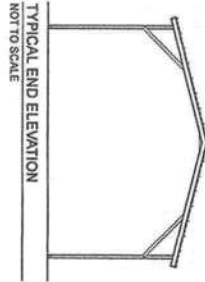
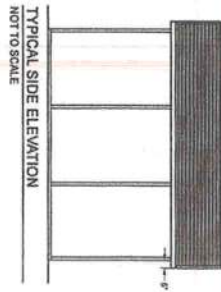
BOW FRAME RAFTER OPEN CARPORT - HORIZONTAL ROOF



TYPICAL SIDE ELEVATION
NOT TO SCALE

TYPICAL END ELEVATION
NOT TO SCALE

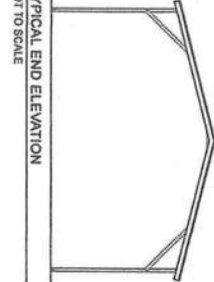
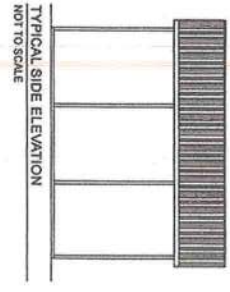
BOX EAVE FRAME RAFTER OPEN CARPORT - HORIZONTAL ROOF



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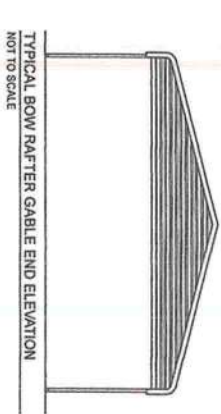
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BOX EAVE FRAME RAFTER OPEN CARPORT - VERTICAL ROOF

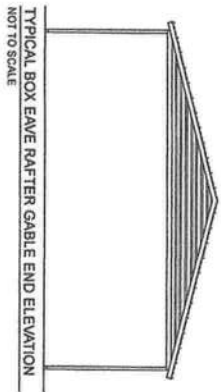


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TYPICAL END ELEVATION
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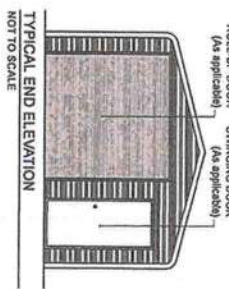
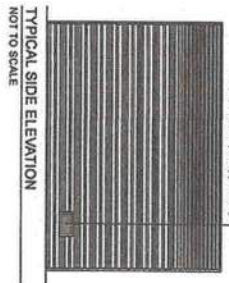


TYPICAL BOW RAFTER GABLE END ELEVATION
NOT TO SCALE



TYPICAL BOX EAVE RAFTER GABLE END ELEVATION
NOT TO SCALE

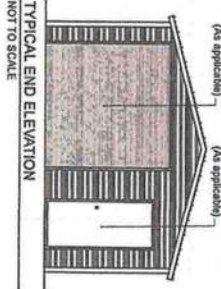
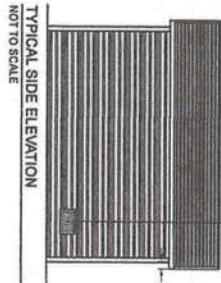
BOW FRAME RAFTER ENCLOSED BUILDING - HORIZONTAL ROOF



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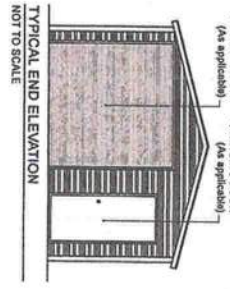
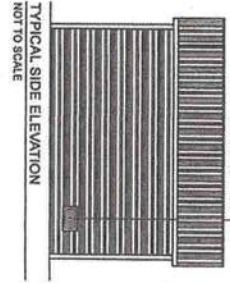
BOX EAVE FRAME RAFTER ENCLOSED BLDG - HORIZONTAL ROOF



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TYPICAL END ELEVATION
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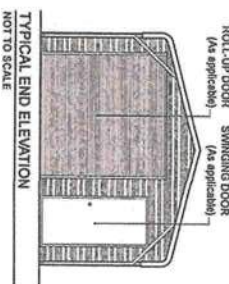
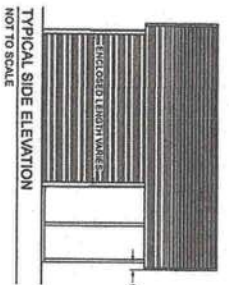
BOX EAVE FRAME RAFTER ENCLOSED BLDG - VERTICAL ROOF



