

PERMIT

This Permit Expires One Year From the Date of Issue

000024861

| | | | | | |
|----------------------|---|--------------------------|--------------------|---------------------|--------------|
| APPLICANT | <u>GEORGE BOHLMANN</u> | | PHONE | <u>352 376-6230</u> | |
| ADDRESS | <u>3826</u> | <u>NW 26TH ST</u> | <u>GAINESVILLE</u> | <u>FL</u> | <u>32605</u> |
| OWNER | <u>GEORGE BOHLMANN</u> | | PHONE | <u>352 376-6230</u> | |
| ADDRESS | <u>122</u> | <u>SW GREENWOOD TERR</u> | <u>FT. WHITE</u> | <u>FL</u> | <u>32038</u> |
| CONTRACTOR | <u>GEORGE BOHLMANN</u> | | PHONE | <u>352 376-6230</u> | |
| LOCATION OF PROPERTY | <u>47S, TL ON 27, TL ON CR 18, TL ON GREENWOOD TERR., 1ST LOT</u> <u>ON LEFT</u> | | | | |

| | | | | | |
|-------------------------------|--------------|------------|--------------------------------|---------|---------|
| TYPE DEVELOPMENT | SHED | | ESTIMATED COST OF CONSTRUCTION | | 8350.00 |
| HEATED FLOOR AREA | TOTAL AREA | | HEIGHT | STORIES | |
| FOUNDATION | WALLS | ROOF PITCH | FLOOR | | |
| LAND USE & ZONING | FW | | MAX. HEIGHT | | |
| Minimum Set Back Requirments: | STREET-FRONT | | REAR | SIDE | |
| NO. EX.D.U. | FLOOD ZONE | FW | DEVELOPMENT PERMIT NO. | | |

| | | | | |
|-----------|--------------------|-------|-------------|-------------|
| PARCEL ID | 34-6S-16-04056-137 | | SUBDIVISION | THORNWOOD |
| LOT 37 | BLOCK | PHASE | UNIT | TOTAL ACRES |

| | | | | |
|---------------------|--------------------|-----------------------------|----------------------------|--------------|
| Culvert Permit No. | Culvert Waiver | Contractor's License Number | Applicant/Owner/Contractor | |
| <u>EXISTING</u> | <u>X06-0263</u> | <u>BK</u> | <u>JH</u> | <u>N</u> |
| Driveway Connection | Septic Tank Number | LU & Zoning checked by | Approved for Issuance | New Resident |

COMMENTS: ONE FOOT ABOVE THE ROAD
FT. WHITE LETTER ATTACHED

Check # or Cash 0919

FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

| | | |
|---|---|---------------------|
| Temporary Power | Foundation | Monolithic |
| date/app. by | date/app. by | date/app. by |
| Under slab rough-in plumbing | Slab | Sheathing/Nailing |
| date/app. by | date/app. by | date/app. by |
| Framing | Rough-in plumbing above slab and below wood floor | |
| date/app. by | | date/app. by |
| Electrical rough-in | Heat & Air Duct | Peri. beam (Lintel) |
| date/app. by | date/app. by | date/app. by |
| Permanent power | C.O. Final | Culvert |
| date/app. by | date/app. by | date/app. by |
| M/H tie downs, blocking, electricity and plumbing | | Pool |
| | date/app. by | date/app. by |
| Reconnection | Pump pole | Utility Pole |
| date/app. by | date/app. by | date/app. by |
| M/H Pole | Travel Trailer | Re-roof |
| date/app. by | date/app. by | date/app. by |

| | | | | | |
|--------------------------|-------------------|----------------------|-------------------|------------------|-------------------|
| BUILDING PERMIT FEE \$ | <u>45.00</u> | CERTIFICATION FEE \$ | <u>0.00</u> | SURCHARGE FEE \$ | <u>0.00</u> |
| MISC. FEES \$ | <u>0.00</u> | ZONING CERT. FEE \$ | <u> </u> | FIRE FEE \$ | <u>0.00</u> |
| FLOOD DEVELOPMENT FEE \$ | <u> </u> | FLOOD ZONE FEE \$ | <u> </u> | CULVERT FEE \$ | <u> </u> |
| TOTAL FEE | | | | | 45.00 |

INSPECTORS OFFICE *Ad 13/14* CLERKS OFFICE

NOTICE: IN ADDITION TO THE REQUIREMENTS OF THIS PERMIT, THERE MAY BE ADDITIONAL RESTRICTIONS APPLICABLE TO THIS PROPERTY THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY. AND THERE MAY BE ADDITIONAL PERMITS REQUIRED FROM OTHER GOVERNMENTAL ENTITIES SUCH AS WATER MANAGEMENT DISTRICTS, STATE AGENCIES, OR FEDERAL AGENCIES.

"WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT."

This Permit Must Be Prominently Posted on Premises During Construction

PLEASE NOTIFY THE COLUMBIA COUNTY BUILDING DEPARTMENT AT LEAST 24 HOURS IN ADVANCE OF EACH INSPECTION, IN ORDER THAT IT MAY BE MADE WITHOUT DELAY OR INCONVENIENCE, PHONE 758-1008. THIS PERMIT IS NOT VALID UNLESS THE WORK AUTHORIZED BY IT IS COMMENCED WITHIN 6 MONTHS AFTER ISSUANCE.

The Issuance of this Permit Does Not Waive Compliance by Permittee with Deed Restrictions.

Columbia County Building Permit Application

CK 0919

For Office Use Only Application # 0608-25 Date Received 8/10/06 By G Permit # 24861
 Application Approved by - Zoning Official _____ Date _____ Plans Examiner OK JTH Date 8-14-06
 Flood Zone _____ Development Permit _____ Zoning _____ Land Use Plan Map Category _____
 Comments Ft White Letter Attached / Town of Ft White

Applicants Name George BOHLMANN Phone 352-376-6230
 Address 3826 NW 26th ST GAINESVILLE FL 32603
 Owners Name SAME Phone _____
 911 Address 122 SW Greenwood Terr. Ft. White, FL 32038
 Contractors Name PRO - BUILT OWNER/BUILDER Phone 352-751-1018
 Address 3752 Hwy 90 WEST SUITE B LAKE CITY
 Fee Simple Owner Name & Address _____
 Bonding Co. Name & Address _____
 Architect/Engineer Name & Address _____
 Mortgage Lenders Name & Address _____

Circle the correct power company - FL Power & Light - Clay Elec. - Suwannee Valley Elec. - Progressive Energy
 Property ID Number 34-GS-16-04056-137 Estimated Cost of Construction \$350.00
 Subdivision Name THORN WOOD Lot 37 Block _____ Unit _____ Phase _____
 Driving Directions 47 SOUTH LEFT 27 TURN LEFT CR 18 LEFT ON CORNER OF CR 18 + THORNWOOD SUB. NO 37 GREENWOOD TERR. 1ST LOT ON LEFT

Type of Construction 20x31 SHED Number of Existing Dwellings on Property 0
 Total Acreage 1.25 Lot Size _____ Do you need a - Culvert Permit or Culvert Waiver or Have an Existing Drive
 Actual Distance of Structure from Property Lines - Front _____ Side 15' Side 15' Rear 15'
 Total Building Height 8' Number of Stories _____ Heated Floor Area _____ Roof Pitch _____

Application is hereby made to obtain a permit to do work and installations as indicated. I certify that no work or installation has commenced prior to the issuance of a permit and that all work be performed to meet the standards of all laws regulating construction in this jurisdiction.

OWNERS AFFIDAVIT: I hereby certify that all the foregoing information is accurate and all work will be done in compliance with all applicable laws and regulating construction and zoning.

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOU PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

George Bohlmann
 Owner Builder or Agent (Including Contractor)
 STATE OF FLORIDA
 COUNTY OF COLUMBIA
 Sworn to (or affirmed) and subscribed before me
 this 9th day of AUG 2006
 Personally known _____ or Produced Identification DL
 GALE TEDDER
 MY COMMISSION # DD 333586
 EXPIRES: June 28, 2008
 Bonded Thru Notary Public Underwriters
 Contractor Signature _____
 Contractors License Number _____
 Competency Card Number _____
 NOTARY STAMP/SEAL
Gale Tedder
 Notary Signature

@ CAM112M01 S CamaUSA Appraisal System
 8/09/2006 11:37 Legal Description Maintenance
 Year T Property Sel
 2006 R 34-6S-16-.04056-137.

Columbia County
 44550 Land 001
 AG 000
 Bldg 000
 Xfea 000
 44550 TOTAL B

BOHLMANN GEORGE & SUSAN M

| | | | |
|----|---------------------------------|---------------------------------------|----|
| 1 | LOT 37, THORNWOOD S/D | WD 1030-2804., WD 1065-2312., | 2 |
| 3 | | | 4 |
| 5 | | | 6 |
| 7 | | | 8 |
| 9 | | | 10 |
| 11 | | | 12 |
| 13 | | | 14 |
| 15 | | | 16 |
| 17 | | | 18 |
| 19 | | | 20 |
| 21 | | | 22 |
| 23 | | | 24 |
| 25 | | | 26 |
| 27 | | | 28 |

Mnt 12/12/2005 THRESA

F1=Task F3=Exit F4=Prompt F10=GoTo PgUp/PgDn F24=More

DISCLOSURE STATEMENT

FOR OWNER/BUILDER WHEN ACTING AS THEIR OWN CONTRACTOR AND CLAIMING EXEMPTION OF CONTRACTOR LICENSING REQUIREMENTS IN ACCORDANCE WITH FLORIDA STATUTES, ss. 489.103(7).

State law requires construction to be done by licensed contractors. You have applied for a permit under an exemption to that law. The exemption allows you, as the owner of your property, to act as your own contractor with certain restrictions even though you do not have a license. You must provide direct, onsite supervision of the construction yourself. You may build or improve a one-family or two-family residence or a farm outbuilding. You may also build or improve a commercial building, provided your costs do not exceed \$25,000. The building or residence must be for your own use or occupancy. It may not be built or substantially improved for sale or lease. If you sell or lease a building you have built or substantially improved yourself within 1 year after the construction is complete, the law will presume that you built or substantially improved it for sale or lease, which is a violation of this exemption. You may not hire an unlicensed person to act as your contractor or to supervise people working on your building. It is your responsibility to make sure that people employed by you have licenses required by state law and by county or municipal licensing ordinances. You may not delegate the responsibility for supervising work to a licensed contractor who is not licensed to perform the work being done. Any person working on your building who is not licensed must work under your direct supervision and must be employed by you, which means that you must deduct F.I.C.A. and withholding tax and provide workers' compensation for that employee, all as prescribed by law. Your construction must comply with all applicable laws, ordinances, building codes, and zoning regulations.

TYPE OF CONSTRUCTION

- ☐ Single Family Dwelling ☐ Two-Family Residence
☐ Farm Outbuilding ☐ Other _____
☐ New Construction ☐ Addition, Alteration, Modification or other Improvement

NEW CONSTRUCTION OR IMPROVEMENT

I George Bohlmann, have been advised of the above disclosure statement for exemption from contractor licensing as an owner/builder. I agree to comply with all requirements provided for in Florida Statutes ss.489.103(7) allowing this exception for the construction permitted by Columbia County Building Permit Number _____

George Bohlmann
Signature

8/9/06
Date

FOR BUILDING USE ONLY

I hereby certify that the above listed owner/builder has been notified of the disclosure statement in Florida Statutes ss 489.103(7).