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TYPICAL END ELEVATION
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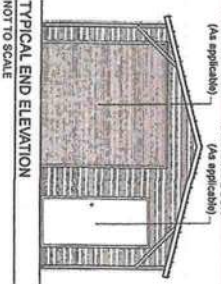
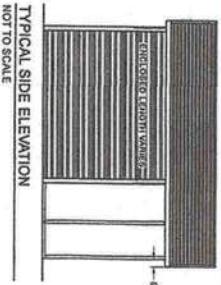
BOW FRAME RAFTER UTILITY BUILDING - HORIZONTAL ROOF



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NOT TO SCALE

TYPICAL END ELEVATION
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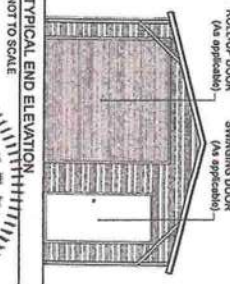
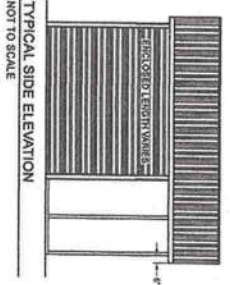
BOX EAVE FRAME RAFTER UTILITY BLDG - HORIZONTAL ROOF



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



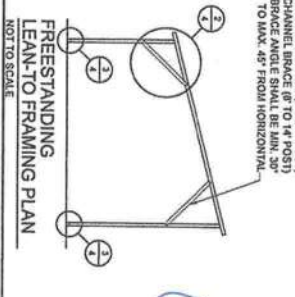
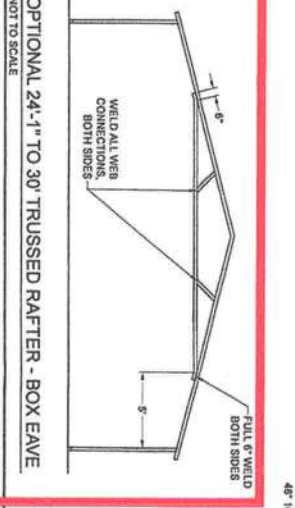
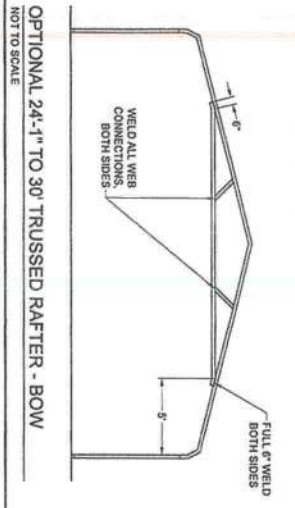
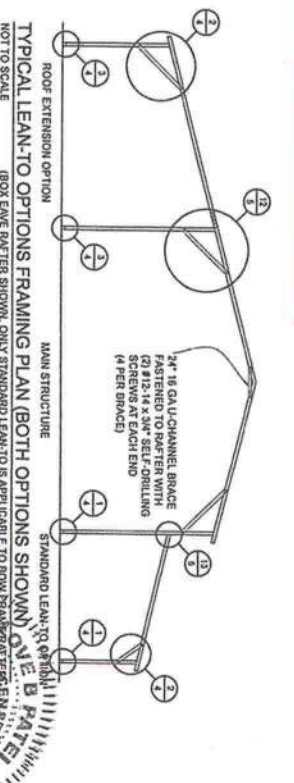
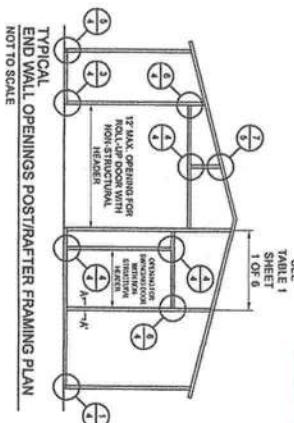
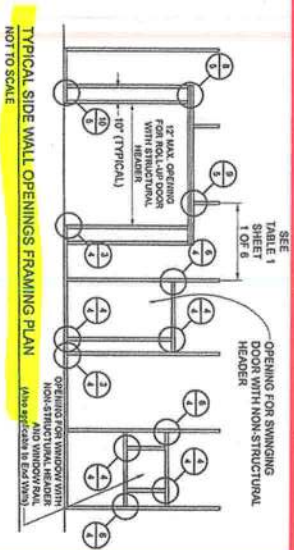
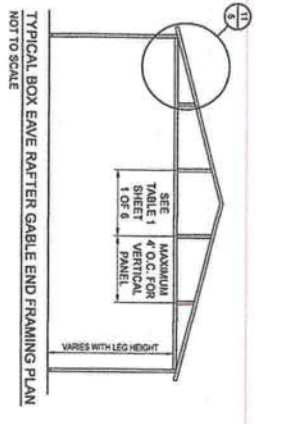
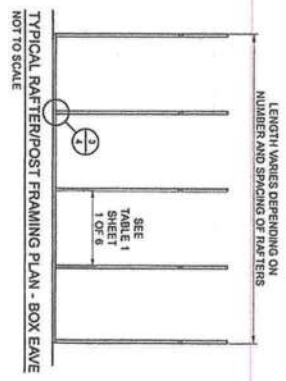
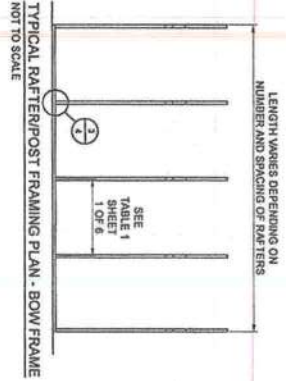
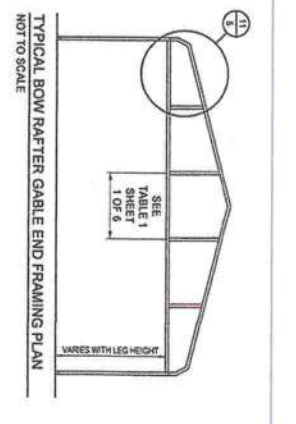
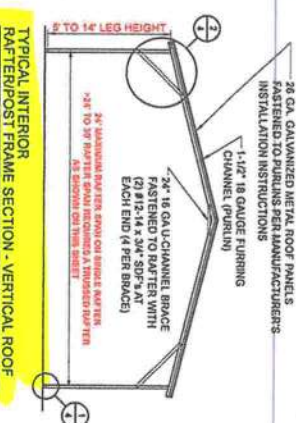
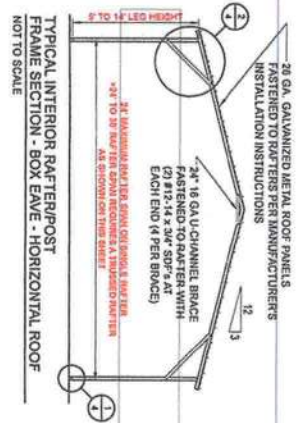
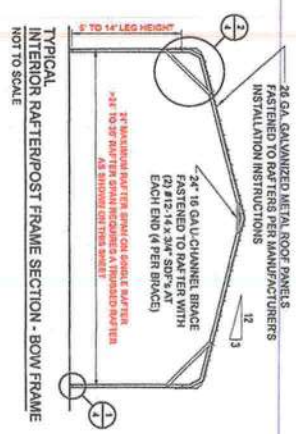
CAROLINA CARPORTS, INC.
GENERIC PLANS FOR USE IN THE STATE OF FLORIDA