Date _____ Building Official/Representative _____

Town of Fort White

Post Office Box 129 Fort White, Florida 32038-0129
Town Hall - (386) 497-2321 • Public Works - (386) 497-3345
Email: townofftwhite@alltel.com • Web site: Townoffortwhitefl.com

CERTIFICATE OF COMPLIANCE & REQUEST FOR ISSUANCE OF BUILDING PERMIT

The undersigned hereby certify the following property is in compliance with the Town of Fort
White's Comprehensive Plan and Land Development Regulations for the stated development purposes:

OWNER'S NAME: Bohlmann, George

ADDRESS: 3826 NW 26th St. Gainesville, FL 32605

PROPERTY DESCRIPTION: Lot #37 Parcel #4056-137
(parcel number if possible) 1.25 Ac. Thornwood Subdivision

DEVELOPMENT: Single Family Dwelling with outside storage building

E. Hudson

You are hereby authorized to issue the appropriate building permits.

09 August 2006

DATE

James E. Ruels
LAND DEVELOPMENT REGULATION
ADMINISTRATOR
TOWN OF FORT WHITE

*** This compliance is being issued for both the home and the storage building.
The owner has satisfactorily met the Town of Fort White requirements.**

District #1
Donald Cook
497-1086

District #2
Henry Maini
497-2992

District #3
John Gloskowski
497-3999

District #4
Demetric Jackson
497-2078

Mayor
Truett George
497-4741

COLUMBIA COUNTY 9-1-1 ADDRESSING

P. O. Box 1787, Lake City, FL 32056-1787

PHONE: (386) 758-1125 • FAX: (386) 758-1365 • Email: ron_croft@columbiacountyfla.com

Addressing Maintenance

To maintain the Countywide Addressing Policy you must make application for a 9-1-1 Address at the time you apply for a building permit. The established standards for assigning and posting numbers to all principal buildings, dwellings, businesses and industries are contained in Columbia County Ordinance 2001-9. The addressing system is to enable Emergency Service Agencies to locate you in an emergency, and to assist the United States Postal Service and the public in the timely and efficient provision of services to residents and businesses of Columbia County.

DATE REQUESTED: 8/9/2006 DATE ISSUED: 8/14/2006**ENHANCED 9-1-1 ADDRESS:****122 SW GREENWOOD TER****FORT WHITE FL 32038****PROPERTY APPRAISER PARCEL NUMBER:****34-6S-16-04056-137****Remarks:****LOCATED ON LOT 37 THORNWOOD S/D****Address Issued By:**
Columbia County 9-1-1 Addressing / GIS Department

NOTICE: THIS ADDRESS WAS ISSUED BASED ON LOCATION INFORMATION RECEIVED FROM THE REQUESTER. SHOULD, AT A LATER DATE, THE LOCATION INFORMATION BE FOUND TO BE IN ERROR, THIS ADDRESS IS SUBJECT TO CHANGE.

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From GEORGE Bohlmann
352-376-6230
appl # 0608-23

**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.
Certificate of Authorization No. 00005492


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

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

TABLE 1 - BOW FRAME AND PANEL FASTENER SPACING SPECIFICATIONS

| WIND EXPOSURE CATEGORY | BASIC WIND SPEED 3-SECOND GUST (MPH) | MAXIMUM BOW SPACING (FEET) | MAXIMUM FASTENER SPACING ON-CENTERS ALONG BOWS (INCHES) | |
|------------------------|--------------------------------------|----------------------------|---|----------|
| | | | INTERIOR BOWS | END BOWS |
| B | 100 | 5.0 | 8 | 8 |
| | 110 | 5.0 | 8 | 8 |
| | 120 | 5.0 | 8 | 8 |
| | 130 | 5.0 | 8 | 8 |
| | 140 | 4.0 | 8 | 6 |
| | 150 | 3.5 | 8 | 6 |
| C | 100 | 5.0 | 8 | 8 |
| | 110 | 5.0 | 8 | 8 |
| | 120 | 4.5 | 8 | 6 |
| | 130 | 4.0 | 8 | 6 |
| | 140 | 3.5 | 8 | 4 |
| | 150 | 3.0 | 8 | 4 |

NOTES:

1. Specifications applicable to 29 gauge metal panels fastened directly to 12 or 14 gauge steel tube bow frames.
2. Fasteners consist of 1/4"-14 x 1" self drilling screws.
3. Specifications applicable only for mean roof height of 15 feet or less, and roof slope of 14 degrees (3/12 pitch). Spacing requirements for other roof heights and/or slopes may vary.

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

TABLE 2 - END POST AND END WALL PANEL FASTENER SPACING SPECIFICATIONS

| WIND EXPOSURE CATEGORY | BASIC WIND SPEED 3-SECOND GUST (MPH) | MAXIMUM END POST SPACING (FEET) | MAXIMUM FASTENER SPACING ON-CENTERS ALONG END POSTS (INCHES) |
|------------------------|--------------------------------------|---------------------------------|--|
| B OR C | 100 TO 150 | 4.0 | 8 |

NOTES:

1. Specifications applicable to 29 gauge metal panels fastened directly to 12 or 14 gauge steel tube end posts.
2. Fasteners consist of 1/4"-14 x 1" self drilling screws.
3. Specifications applicable only for mean roof height of 15 feet or less. Spacing requirements for other roof heights may vary.

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 2004 FLORIDA BUILDING CODE.

 3/13/04
THOMAS BECHTOL, P.E.

FLORIDA LICENSE NO. 38538

METAL CARPORT ROOF AND SIDE PANEL FASTENER SPECIFICATIONS (EXPOSURE CATEGORY B / 100 MPH BASIC WIND SPEED)

PREPARED FOR: CAROLINA CARPORTS, INC., P.O. BOX 1283, DOBSON, NORTH CAROLINA
PREPARED BY: THOMAS BECHTOL, P.E., FLORIDA LICENSE NO. 38538
DATE PREPARED: 02/06/06

THE FOLLOWING CALCULATIONS AND SPECIFICATIONS ARE PREPARED ONLY FOR, AND ARE CERTIFIED ONLY TO CAROLINA CARPORTS, INC. USE OF THESE CALCULATIONS AND SPECIFICATIONS BY OTHERS IS PROHIBITED UNLESS AUTHORIZED BY CAROLINA CARPORTS, INC.

MATERIAL SPECIFICATIONS:

ROOF AND SIDE PANELS: CAROLINA CARPORTS, INC. 29 GA. R-PANELS
FRAMING: 2.5" X 2.5" 12 OR 14 GAUGE STEEL TUBE BOW FRAMES
PANEL FASTENERS: 1/4"-14 X 1" SELF DRILLING SCREWS

ASSUMED DESIGN CRITERIA:

EXPOSURE CATEGORY: B
BASIC WIND SPEED: 100 MPH (3-SECOND GUST)
MEAN ROOF HEIGHT: 15 FEET MAXIMUM
ROOF ANGLE: 14 DEGREES
EFFECTIVE WIND AREA: 10 S.F.
IMPORTANCE FACTOR: 0.87
EFFECTIVE END ZONE WIDTH: 3.0'

COMPONENT AND CLADDING DESIGN WIND PRESSURE:

DESIGN UNIT LOAD (q): USE OVERHANG ZONE 2 (PER FIGURE 1609.6(c), 2004 FBC) FOR INTERIOR BOWS
USE OVERHANG ZONE 3 (PER FIGURE 1609.6(c), 2004 FBC) FOR END BOWS
FROM TABLES 1609.6C, TABLE 1609.6D (BUILDING HEIGHT AND EXPOSURE ADJUSTMENT FACTOR), AND 1604.5
(STRUCTURE IMPORTANCE FACTOR), 2004 FBC:
INTERIOR BOWS: $q = (33.5)(1.00)(0.87) = 29.1$ PSF
END BOWS: $q = (56.4)(1.00)(0.87) = 49.1$ PSF

PANEL FASTENER DESIGN CALCULATIONS:

DESIGN FASTENER: 1/4" X 1" SELF DRILLING FASTENER INTO 12 OR 14 GAUGE STEEL TUBE BOW FRAME
ALLOWABLE PULL-OUT CAPACITY = 383 POUNDS / SCREW (INCORPORATES MINIMUM SF = 3)
ALLOWABLE PULL-OVER CAPACITY = 150 POUNDS / SCREW (INCORPORATES MINIMUM SF = 3)
FASTENER DESIGN SHALL BE GOVERNED BY ALLOWABLE PULL-OVER CAPACITY
MANUFACTURER SPECIFIES 1 SCREW @ MAXIMUM 8" O.C. ALONG EACH BOW

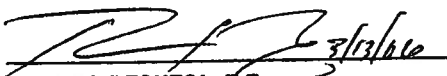
MAXIMUM ALLOWABLE BOW SPACING = $(150) / (.67)(29.1) = 7.69'$
MAXIMUM ALLOWABLE END BOW FASTENER SPACING = $(150) / (49.1)(3.0) = 1.02' = 12.2"$

DESIGN: MAXIMUM BOW SPACING = 5.0'

MAXIMUM FASTENER SPACING ALONG BOWS = 8" O.C. (INTERIOR BOWS) AND 8" O.C. (END BOWS)

THE ABOVE CALCULATIONS AND SPECIFICATIONS ARE APPLICABLE TO STRUCTURES CONSTRUCTED IN EXPOSURE CATEGORY B WITH MEAN ROOF HEIGHT OF 15 FEET OR LESS, AND WITH ROOF SLOPE OF 14 DEGREES (3/12 PITCH). REQUIREMENTS FOR OTHER EXPOSURE CATEGORIES, AND/OR ROOF HEIGHT, AND/OR ROOF SLOPES MAY VARY.

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 2004 FLORIDA BUILDING CODE.


THOMAS BECHTOL, P.E.
FLORIDA LICENSE NO. 38538

METAL CARPORT ROOF AND SIDE PANEL FASTENER SPECIFICATIONS (EXPOSURE CATEGORY B / 110 MPH BASIC WIND SPEED)

PREPARED FOR: CAROLINA CARPORTS, INC., P.O. BOX 1263, DOBSON, NORTH CAROLINA
PREPARED BY: THOMAS BECHTOL, P.E., FLORIDA LICENSE NO. 38538
DATE PREPARED: 02/06/06

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MATERIAL SPECIFICATIONS:

ROOF AND SIDE PANELS: CAROLINA CARPORTS, INC. 29 GA. R-PANELS
FRAMING: 2.5" X 2.5" 12 OR 14 GAUGE STEEL TUBE BOW FRAMES
PANEL FASTENERS: 1/4"-14 X 1" SELF DRILLING SCREWS

ASSUMED DESIGN CRITERIA:

EXPOSURE CATEGORY: B
BASIC WIND SPEED: 110 MPH (3-SECOND GUST)
MEAN ROOF HEIGHT: 15 FEET MAXIMUM
ROOF ANGLE: 14 DEGREES
EFFECTIVE WIND AREA: 10 S.F.
IMPORTANCE FACTOR: 0.77
EFFECTIVE END ZONE WIDTH: 3.0'

COMPONENT AND CLADDING DESIGN WIND PRESSURE:

DESIGN UNIT LOAD (q): USE OVERHANG ZONE 2 (PER FIGURE 1609.6(c), 2004 FBC) FOR INTERIOR BOWS
USE OVERHANG ZONE 3 (PER FIGURE 1609.6(c), 2004 FBC) FOR END BOWS
FROM TABLES 1609.6C, TABLE 1609.6D (BUILDING HEIGHT AND EXPOSURE ADJUSTMENT FACTOR), AND 1604.5
(STRUCTURE IMPORTANCE FACTOR), 2004 FBC:
INTERIOR BOWS: $q = (40.6)(1.00)(0.77) = 31.3$ PSF
END BOWS: $q = (68.3)(1.00)(0.77) = 52.6$ PSF