DATE	2/21/2023
DESIGN	MJS
CHECK	MJS
PROJECT	19/CS
PROJECT	022001
PROJECT	18/1P
SHEET	7 OF 6

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

No. 80783



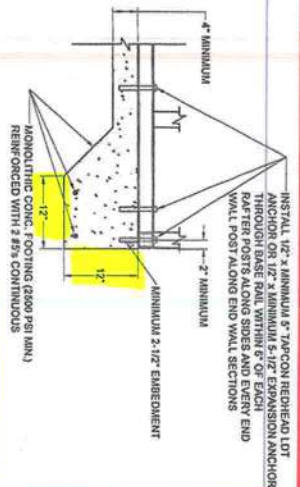


CAROLINA CARPORTS, INC.
GENERIC PLANS FOR USE IN THE STATE OF FLORIDA

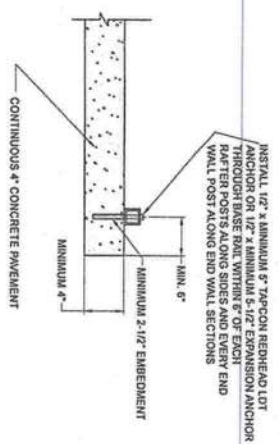
BECHTOL ENGINEERING AND TESTING, INC.
10000 N. W. 11TH AVENUE
DELAND, FLORIDA 32205
No. D0763

STATE OF FLORIDA
PROFESSIONAL ENGINEER

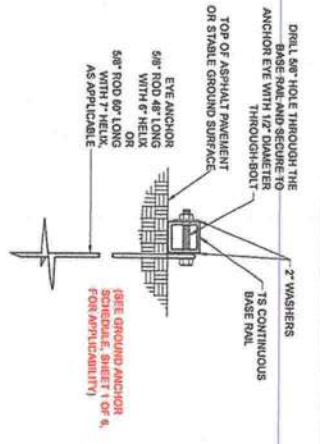
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BY: MNG
CHECKED: TB/JS
DESIGNED: G22001
VERSION: TB/JP
SHEET 3 OF 6



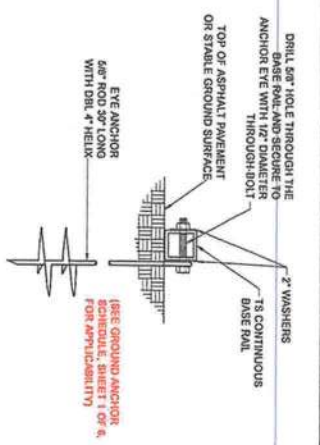
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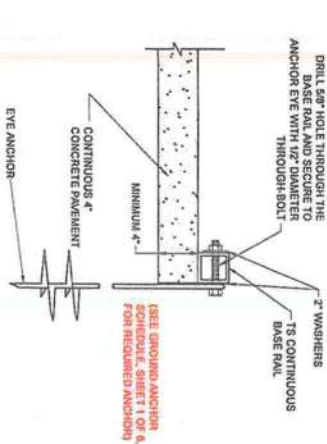
1B CONCRETE BASE RAIL ANCHORAGE
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(OPTIONAL - OPEN JOINTS ONLY)



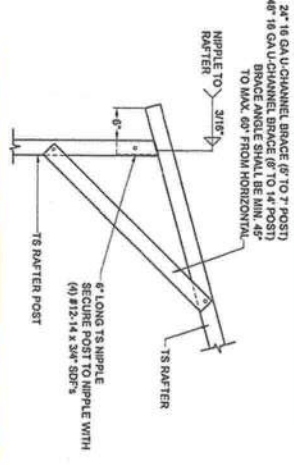
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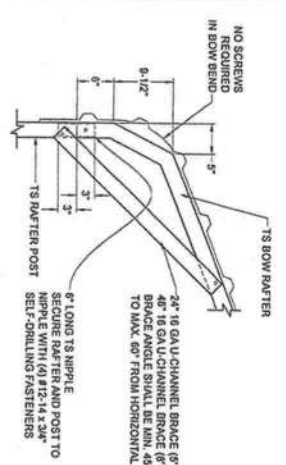
1D BASE RAIL ANCHORAGE
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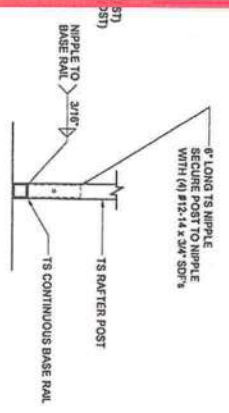
1E CONCRETE BASE RAIL ANCHORAGE
Not To Scale
(OPEN JOINTS TO BE USED WHERE SHOWN DO NOT MEET MINIMUM EMBEDMENT DISTANCE SHOWN IN DETAIL 1B)



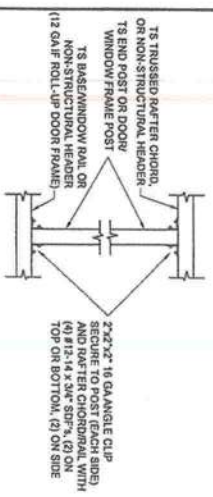
2A BOX EAVE RAFTER/POST DETAIL
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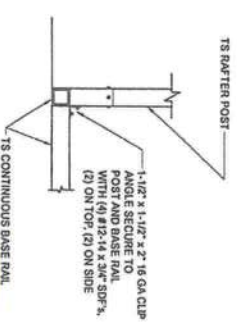
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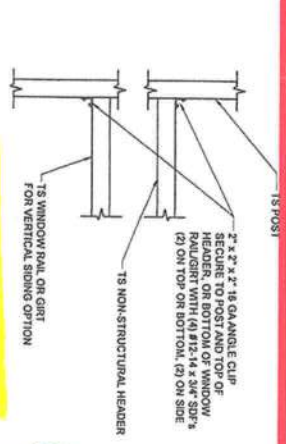
3 POST/BASE RAIL CONN. DETAIL
Not To Scale