PANEL FASTENER DESIGN CALCULATIONS:

DESIGN FASTENER: 1/4" X 1" SELF DRILLING FASTENER INTO 12 OR 14 GAUGE STEEL TUBE BOW FRAME
ALLOWABLE PULL-OUT CAPACITY = 383 POUNDS / SCREW (INCORPORATES MINIMUM SF = 3)
ALLOWABLE PULL-OVER CAPACITY = 150 POUNDS / SCREW (INCORPORATES MINIMUM SF = 3)
FASTENER DESIGN SHALL BE GOVERNED BY ALLOWABLE PULL-OVER CAPACITY
MANUFACTURER SPECIFIES 1 SCREW @ MAXIMUM 8" O.C. ALONG EACH BOW

$$\text{MAXIMUM ALLOWABLE BOW SPACING} = (150) / (.67)(31.3) = 7.15'$$

$$\text{MAXIMUM ALLOWABLE END BOW FASTENER SPACING} = (150) / (52.6)(3.0) = 0.95' = 11.4"$$

DESIGN: MAXIMUM BOW SPACING = 5.0'

MAXIMUM FASTENER SPACING ALONG BOWS = 8" O.C. (INTERIOR BOWS) AND 8" O.C. (END BOWS)

THE ABOVE CALCULATIONS AND SPECIFICATIONS ARE APPLICABLE TO STRUCTURES CONSTRUCTED IN EXPOSURE CATEGORY B WITH MEAN ROOF HEIGHT OF 15 FEET OR LESS, AND WITH ROOF SLOPE OF 14 DEGREES (3/12 PITCH). REQUIREMENTS FOR OTHER EXPOSURE CATEGORIES, AND/OR ROOF HEIGHT, AND/OR ROOF SLOPES MAY VARY.

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 2004 FLORIDA BUILDING CODE.


THOMAS BECHTOL, P.E.
FLORIDA LICENSE NO. 38538

METAL CARPORT ROOF AND SIDE PANEL FASTENER SPECIFICATIONS (EXPOSURE CATEGORY B / 120 MPH BASIC WIND SPEED)

PREPARED FOR: CAROLINA CARPORTS, INC., P.O. BOX 1263, DOBSON, NORTH CAROLINA
PREPARED BY: THOMAS BECHTOL, P.E., FLORIDA LICENSE NO. 38538
DATE PREPARED: 02/08/06

THE FOLLOWING CALCULATIONS AND SPECIFICATIONS ARE PREPARED ONLY FOR, AND ARE CERTIFIED ONLY TO CAROLINA CARPORTS, INC. USE OF THESE CALCULATIONS AND SPECIFICATIONS BY OTHERS IS PROHIBITED UNLESS AUTHORIZED BY CAROLINA CARPORTS, INC.

MATERIAL SPECIFICATIONS:

ROOF AND SIDE PANELS: CAROLINA CARPORTS, INC. 29 GA. R-PANELS
FRAMING: 2.5" X 2.5" 12 OR 14 GAUGE STEEL TUBE BOW FRAMES
PANEL FASTENERS: 1/4"-14 X 1" SELF DRILLING SCREWS

ASSUMED DESIGN CRITERIA:

EXPOSURE CATEGORY: B
BASIC WIND SPEED: 120 MPH (3-SECOND GUST)
MEAN ROOF HEIGHT: 15 FEET MAXIMUM
ROOF ANGLE: 14 DEGREES
EFFECTIVE WIND AREA: 10 S.F.
IMPORTANCE FACTOR: 0.77
EFFECTIVE END ZONE WIDTH: 3.0'

COMPONENT AND CLADDING DESIGN WIND PRESSURE:

DESIGN UNIT LOAD (q): USE OVERHANG ZONE 2 (PER FIGURE 1609.6(c), 2004 FBC) FOR INTERIOR BOWS
USE OVERHANG ZONE 3 (PER FIGURE 1609.6(c), 2004 FBC) FOR END BOWS
FROM TABLES 1609.6C, TABLE 1609.6D (BUILDING HEIGHT AND EXPOSURE ADJUSTMENT FACTOR), AND 1604.5
(STRUCTURE IMPORTANCE FACTOR), 2004 FBC:
INTERIOR BOWS: $q = (48.3)(1.00)(0.77) = 37.2$ PSF
END BOWS: $q = (81.2)(1.00)(0.77) = 62.5$ PSF

PANEL FASTENER DESIGN CALCULATIONS:

DESIGN FASTENER: 1/4" X 1" SELF DRILLING FASTENER INTO 12 OR 14 GAUGE STEEL TUBE BOW FRAME
ALLOWABLE PULL-OUT CAPACITY = 383 POUNDS / SCREW (INCORPORATES MINIMUM SF = 3)
ALLOWABLE PULL-OVER CAPACITY = 150 POUNDS / SCREW (INCORPORATES MINIMUM SF = 3)
FASTENER DESIGN SHALL BE GOVERNED BY ALLOWABLE PULL-OVER CAPACITY
MANUFACTURER SPECIFIES 1 SCREW @ MAXIMUM 8" O.C. ALONG EACH BOW


MAXIMUM ALLOWABLE BOW SPACING = $(150) / (.67)(37.2) = 6.02'$
MAXIMUM ALLOWABLE END BOW FASTENER SPACING = $(150) / (62.5)(3.0) = 0.80' = 9.6"$

DESIGN: MAXIMUM BOW SPACING = 5.0'

MAXIMUM FASTENER SPACING ALONG BOWS = 8" O.C. (INTERIOR BOWS) AND 8" O.C. (END BOWS)

THE ABOVE CALCULATIONS AND SPECIFICATIONS ARE APPLICABLE TO STRUCTURES CONSTRUCTED IN EXPOSURE CATEGORY B WITH MEAN ROOF HEIGHT OF 15 FEET OR LESS, AND WITH ROOF SLOPE OF 14 DEGREES (3/12 PITCH). REQUIREMENTS FOR OTHER EXPOSURE CATEGORIES, AND/OR ROOF HEIGHT, AND/OR ROOF SLOPES MAY VARY.

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 2004 FLORIDA BUILDING CODE.


THOMAS BECHTOL, P.E.
FLORIDA LICENSE NO. 38538

METAL CARPORT ROOF AND SIDE PANEL FASTENER SPECIFICATIONS (EXPOSURE CATEGORY B / 130 MPH BASIC WIND SPEED)

PREPARED FOR: CAROLINA CARPORTS, INC., P.O. BOX 1263, DOBSON, NORTH CAROLINA
PREPARED BY: THOMAS BECHTOL, P.E., FLORIDA LICENSE NO. 38538
DATE PREPARED: 02/06/06

THE FOLLOWING CALCULATIONS AND SPECIFICATIONS ARE PREPARED ONLY FOR, AND ARE CERTIFIED ONLY TO CAROLINA CARPORTS, INC. USE OF THESE CALCULATIONS AND SPECIFICATIONS BY OTHERS IS PROHIBITED UNLESS AUTHORIZED BY CAROLINA CARPORTS, INC.

MATERIAL SPECIFICATIONS:

ROOF AND SIDE PANELS: CAROLINA CARPORTS, INC. 29 GA. R-PANELS
FRAMING: 2.5" X 2.5" 12 OR 14 GAUGE STEEL TUBE BOW FRAMES
PANEL FASTENERS: 1/4"-14 X 1" SELF DRILLING SCREWS

ASSUMED DESIGN CRITERIA:

EXPOSURE CATEGORY: B
BASIC WIND SPEED: 130 MPH (3-SECOND GUST)
MEAN ROOF HEIGHT: 15 FEET MAXIMUM
ROOF ANGLE: 14 DEGREES
EFFECTIVE WIND AREA: 10 S.F.
IMPORTANCE FACTOR: 0.77
EFFECTIVE END ZONE WIDTH: 3.0'

COMPONENT AND CLADDING DESIGN WIND PRESSURE:

DESIGN UNIT LOAD (q): USE OVERHANG ZONE 2 (PER FIGURE 1609.6(c), 2004 FBC) FOR INTERIOR BOWS
USE OVERHANG ZONE 3 (PER FIGURE 1609.6(c), 2004 FBC) FOR END BOWS
FROM TABLES 1609.6C, TABLE 1609.6D (BUILDING HEIGHT AND EXPOSURE ADJUSTMENT FACTOR), AND 1604.5
(STRUCTURE IMPORTANCE FACTOR), 2004 FBC:
INTERIOR BOWS: $q = (56.7)(1.00)(0.77) = 43.7$ PSF
END BOWS: $q = (95.3)(1.00)(0.77) = 73.4$ PSF

PANEL FASTENER DESIGN CALCULATIONS:

DESIGN FASTENER: 1/4" X 1" SELF DRILLING FASTENER INTO 12 OR 14 GAUGE STEEL TUBE BOW FRAME
ALLOWABLE PULL-OUT CAPACITY = 383 POUNDS / SCREW (INCORPORATES MINIMUM SF = 3)
ALLOWABLE PULL-OVER CAPACITY = 150 POUNDS / SCREW (INCORPORATES MINIMUM SF = 3)
FASTENER DESIGN SHALL BE GOVERNED BY ALLOWABLE PULL-OVER CAPACITY
MANUFACTURER SPECIFIES 1 SCREW @ MAXIMUM 8" O.C. ALONG EACH BOW

$$\text{MAXIMUM ALLOWABLE BOW SPACING} = (150) / (.67)(43.7) = 5.12'$$

$$\text{MAXIMUM ALLOWABLE END BOW FASTENER SPACING} = (150) / (73.4)(3.0) = 0.68' = 8.17"$$

DESIGN: MAXIMUM BOW SPACING = 5.0'

MAXIMUM FASTENER SPACING ALONG BOWS = 8" O.C. (INTERIOR BOWS) AND 8" O.C. (END BOWS)

THE ABOVE CALCULATIONS AND SPECIFICATIONS ARE APPLICABLE TO STRUCTURES CONSTRUCTED IN EXPOSURE CATEGORY B WITH MEAN ROOF HEIGHT OF 15 FEET OR LESS, AND WITH ROOF SLOPE OF 14 DEGREES (3/12 PITCH). REQUIREMENTS FOR OTHER EXPOSURE CATEGORIES, AND/OR ROOF HEIGHT, AND/OR ROOF SLOPES MAY VARY.

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 2004 FLORIDA BUILDING CODE.


THOMAS BECHTOL, P.E.
FLORIDA LICENSE NO. 38538

METAL CARPORT ROOF AND SIDE PANEL FASTENER SPECIFICATIONS (EXPOSURE CATEGORY B / 140 MPH BASIC WIND SPEED)

PREPARED FOR: CAROLINA CARPORTS, INC., P.O. BOX 1263, DOBSON, NORTH CAROLINA
PREPARED BY: THOMAS BECHTOL, P.E., FLORIDA LICENSE NO. 38538
DATE PREPARED: 02/06/08

THE FOLLOWING CALCULATIONS AND SPECIFICATIONS ARE PREPARED ONLY FOR, AND ARE CERTIFIED ONLY TO CAROLINA CARPORTS, INC. USE OF THESE CALCULATIONS AND SPECIFICATIONS BY OTHERS IS PROHIBITED UNLESS AUTHORIZED BY CAROLINA CARPORTS, INC.

MATERIAL SPECIFICATIONS:

ROOF AND SIDE PANELS: CAROLINA CARPORTS, INC. 29 GA. R-PANELS
FRAMING: 2.5" X 2.5" 12 OR 14 GAUGE STEEL TUBE BOW FRAMES
PANEL FASTENERS: 1/4"-14 X 1" SELF DRILLING SCREWS

ASSUMED DESIGN CRITERIA:

EXPOSURE CATEGORY: B
BASIC WIND SPEED: 140 MPH (3-SECOND GUST)
MEAN ROOF HEIGHT: 15 FEET MAXIMUM
ROOF ANGLE: 14 DEGREES
EFFECTIVE WIND AREA: 10 S.F.
IMPORTANCE FACTOR: 0.77
EFFECTIVE END ZONE WIDTH: 3.0'

COMPONENT AND CLADDING DESIGN WIND PRESSURE:

DESIGN UNIT LOAD (q): USE OVERHANG ZONE 2 (PER FIGURE 1609.6(c), 2004 FBC) FOR INTERIOR BOWS
USE OVERHANG ZONE 3 (PER FIGURE 1609.6(c), 2004 FBC) FOR END BOWS
FROM TABLES 1609.6C, TABLE 1609.6D (BUILDING HEIGHT AND EXPOSURE ADJUSTMENT FACTOR), AND 1604.5
(STRUCTURE IMPORTANCE FACTOR), 2004 FBC:
INTERIOR BOWS: $q = (65.7)(1.00)(0.77) = 50.6$ PSF
END BOWS: $q = (110.6)(1.00)(0.77) = 85.2$ PSF

PANEL FASTENER DESIGN CALCULATIONS:

DESIGN FASTENER: 1/4" X 1" SELF DRILLING FASTENER INTO 12 OR 14 GAUGE STEEL TUBE BOW FRAME
ALLOWABLE PULL-OUT CAPACITY = 383 POUNDS / SCREW (INCORPORATES MINIMUM SF = 3)
ALLOWABLE PULL-OVER CAPACITY = 150 POUNDS / SCREW (INCORPORATES MINIMUM SF = 3)
FASTENER DESIGN SHALL BE GOVERNED BY ALLOWABLE PULL-OVER CAPACITY
MANUFACTURER SPECIFIES 1 SCREW @ MAXIMUM 8" O.C. ALONG EACH BOW

$$\text{MAXIMUM ALLOWABLE BOW SPACING} = (150) / (.67)(50.6) = 4.42'$$

$$\text{MAXIMUM ALLOWABLE END BOW FASTENER SPACING} = (150) / (85.2)(3.0) = 0.59' = 7.04"$$

DESIGN: MAXIMUM BOW SPACING = 4.0'

MAXIMUM FASTENER SPACING ALONG BOWS = 8" O.C. (INTERIOR BOWS) AND 6" O.C. (END BOWS)

THE ABOVE CALCULATIONS AND SPECIFICATIONS ARE APPLICABLE TO STRUCTURES CONSTRUCTED IN EXPOSURE CATEGORY B WITH MEAN ROOF HEIGHT OF 15 FEET OR LESS, AND WITH ROOF SLOPE OF 14 DEGREES (3/12 PITCH). REQUIREMENTS FOR OTHER EXPOSURE CATEGORIES, AND/OR ROOF HEIGHT, AND/OR ROOF SLOPES MAY VARY.

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 2004 FLORIDA BUILDING CODE.


THOMAS BECHTOL, P.E.
FLORIDA LICENSE NO. 38538

METAL CARPORT ROOF AND SIDE PANEL FASTENER SPECIFICATIONS (EXPOSURE CATEGORY B / 150 MPH BASIC WIND SPEED)

PREPARED FOR: CAROLINA CARPORTS, INC., P.O. BOX 1263, DOBSON, NORTH CAROLINA
PREPARED BY: THOMAS BECHTOL, P.E., FLORIDA LICENSE NO. 38538
DATE PREPARED: 02/06/06

THE FOLLOWING CALCULATIONS AND SPECIFICATIONS ARE PREPARED ONLY FOR, AND ARE CERTIFIED ONLY TO CAROLINA CARPORTS, INC. USE OF THESE CALCULATIONS AND SPECIFICATIONS BY OTHERS IS PROHIBITED UNLESS AUTHORIZED BY CAROLINA CARPORTS, INC.

MATERIAL SPECIFICATIONS:

ROOF AND SIDE PANELS: CAROLINA CARPORTS, INC. 29 GA. R-PANELS
FRAMING: 2.5" X 2.5" 12 OR 14 GAUGE STEEL TUBE BOW FRAMES
PANEL FASTENERS: 1/4"-14 X 1" SELF DRILLING SCREWS

ASSUMED DESIGN CRITERIA:

EXPOSURE CATEGORY: B
BASIC WIND SPEED: 150 MPH (3-SECOND GUST)
MEAN ROOF HEIGHT: 15 FEET MAXIMUM
ROOF ANGLE: 14 DEGREES
EFFECTIVE WIND AREA: 10 S.F.
IMPORTANCE FACTOR: 0.77
EFFECTIVE END ZONE WIDTH: 3.0'

COMPONENT AND CLADDING DESIGN WIND PRESSURE:

DESIGN UNIT LOAD (q): USE OVERHANG ZONE 2 (PER FIGURE 1609.8(c), 2004 FBC) FOR INTERIOR BOWS
USE OVERHANG ZONE 3 (PER FIGURE 1609.8(c), 2004 FBC) FOR END BOWS
FROM TABLES 1609.8C, TABLE 1609.8D (BUILDING HEIGHT AND EXPOSURE ADJUSTMENT FACTOR), AND 1604.5
(STRUCTURE IMPORTANCE FACTOR), 2004 FBC:
INTERIOR BOWS: $q = (75.5)(1.00)(0.77) = 58.1$ PSF
END BOWS: $q = (126.9)(1.00)(0.77) = 97.7$ PSF

PANEL FASTENER DESIGN CALCULATIONS:

DESIGN FASTENER: 1/4" X 1" SELF DRILLING FASTENER INTO 12 OR 14 GAUGE STEEL TUBE BOW FRAME
ALLOWABLE PULL-OUT CAPACITY = 383 POUNDS / SCREW (INCORPORATES MINIMUM SF = 3)
ALLOWABLE PULL-OVER CAPACITY = 150 POUNDS / SCREW (INCORPORATES MINIMUM SF = 3)
FASTENER DESIGN SHALL BE GOVERNED BY ALLOWABLE PULL-OVER CAPACITY
MANUFACTURER SPECIFIES 1 SCREW @ MAXIMUM 8" O.C. ALONG EACH BOW

$$\text{MAXIMUM ALLOWABLE BOW SPACING} = (150) / (.67)(58.1) = 3.85'$$

$$\text{MAXIMUM ALLOWABLE END BOW FASTENER SPACING} = (150) / (.97.7)(3.0) = 0.51" = 6.14"$$

DESIGN: MAXIMUM BOW SPACING = 3.5'

MAXIMUM FASTENER SPACING ALONG BOWS = 8" O.C. (INTERIOR BOWS) AND 6" O.C. (END BOWS)

THE ABOVE CALCULATIONS AND SPECIFICATIONS ARE APPLICABLE TO STRUCTURES CONSTRUCTED IN EXPOSURE CATEGORY B WITH MEAN ROOF HEIGHT OF 15 FEET OR LESS, AND WITH ROOF SLOPE OF 14 DEGREES (3/12 PITCH). REQUIREMENTS FOR OTHER EXPOSURE CATEGORIES, AND/OR ROOF HEIGHT, AND/OR ROOF SLOPES MAY VARY.

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 2004 FLORIDA BUILDING CODE.


THOMAS BECHTOL P.E.
FLORIDA LICENSE NO. 38538

METAL CARPORT ROOF AND SIDE PANEL FASTENER SPECIFICATIONS (EXPOSURE CATEGORY C / 100 MPH BASIC WIND SPEED)

PREPARED FOR: CAROLINA CARPORTS, INC., P.O. BOX 1263, DOBSON, NORTH CAROLINA
PREPARED BY: THOMAS BECHTOL, P.E., FLORIDA LICENSE NO. 38538
DATE PREPARED: 02/06/08

THE FOLLOWING CALCULATIONS AND SPECIFICATIONS ARE PREPARED ONLY FOR, AND ARE CERTIFIED ONLY TO CAROLINA CARPORTS, INC. USE OF THESE CALCULATIONS AND SPECIFICATIONS BY OTHERS IS PROHIBITED UNLESS AUTHORIZED BY CAROLINA CARPORTS, INC.

MATERIAL SPECIFICATIONS:

ROOF AND SIDE PANELS: CAROLINA CARPORTS, INC. 29 GA. R-PANELS
FRAMING: 2.5" X 2.5" 12 OR 14 GAUGE STEEL TUBE BOW FRAMES
PANEL FASTENERS: 1/4"-14 X 1" SELF DRILLING SCREWS

ASSUMED DESIGN CRITERIA:

EXPOSURE CATEGORY: C
BASIC WIND SPEED: 100 MPH (3-SECOND GUST)
MEAN ROOF HEIGHT: 15 FEET MAXIMUM
ROOF ANGLE: 14 DEGREES
EFFECTIVE WIND AREA: 10 S.F.
IMPORTANCE FACTOR: 0.87
EFFECTIVE END ZONE WIDTH: 3.0'

COMPONENT AND CLADDING DESIGN WIND PRESSURE:

DESIGN UNIT LOAD (q): USE OVERHANG ZONE 2 (PER FIGURE 1609.6(c), 2004 FBC) FOR INTERIOR BOWS
USE OVERHANG ZONE 3 (PER FIGURE 1609.6(c), 2004 FBC) FOR END BOWS
FROM TABLES 1609.6C, TABLE 1609.6D (BUILDING HEIGHT AND EXPOSURE ADJUSTMENT FACTOR), AND 1604.5
(STRUCTURE IMPORTANCE FACTOR), 2004 FBC:
INTERIOR BOWS: $q = (33.5)(1.21)(0.87) = 35.3$ PSF
END BOWS: $q = (56.4)(1.21)(0.87) = 59.4$ PSF

PANEL FASTENER DESIGN CALCULATIONS:

DESIGN FASTENER: 1/4" X 1" SELF DRILLING FASTENER INTO 12 OR 14 GAUGE STEEL TUBE BOW FRAME
ALLOWABLE PULL-OUT CAPACITY = 383 POUNDS / SCREW (INCORPORATES MINIMUM SF = 3)
ALLOWABLE PULL-OVER CAPACITY = 150 POUNDS / SCREW (INCORPORATES MINIMUM SF = 3)
FASTENER DESIGN SHALL BE GOVERNED BY ALLOWABLE PULL-OVER CAPACITY
MANUFACTURER SPECIFIES 1 SCREW @ MAXIMUM 8" O.C. ALONG EACH BOW

$$\text{MAXIMUM ALLOWABLE BOW SPACING} = (150) / (.67)(35.3) = 6.34'$$

$$\text{MAXIMUM ALLOWABLE END BOW FASTENER SPACING} = (150) / (59.4)(3.0) = 0.84' = 10.1"$$

DESIGN: MAXIMUM BOW SPACING = 5.0'

MAXIMUM FASTENER SPACING ALONG BOWS = 8" O.C. (INTERIOR BOWS) AND 8" O.C. (END BOWS)

THE ABOVE CALCULATIONS AND SPECIFICATIONS ARE APPLICABLE TO STRUCTURES CONSTRUCTED IN EXPOSURE CATEGORY C WITH MEAN ROOF HEIGHT OF 15 FEET OR LESS, AND WITH ROOF SLOPE OF 14 DEGREES (3/12 PITCH). REQUIREMENTS FOR OTHER EXPOSURE CATEGORIES, AND/OR ROOF HEIGHT, AND/OR ROOF SLOPES MAY VARY.