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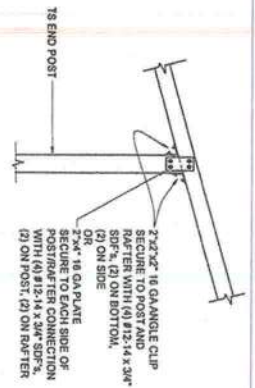
CAROLINA CARPORTS, INC.
GENERIC PLANS FOR USE IN THE STATE OF FLORIDA

BECHTEL ENGINEERING AND TESTING, INC.
2020 N. W. 10TH AVE.
DELAND, FLORIDA 32720

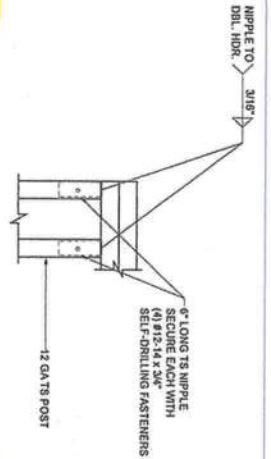
STATE OF FLORIDA
No. 80723
Professional Engineer

BECHTEL ENGINEERING
AND TESTING, INC.
2020 N. W. 10TH AVE.
DELAND, FLORIDA 32720

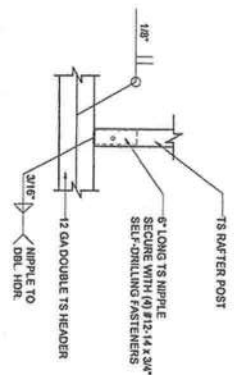
DATE	2/21/2023
BY	MDG
FOR	TS/CS
PROJECT	TS/1/P
SHEET	4 OF 6



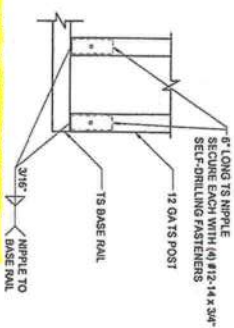
7 END POST/RAFTER CONN. DETAIL
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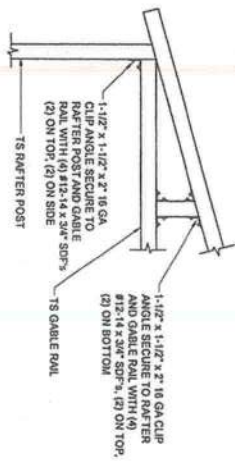
8 RAFTER POST/DBL. HEADER DETAIL
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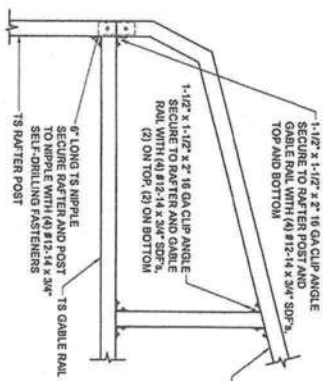
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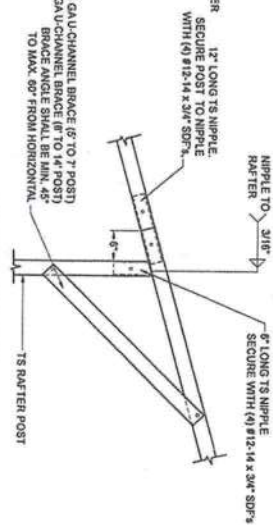
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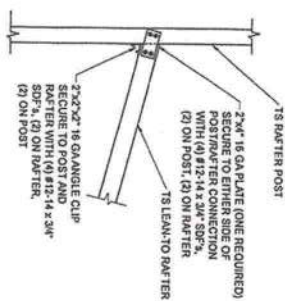
11A GABLE RAIL TO RAFTER POST CONNECTION DETAIL
Not To Scale



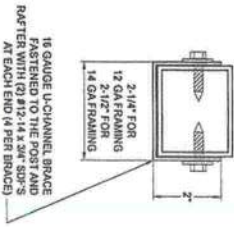
11B GABLE RAIL TO RAFTER POST CONNECTION DETAIL
Not To Scale



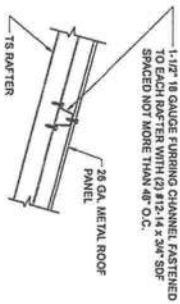
12 SIDE EXTENSION RAFTER/POST DETAIL
Not To Scale



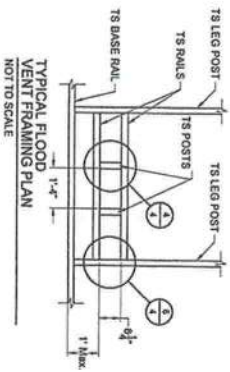
13 POST / LEAN-TO RAFTER CONN. DETAIL
Not To Scale



14 BRACE SECTION
Not To Scale



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



16 TYPICAL FLOOD VENT FRAMING PLAN
NOT TO SCALE

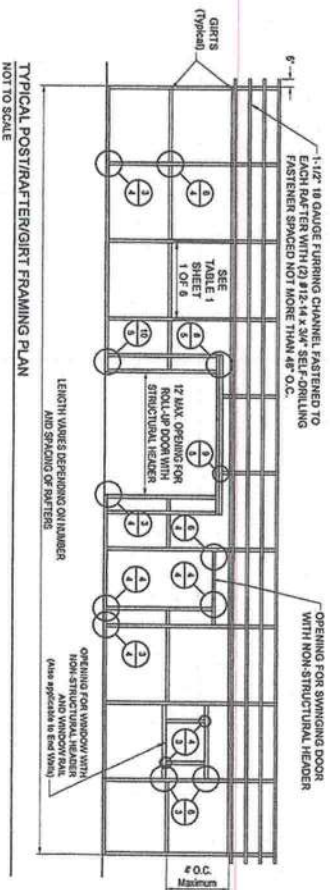
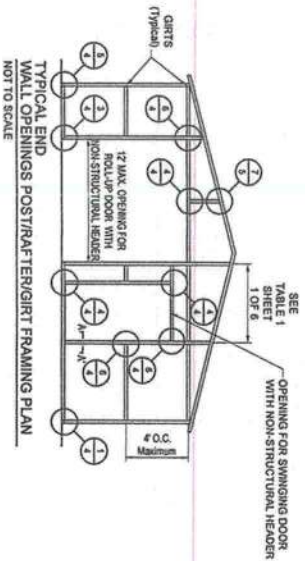
CAROLINA CARPORTS, INC.
GENERIC PLANS FOR USE IN THE STATE OF FLORIDA

BECHTOL ENGINEERING AND TESTING, INC.
605 WEST NEWYORK AVENUE
DELAND, FLORIDA 32725

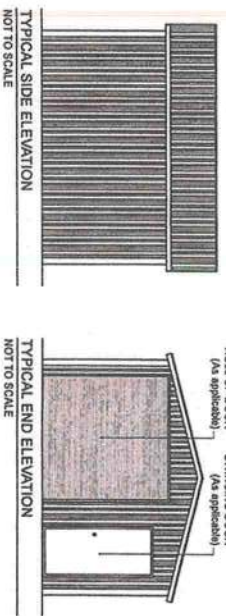
Professional Engineer
No. 80703
STATE OF FLORIDA

BECHTOL ENGINEERING AND TESTING, INC.
221/0023
JMB
NJS
18/CS
G23001
SHEET 15 OF 16

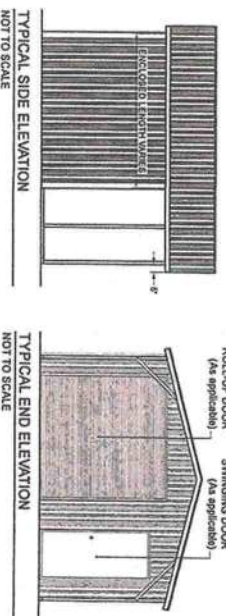
VERTICAL SIDE OPTION



BOX EAVE FRAME RAFTER ENCLOSED BLDG. - VERTICAL SIDES



BOX EAVE FRAME RAFTER UTILITY BLDG. - VERTICAL SIDES



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

DATE	2/21/2023
DESIGNER	MNG
CHECKED	TS/CS
PROJECT NO.	Q3301
SHEET	6 OF 6

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

LOVE B. FATEL
Professional Engineer
No. 90753
STATE OF FLORIDA

SIDE AND REAR
PROPERTY LINE

30'

184

30'

10'

FRONT OF
PROPERTY

134' TO
HOUSE

55'

Shop

APRON

55'

30'

30'

10'

30'

ROAD SIDE PROPERTY LINE

Back Property