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 2004 FLORIDA BUILDING CODE.


THOMAS BECHTOL, P.E.
FLORIDA LICENSE NO. 38538

METAL CARPORT ROOF AND SIDE PANEL FASTENER SPECIFICATIONS (EXPOSURE CATEGORY C / 110 MPH BASIC WIND SPEED)

PREPARED FOR: CAROLINA CARPORTS, INC., P.O. BOX 1263, DOBSON, NORTH CAROLINA
PREPARED BY: THOMAS BECHTOL, P.E., FLORIDA LICENSE NO. 38538
DATE PREPARED: 02/08/06

THE FOLLOWING CALCULATIONS AND SPECIFICATIONS ARE PREPARED ONLY FOR, AND ARE CERTIFIED ONLY TO CAROLINA CARPORTS, INC. USE OF THESE CALCULATIONS AND SPECIFICATIONS BY OTHERS IS PROHIBITED UNLESS AUTHORIZED BY CAROLINA CARPORTS, INC.

MATERIAL SPECIFICATIONS:

ROOF AND SIDE PANELS: CAROLINA CARPORTS, INC. 29 GA. R-PANELS
FRAMING: 2.5" X 2.5" 12 OR 14 GAUGE STEEL TUBE BOW FRAMES
PANEL FASTENERS: 1/4"-14 X 1" SELF DRILLING SCREWS

ASSUMED DESIGN CRITERIA:

EXPOSURE CATEGORY: C
BASIC WIND SPEED: 110 MPH (3-SECOND GUST)
MEAN ROOF HEIGHT: 15 FEET MAXIMUM
ROOF ANGLE: 14 DEGREES
EFFECTIVE WIND AREA: 10 S.F.
IMPORTANCE FACTOR: 0.77
EFFECTIVE END ZONE WIDTH: 3.0'

COMPONENT AND CLADDING DESIGN WIND PRESSURE:

DESIGN UNIT LOAD (q): USE OVERHANG ZONE 2 (PER FIGURE 1609.8(c), 2004 FBC) FOR INTERIOR BOWS
USE OVERHANG ZONE 3 (PER FIGURE 1609.8(c), 2004 FBC) FOR END BOWS
FROM TABLES 1609.8C, TABLE 1609.8D (BUILDING HEIGHT AND EXPOSURE ADJUSTMENT FACTOR), AND 1604.5
(STRUCTURE IMPORTANCE FACTOR), 2004 FBC:
INTERIOR BOWS: $q = (40.6)(1.21)(0.77) = 37.8$ PSF
END BOWS: $q = (68.3)(1.21)(0.77) = 63.6$ PSF

PANEL FASTENER DESIGN CALCULATIONS:

DESIGN FASTENER: 1/4" X 1" SELF DRILLING FASTENER INTO 12 OR 14 GAUGE STEEL TUBE BOW FRAME
ALLOWABLE PULL-OUT CAPACITY = 383 POUNDS / SCREW (INCORPORATES MINIMUM SF = 3)
ALLOWABLE PULL-OVER CAPACITY = 150 POUNDS / SCREW (INCORPORATES MINIMUM SF = 3)
FASTENER DESIGN SHALL BE GOVERNED BY ALLOWABLE PULL-OVER CAPACITY
MANUFACTURER SPECIFIES 1 SCREW @ MAXIMUM 8" O.C. ALONG EACH BOW

$$\text{MAXIMUM ALLOWABLE BOW SPACING} = (150) / (.67)(37.8) = 5.92'$$


$$\text{MAXIMUM ALLOWABLE END BOW FASTENER SPACING} = (150) / (63.6)(3.0) = 0.79' = 9.4"$$

DESIGN: MAXIMUM BOW SPACING = 6.0'

MAXIMUM FASTENER SPACING ALONG BOWS = 8" O.C. (INTERIOR BOWS) AND 8" O.C. (END BOWS)

THE ABOVE CALCULATIONS AND SPECIFICATIONS ARE APPLICABLE TO STRUCTURES CONSTRUCTED IN EXPOSURE CATEGORY C WITH MEAN ROOF HEIGHT OF 15 FEET OR LESS, AND WITH ROOF SLOPE OF 14 DEGREES (3/12 PITCH). REQUIREMENTS FOR OTHER EXPOSURE CATEGORIES, AND/OR ROOF HEIGHT, AND/OR ROOF SLOPES MAY VARY.

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 2004 FLORIDA BUILDING CODE.


THOMAS BECHTOL, P.E.
FLORIDA LICENSE NO. 38538

METAL CARPORT ROOF AND SIDE PANEL FASTENER SPECIFICATIONS (EXPOSURE CATEGORY C / 120 MPH BASIC WIND SPEED)

PREPARED FOR: CAROLINA CARPORTS, INC., P.O. BOX 1263, DOBSON, NORTH CAROLINA
PREPARED BY: THOMAS BECHTOL, P.E., FLORIDA LICENSE NO. 38538
DATE PREPARED: 02/06/06

THE FOLLOWING CALCULATIONS AND SPECIFICATIONS ARE PREPARED ONLY FOR, AND ARE CERTIFIED ONLY TO CAROLINA CARPORTS, INC. USE OF THESE CALCULATIONS AND SPECIFICATIONS BY OTHERS IS PROHIBITED UNLESS AUTHORIZED BY CAROLINA CARPORTS, INC.

MATERIAL SPECIFICATIONS:

ROOF AND SIDE PANELS: CAROLINA CARPORTS, INC. 29 GA. R-PANELS
FRAMING: 2.5" X 2.5" 12 OR 14 GAUGE STEEL TUBE BOW FRAMES
PANEL FASTENERS: 1/4"-14 X 1" SELF DRILLING SCREWS

ASSUMED DESIGN CRITERIA:

EXPOSURE CATEGORY: C
BASIC WIND SPEED: 120 MPH (3-SECOND GUST)
MEAN ROOF HEIGHT: 15 FEET MAXIMUM
ROOF ANGLE: 14 DEGREES
EFFECTIVE WIND AREA: 10 S.F.
IMPORTANCE FACTOR: 0.77
EFFECTIVE END ZONE WIDTH: 3.0'

COMPONENT AND CLADDING DESIGN WIND PRESSURE:

DESIGN UNIT LOAD (q): USE OVERHANG ZONE 2 (PER FIGURE 1609.6(c), 2004 FBC) FOR INTERIOR BOWS
USE OVERHANG ZONE 3 (PER FIGURE 1609.6(c), 2004 FBC) FOR END BOWS
FROM TABLES 1609.6C, TABLE 1609.6D (BUILDING HEIGHT AND EXPOSURE ADJUSTMENT FACTOR), AND 1604.5
(STRUCTURE IMPORTANCE FACTOR), 2004 FBC:
INTERIOR BOWS: $q = (48.3)(1.21)(0.77) = 45.0$ PSF
END BOWS: $q = (81.2)(1.21)(0.77) = 75.7$ PSF

PANEL FASTENER DESIGN CALCULATIONS:

DESIGN FASTENER: 1/4" X 1" SELF DRILLING FASTENER INTO 12 OR 14 GAUGE STEEL TUBE BOW FRAME
ALLOWABLE PULL-OUT CAPACITY = 383 POUNDS / SCREW (INCORPORATES MINIMUM SF = 3)
ALLOWABLE PULL-OVER CAPACITY = 150 POUNDS / SCREW (INCORPORATES MINIMUM SF = 3)
FASTENER DESIGN SHALL BE GOVERNED BY ALLOWABLE PULL-OVER CAPACITY
MANUFACTURER SPECIFIES 1 SCREW @ MAXIMUM 8" O.C. ALONG EACH BOW

MAXIMUM ALLOWABLE BOW SPACING = $(150) / (.87)(45.0) = 4.98'$
MAXIMUM ALLOWABLE END BOW FASTENER SPACING = $(150) / (75.7)(3.0) = 0.66" = 7.9"$

DESIGN: MAXIMUM BOW SPACING = 4.5'

MAXIMUM FASTENER SPACING ALONG BOWS = 8" O.C. (INTERIOR BOWS) AND 6" O.C. (END BOWS)

THE ABOVE CALCULATIONS AND SPECIFICATIONS ARE APPLICABLE TO STRUCTURES CONSTRUCTED IN EXPOSURE CATEGORY C WITH MEAN ROOF HEIGHT OF 15 FEET OR LESS, AND WITH ROOF SLOPE OF 14 DEGREES (3/12 PITCH). REQUIREMENTS FOR OTHER EXPOSURE CATEGORIES, AND/OR ROOF HEIGHT, AND/OR ROOF SLOPES MAY VARY.

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 2004 FLORIDA BUILDING CODE.


THOMAS BECHTOL, P.E.
FLORIDA LICENSE NO. 38538

METAL CARPORT ROOF AND SIDE PANEL FASTENER SPECIFICATIONS (EXPOSURE CATEGORY C / 130 MPH BASIC WIND SPEED)

PREPARED FOR: CAROLINA CARPORTS, INC., P.O. BOX 1283, DOBSON, NORTH CAROLINA
PREPARED BY: THOMAS BECHTOL, P.E., FLORIDA LICENSE NO. 38538
DATE PREPARED: 02/06/06

THE FOLLOWING CALCULATIONS AND SPECIFICATIONS ARE PREPARED ONLY FOR, AND ARE CERTIFIED ONLY TO CAROLINA CARPORTS, INC. USE OF THESE CALCULATIONS AND SPECIFICATIONS BY OTHERS IS PROHIBITED UNLESS AUTHORIZED BY CAROLINA CARPORTS, INC.

MATERIAL SPECIFICATIONS:

ROOF AND SIDE PANELS: CAROLINA CARPORTS, INC. 29 GA. R-PANELS
FRAMING: 2.5" X 2.5" 12 OR 14 GAUGE STEEL TUBE BOW FRAMES
PANEL FASTENERS: 1/4"-14 X 1" SELF DRILLING SCREWS

ASSUMED DESIGN CRITERIA:

EXPOSURE CATEGORY: C
BASIC WIND SPEED: 130 MPH (3-SECOND GUST)
MEAN ROOF HEIGHT: 15 FEET MAXIMUM
ROOF ANGLE: 14 DEGREES
EFFECTIVE WIND AREA: 10 S.F.
IMPORTANCE FACTOR: 0.77
EFFECTIVE END ZONE WIDTH: 3.0'

COMPONENT AND CLADDING DESIGN WIND PRESSURE:

DESIGN UNIT LOAD (q): USE OVERHANG ZONE 2 (PER FIGURE 1609.6(c), 2004 FBC) FOR INTERIOR BOWS
USE OVERHANG ZONE 3 (PER FIGURE 1609.6(c), 2004 FBC) FOR END BOWS
FROM TABLES 1609.6C, TABLE 1609.6D (BUILDING HEIGHT AND EXPOSURE ADJUSTMENT FACTOR) AND 1604.5
(STRUCTURE IMPORTANCE FACTOR), 2004 FBC:
INTERIOR BOWS: $q = (56.7)(1.21)(0.77) = 52.8$ PSF
END BOWS: $q = (95.3)(1.21)(0.77) = 88.8$ PSF

PANEL FASTENER DESIGN CALCULATIONS:

DESIGN FASTENER: 1/4" X 1" SELF DRILLING FASTENER INTO 12 OR 14 GAUGE STEEL TUBE BOW FRAME
ALLOWABLE PULL-OUT CAPACITY = 383 POUNDS / SCREW (INCORPORATES MINIMUM SF = 3)
ALLOWABLE PULL-OVER CAPACITY = 150 POUNDS / SCREW (INCORPORATES MINIMUM SF = 3)
FASTENER DESIGN SHALL BE GOVERNED BY ALLOWABLE PULL-OVER CAPACITY
MANUFACTURER SPECIFIES 1 SCREW @ MAXIMUM 8" O.C. ALONG EACH BOW

$$\text{MAXIMUM ALLOWABLE BOW SPACING} = (150) / (.67)(52.8) = 4.24'$$


$$\text{MAXIMUM ALLOWABLE END BOW FASTENER SPACING} = (150) / (88.8)(3.0) = 0.56' = 6.8''$$

DESIGN: MAXIMUM BOW SPACING = 4.0'

MAXIMUM FASTENER SPACING ALONG BOWS = 8" O.C. (INTERIOR BOWS) AND 6" O.C. (END BOWS)

THE ABOVE CALCULATIONS AND SPECIFICATIONS ARE APPLICABLE TO STRUCTURES CONSTRUCTED IN EXPOSURE CATEGORY C WITH MEAN ROOF HEIGHT OF 15 FEET OR LESS, AND WITH ROOF SLOPE OF 14 DEGREES (3/12 PITCH). REQUIREMENTS FOR OTHER EXPOSURE CATEGORIES, AND/OR ROOF HEIGHT, AND/OR ROOF SLOPES MAY VARY.

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 2004 FLORIDA BUILDING CODE.


THOMAS BECHTOL, P.E.
FLORIDA LICENSE NO. 38538

METAL CARPORT ROOF AND SIDE PANEL FASTENER SPECIFICATIONS (EXPOSURE CATEGORY C / 140 MPH BASIC WIND SPEED)

PREPARED FOR: CAROLINA CARPORTS, INC., P.O. BOX 1263, DOBSON, NORTH CAROLINA
PREPARED BY: THOMAS BECHTOL, P.E., FLORIDA LICENSE NO. 38538
DATE PREPARED: 02/06/08

THE FOLLOWING CALCULATIONS AND SPECIFICATIONS ARE PREPARED ONLY FOR, AND ARE CERTIFIED ONLY TO CAROLINA CARPORTS, INC. USE OF THESE CALCULATIONS AND SPECIFICATIONS BY OTHERS IS PROHIBITED UNLESS AUTHORIZED BY CAROLINA CARPORTS, INC.

MATERIAL SPECIFICATIONS:

ROOF AND SIDE PANELS: CAROLINA CARPORTS, INC. 29 GA. R-PANELS
FRAMING: 2.5" X 2.5" 12 OR 14 GAUGE STEEL TUBE BOW FRAMES
PANEL FASTENERS: 1/4"-14 X 1" SELF DRILLING SCREWS

ASSUMED DESIGN CRITERIA:

EXPOSURE CATEGORY: C
BASIC WIND SPEED: 140 MPH (3-SECOND GUST)
MEAN ROOF HEIGHT: 15 FEET MAXIMUM
ROOF ANGLE: 14 DEGREES
EFFECTIVE WIND AREA: 10 S.F.
IMPORTANCE FACTOR: 0.77
EFFECTIVE END ZONE WIDTH: 3.0'

COMPONENT AND CLADDING DESIGN WIND PRESSURE:

DESIGN UNIT LOAD (q): USE OVERHANG ZONE 2 (PER FIGURE 1609.6(c), 2004 FBC) FOR INTERIOR BOWS
USE OVERHANG ZONE 3 (PER FIGURE 1609.6(c), 2004 FBC) FOR END BOWS
FROM TABLES 1609.6C, TABLE 1609.6D (BUILDING HEIGHT AND EXPOSURE ADJUSTMENT FACTOR) AND 1604.5
(STRUCTURE IMPORTANCE FACTOR), 2004 FBC:
INTERIOR BOWS: $q = (65.7)(1.21)(0.77) = 61.2$ PSF
END BOWS: $q = (110.6)(1.21)(0.77) = 103.0$ PSF

PANEL FASTENER DESIGN CALCULATIONS:

DESIGN FASTENER: 1/4" X 1" SELF DRILLING FASTENER INTO 12 OR 14 GAUGE STEEL TUBE BOW FRAME
ALLOWABLE PULL-OUT CAPACITY = 383 POUNDS / SCREW (INCORPORATES MINIMUM SF = 3)
ALLOWABLE PULL-OVER CAPACITY = 150 POUNDS / SCREW (INCORPORATES MINIMUM SF = 3)
FASTENER DESIGN SHALL BE GOVERNED BY ALLOWABLE PULL-OVER CAPACITY
MANUFACTURER SPECIFIES 1 SCREW @ MAXIMUM 8" O.C. ALONG EACH BOW

MAXIMUM ALLOWABLE BOW SPACING = $(150) / (.67)(61.2) = 3.66'$
MAXIMUM ALLOWABLE END BOW FASTENER SPACING = $(150) / (103.0)(3.0) = 0.49' = 5.8"$

DESIGN: MAXIMUM BOW SPACING = 3.5'

MAXIMUM FASTENER SPACING ALONG BOWS = 8" O.C. (INTERIOR BOWS) AND 4" O.C. (END BOWS)

THE ABOVE CALCULATIONS AND SPECIFICATIONS ARE APPLICABLE TO STRUCTURES CONSTRUCTED IN EXPOSURE CATEGORY C WITH MEAN ROOF HEIGHT OF 15 FEET OR LESS, AND WITH ROOF SLOPE OF 14 DEGREES (3/12 PITCH). REQUIREMENTS FOR OTHER EXPOSURE CATEGORIES, AND/OR ROOF HEIGHT, AND/OR ROOF SLOPES MAY VARY.

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 2004 FLORIDA BUILDING CODE.


THOMAS BECHTOL, P.E.
FLORIDA LICENSE NO. 38538

METAL CARPORT ROOF AND SIDE PANEL FASTENER SPECIFICATIONS (EXPOSURE CATEGORY C / 150 MPH BASIC WIND SPEED)

PREPARED FOR: CAROLINA CARPORTS, INC., P.O. BOX 1263, DOBSON, NORTH CAROLINA
PREPARED BY: THOMAS BECHTOL, P.E., FLORIDA LICENSE NO. 38538
DATE PREPARED: 02/06/06

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MATERIAL SPECIFICATIONS:

ROOF AND SIDE PANELS: CAROLINA CARPORTS, INC. 29 GA. R-PANELS

FRAMING: 2.5" X 2.5" 12 OR 14 GAUGE STEEL TUBE BOW FRAMES

PANEL FASTENERS: 1/4"-14 X 1" SELF DRILLING SCREWS

ASSUMED DESIGN CRITERIA:

EXPOSURE CATEGORY: C

BASIC WIND SPEED: 150 MPH (3-SECOND GUST)

MEAN ROOF HEIGHT: 15 FEET MAXIMUM

ROOF ANGLE: 14 DEGREES

EFFECTIVE WIND AREA: 10 S.F.

IMPORTANCE FACTOR: 0.77

EFFECTIVE END ZONE WIDTH: 3.0'

COMPONENT AND CLADDING DESIGN WIND PRESSURE:

DESIGN UNIT LOAD (q): USE OVERHANG ZONE 2 (PER FIGURE 1609.6(c), 2004 FBC) FOR INTERIOR BOWS

USE OVERHANG ZONE 3 (PER FIGURE 1609.6(c), 2004 FBC) FOR END BOWS

FROM TABLES 1609.6C, TABLE 1609.6D (BUILDING HEIGHT AND EXPOSURE ADJUSTMENT FACTOR), AND 1604.5
(STRUCTURE IMPORTANCE FACTOR), 2004 FBC:

INTERIOR BOWS: $q = (75.5)(1.21)(0.77) = 70.3$ PSF

END BOWS: $q = (126.9)(1.21)(0.77) = 118.2$ PSF

PANEL FASTENER DESIGN CALCULATIONS:

DESIGN FASTENER: 1/4" X 1" SELF DRILLING FASTENER INTO 12 OR 14 GAUGE STEEL TUBE BOW FRAME

ALLOWABLE PULL-OUT CAPACITY = 383 POUNDS / SCREW (INCORPORATES MINIMUM SF = 3)

ALLOWABLE PULL-OVER CAPACITY = 150 POUNDS / SCREW (INCORPORATES MINIMUM SF = 3)

FASTENER DESIGN SHALL BE GOVERNED BY ALLOWABLE PULL-OVER CAPACITY

MANUFACTURER SPECIFIES 1 SCREW @ MAXIMUM 8" O.C. ALONG EACH BOW

MAXIMUM ALLOWABLE BOW SPACING = $(150) / (.67)(70.3) = 3.18'$

MAXIMUM ALLOWABLE END BOW FASTENER SPACING = $(150) / (118.2)(3.0) = 0.42' = 5.1"$

DESIGN: MAXIMUM BOW SPACING = 3.0'

MAXIMUM FASTENER SPACING ALONG BOWS = 8" O.C. (INTERIOR BOWS) AND 4" O.C. (END BOWS)

THE ABOVE CALCULATIONS AND SPECIFICATIONS ARE APPLICABLE TO STRUCTURES CONSTRUCTED IN EXPOSURE CATEGORY C WITH MEAN ROOF HEIGHT OF 15 FEET OR LESS, AND WITH ROOF SLOPE OF 14 DEGREES (3/12 PITCH). REQUIREMENTS FOR OTHER EXPOSURE CATEGORIES, AND/OR ROOF HEIGHT, AND/OR ROOF SLOPES MAY VARY.

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 2004 FLORIDA BUILDING CODE.


THOMAS BECHTOL, P.E.
FLORIDA LICENSE NO. 38538

METAL CARPORT END WALL PANEL FASTENER SPECIFICATIONS

PREPARED FOR: CAROLINA CARPORTS, INC., P.O. BOX 1263, DOBSON, NORTH CAROLINA
PREPARED BY: THOMAS BECHTOL, P.E., FLORIDA LICENSE NO. 38538
DATE PREPARED: 02/08/08

THE FOLLOWING CALCULATIONS AND SPECIFICATIONS ARE PREPARED ONLY FOR, AND ARE CERTIFIED ONLY TO CAROLINA CARPORTS, INC. USE OF THESE CALCULATIONS AND SPECIFICATIONS BY OTHERS IS PROHIBITED UNLESS AUTHORIZED BY CAROLINA CARPORTS, INC.

MATERIAL SPECIFICATIONS:

END WALL PANELS: CAROLINA CARPORTS, INC. 29 GA. R-PANELS
FRAMING: 2.5" X 2.5" 12 GAUGE STEEL TUBE END WALL POSTS
PANEL FASTENERS: 1/4"-14 X 1" SELF DRILLING SCREWS

ASSUMED DESIGN CRITERIA (WORST CASE):

EXPOSURE CATEGORY: C
BASIC WIND SPEED: 150 MPH (3-SECOND GUST)
MEAN ROOF HEIGHT: 15 FEET MAXIMUM
EFFECTIVE WIND AREA: 10 S.F.
IMPORTANCE FACTOR: 0.77

COMPONENT AND CLADDING DESIGN WIND PRESSURE:

DESIGN UNIT LOAD (q): USE WALL ZONE 5 (PER FIGURE 1609.6(c), 2004 FBC)
FROM TABLES 1609.6C, TABLE 1609.6D (BUILDING HEIGHT AND EXPOSURE ADJUSTMENT FACTOR), AND 1604.5
(STRUCTURE IMPORTANCE FACTOR), 2004 FBC:
END POSTS: $q = (54.2)(1.21)(0.77) = 50.5$ PSF

PANEL FASTENER DESIGN CALCULATIONS:

DESIGN FASTENER: 1/4" X 1" SELF DRILLING FASTENER INTO 12 GAUGE STEEL TUBE END POST
ALLOWABLE PULL-OUT CAPACITY = 383 POUNDS / SCREW (INCORPORATES MINIMUM SF = 3)
ALLOWABLE PULL-OVER CAPACITY = 150 POUNDS / SCREW (INCORPORATES MINIMUM SF = 3)
FASTENER DESIGN SHALL BE GOVERNED BY ALLOWABLE PULL-OVER CAPACITY
MANUFACTURER SPECIFIES 1 SCREW @ MAXIMUM 8" O.C. ALONG EACH POST

$$\text{MAXIMUM ALLOWABLE END POST SPACING} = (150) / (.67)(50.5) = 4.43'$$

DESIGN: MAXIMUM END POST SPACING = 4.0'

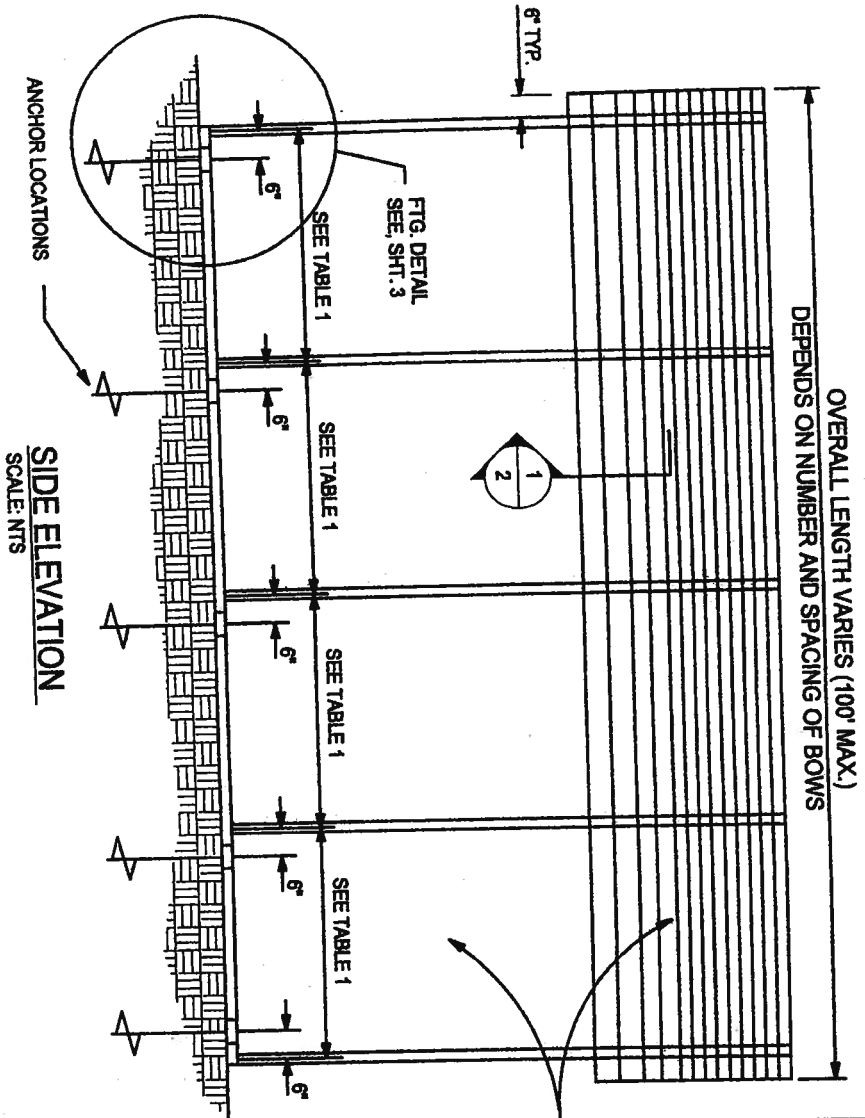
MAXIMUM FASTENER SPACING ALONG POSTS = 8" O.C.

THE ABOVE CALCULATIONS AND SPECIFICATIONS ARE APPLICABLE TO STRUCTURES CONSTRUCTED IN EXPOSURE CATEGORY B OR C WITH MEAN ROOF HEIGHT OF 15 FEET OR LESS. REQUIREMENTS FOR OTHER EXPOSURE CATEGORIES, AND/OR ROOF HEIGHT MAY VARY.

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 2004 FLORIDA BUILDING CODE.


THOMAS BECHTOL, P.E.

FLORIDA LICENSE NO. 38538



CAROLINA CARPORTS INC.
P.O. BOX 1263
DOBSON, NC 27017
TOLL FREE 1-800-670-4262
LOCAL 336-367-6400
FAX 336-367-6410

29 GAGE R-PANEL ROOFING
(OPTIONAL SIDE PANELS)

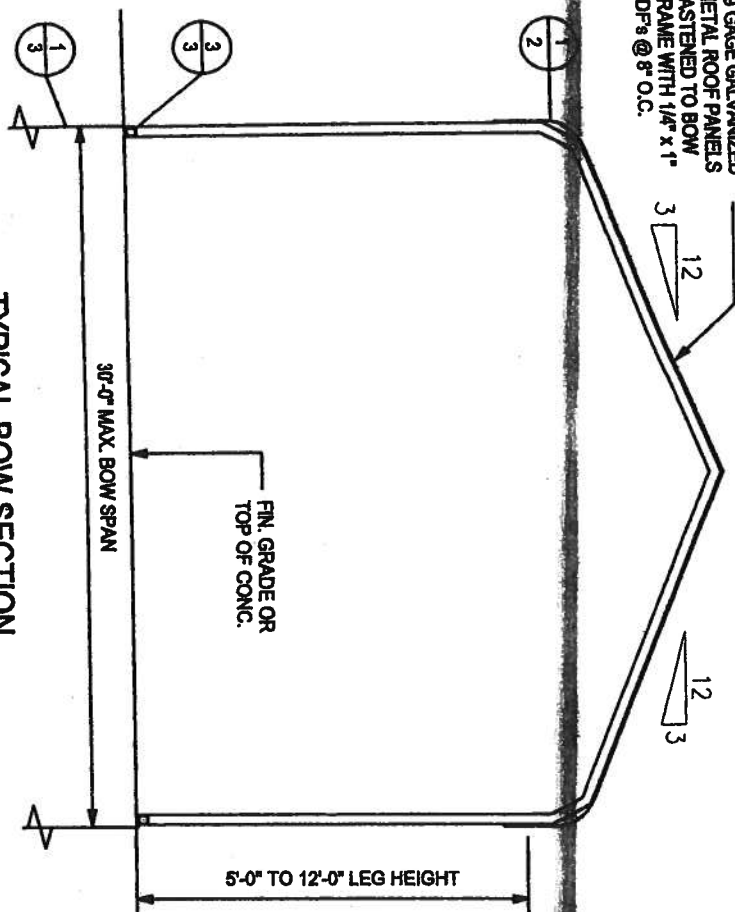
NOTES:

1. ALL STEEL TUBING SHALL BE 60 KSI STEEL.
2. LOCATE ANCHORS AT EACH END OF BOW.
3. FASTEN METAL ROOF PANELS TO BOW FRAME WITH 1/4" x 1" SELF DRILLING FASTENERS @ 8" O.C. MAX. (SEE TABLE 1 FOR FASTENER SPACING SPECIFICATIONS)
4. ALL FIELD CONNECTIONS SHALL BE 1/4" x 1" SELF DRILLING SCREWS
5. ALL SHOP CONNECTIONS SHALL BE WELDED.
6. THE PLANS ARE VALID UNTIL THE NEXT REVISION OF THE FLORIDA BUILDING CODE.

BECHTOL ENGINEERING AND TESTING, INC.
Certificate of Authorization No. 00005492

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

29 GAGE GALVANIZED
METAL ROOF PANELS
FASTENED TO BOW
FRAME WITH 1/4" x 1"
SDFs @ 8" O.C.

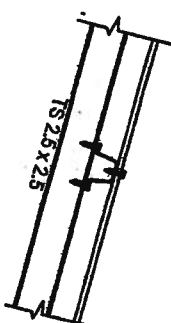


TYPICAL BOW SECTION
SCALE: NTS

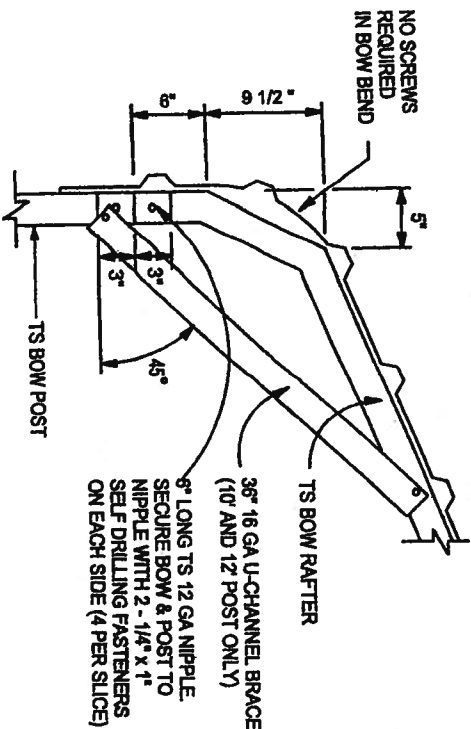
BRACE SECTION
(10' AND 12' POST ONLY)
NTS

3'-0" 16 GAUGE
FASTENED TO THE LEG
AND BOW POSITIONED
AT 45 DEGREES
W/ 2 - 1/4" x 1" SELF
DRILLING SCREWS
AT EACH END
(4 PER BRACE)

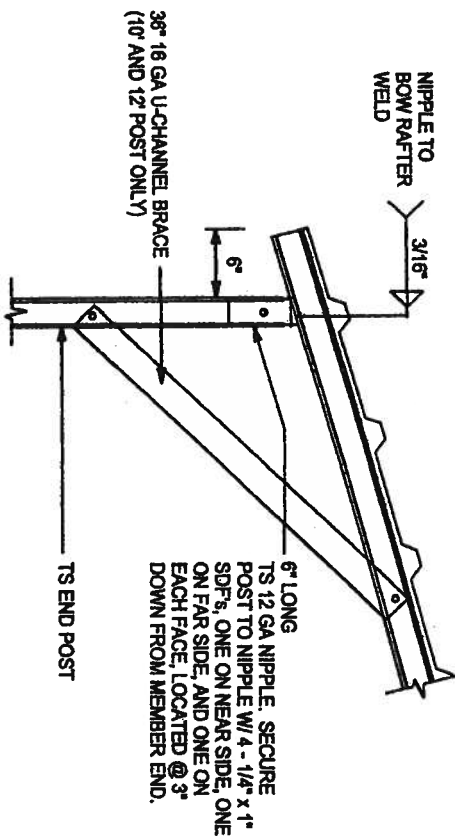
1 1/2" 18 GAGE FLUORING CHANNEL
FASTENED TO EACH BOW WITH
(2) 1/4" x 1" SELF DRILLING FASTENER
SPACED NOT MORE THAN 4'-0" O.C.



ROOF PANEL ATTACHMENT
(ALTERNATE FOR VERTICAL ROOF PANELS)
SCALE: 1" = 1'-0"



BOW/POST DETAIL
SCALE: 3/4" = 1'-0"



BOW/POST DETAIL
SCALE: 3/4" = 1'-0"
(BOXED EAVE OPTION)

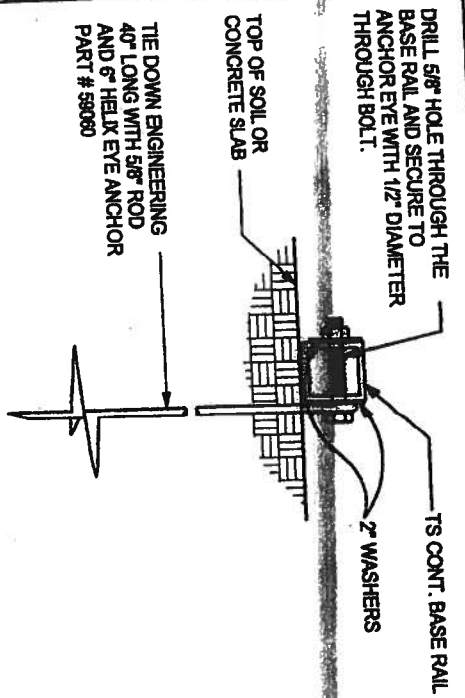
NOTE:

14 GA FRAMING IS 2-1/2"x2-1/2" TUBE STEEL.
12 GA FRAMING IS 2-1/4"x2-1/4" TUBE STEEL.
NIPPLES ARE 2-1/4"x2-1/4" 12 GA T.S. FOR 14 GA FRAMING.
NIPPLES ARE 2"x2" 12 GA T.S. FOR 12 GA FRAMING.

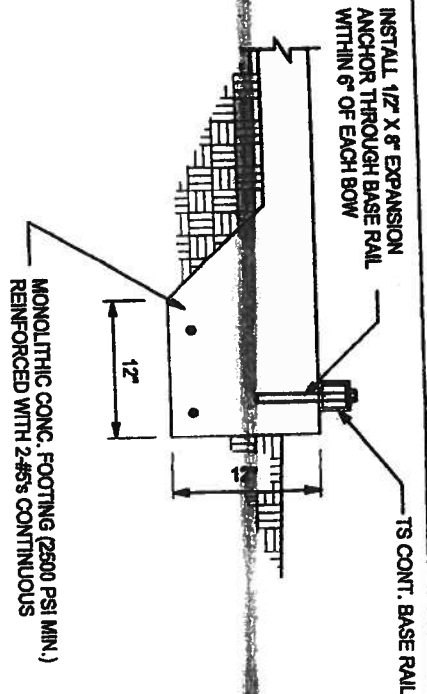
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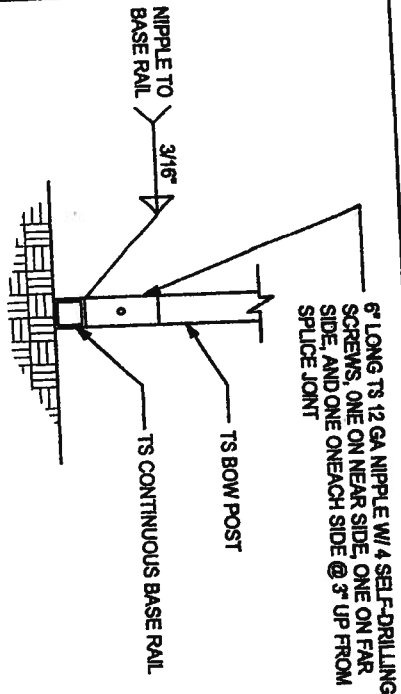
3/13/04



1
BASE RAIL ANCHORAGE
SCALE: 1 1/2\" = 1'-0"



2
CONCRETE BASE RAIL ANCHORAGE
(OPTIONAL)
SCALE: 3/4\" = 1'-0"



3
BOW/BASE RAIL CONN. DETAIL
SCALE: 3/4\" = 1'-0"

NOTE:
14 GA FRAMING IS 2-1/2\"x2-1/2\" TUBE STEEL.
12 GA FRAMING IS 2-1/4\"x2-1/4\" TUBE STEEL.
NIPPLES ARE 2-1/4\"x2-1/4\" 12 GA T.S. FOR 14 GA FRAMING.
NIPPLES ARE 2\"x2\" 12 GA T.S. FOR 12 GA FRAMING.

CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 2500 PSI AT 28 DAYS.

FOR FOUNDATIONS, MINIMUM CONCRETE COVER OVER REINFORCING BARS SHALL BE:

3 INCHES IN FOUNDATIONS WHERE THE CONCRETE IS CAST AGAINST AND PERMANENTLY IN CONTACT WITH THE EARTH OR EXPOSED TO THE EARTH OR WEATHER AND 1 1/2 INCHES ELSEWHERE. REINFORCING BARS EMBEDDED IN GROUTED CELLS SHALL HAVE A MINIMUM CLEAR DISTANCE OF 1/4 INCH FOR FINE GROUT OR 1/2 INCH FOR COARSE GROUT BETWEEN REINFORCING BARS AND ANY FACE OF A CELL. REINFORCING BARS USED IN MASONRY WALLS SHALL HAVE A MASONRY COVER (INCLUDING GROUT) OF NOT LESS THAN 2 INCHES FOR MASONRY UNITS WITH FACE EXPOSED TO EARTH OR WEATHER 1 1/2 INCHES FOR MASONRY UNITS NOT EXPOSED TO EARTH OR WEATHER

REINFORCING STEEL SHALL BE MINIMUM GRADE 40.

THE REINFORCING STEEL SHALL BE MINIMUM GRADE 40.

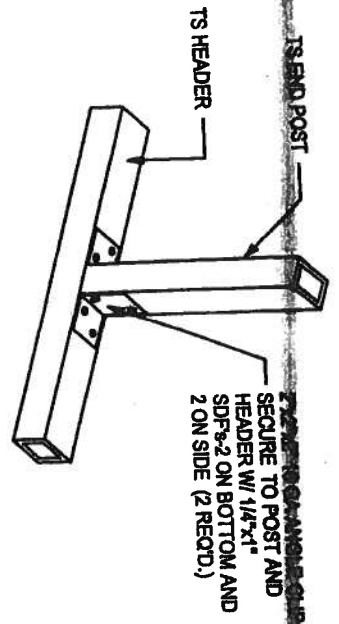
GALVANIZATION:
METAL ACCESSORIES FOR USE IN EXTERIOR WALL CONSTRUCTION AND NOT DIRECTLY EXPOSED TO THE WEATHER SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 153, CLASS B-2. METAL PLATE CONNECTORS, SCREWS, BOLTS AND NAILS EXPOSED DIRECTLY TO THE WEATHER SHALL BE STAINLESS STEEL OR HOT DIPPED GALVANIZED.

REINFORCEMENT MAY BE BENT IN THE SHOP OR THE FIELD PROVIDED:

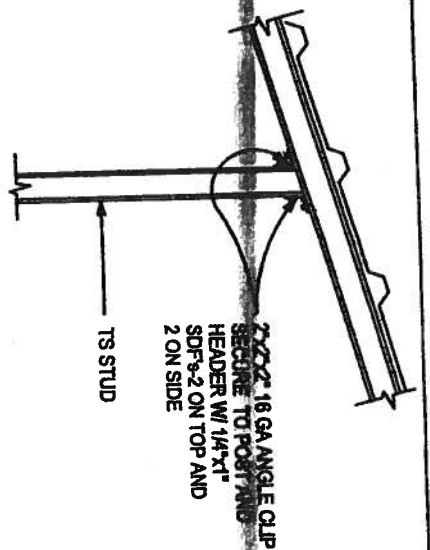
1. ALL REINFORCEMENT IS BENT COLD.
2. THE DIAMETER OF THE BEND, MEASURED ON THE INSIDE OF THE BAR, IS NOT LESS THAN SIX-BAR DIAMETERS AND
3. REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FIELD BENT.

EXCEPTION: WHERE BENDING IS NECESSARY TO ALIGN DOWN, BARS WITH A VERTICAL CELL BARS PARTIALLY EMBEDDED IN CONCRETE SHALL BE PERMITTED TO BE BENT AT A SLOPE OF NOT MORE THAN 1 INCH OF HORIZONTAL DISPLACEMENT TO 6 INCHES OF VERTICAL BAR LENGTH.

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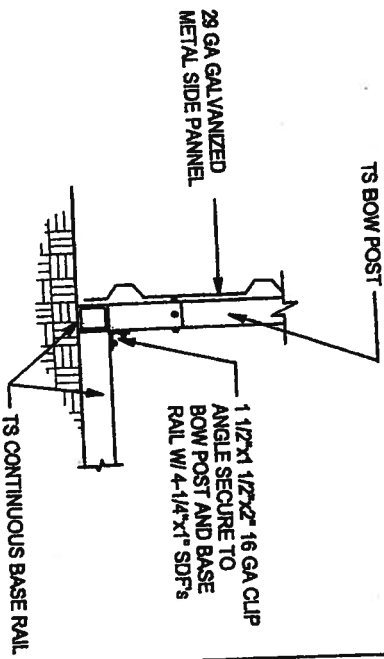


1
NTS
END POST TO HEADER/RAIL CONN.

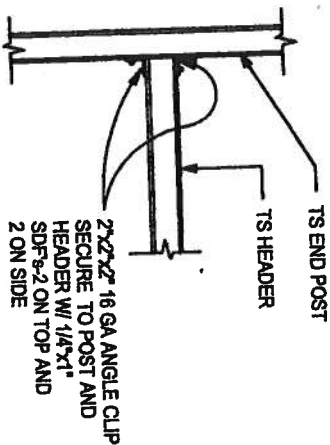


2
SCALE: 3/4" = 1'-0"
END POST/BOW CONN. DETAIL

NOTE:
14 GA FRAMING IS 2-1/2x2-1/2" TUBE STEEL
12 GA FRAMING IS 2-1/4x2-1/4" TUBE STEEL
NIPPLES ARE 2-1/4x2-1/4" 12 GA T.S. FOR 14 GA FRAMING.
NIPPLES ARE 2x2" 12 GA T.S. FOR 12 GA FRAMING.



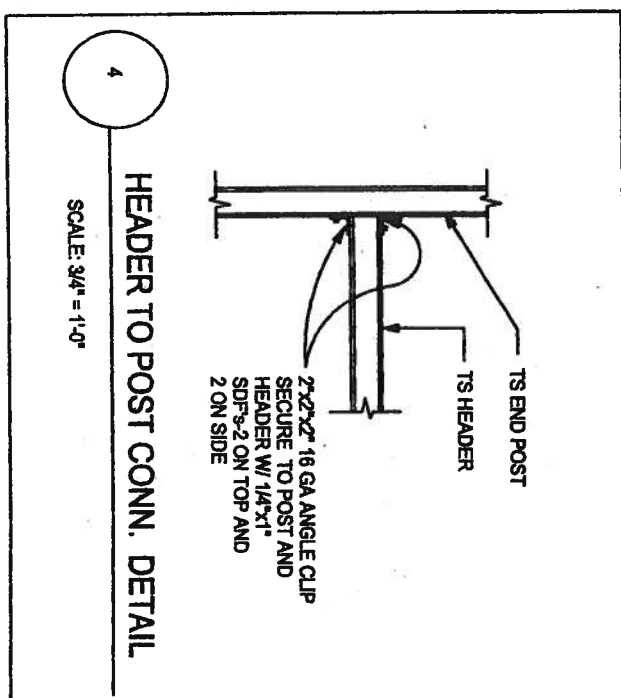
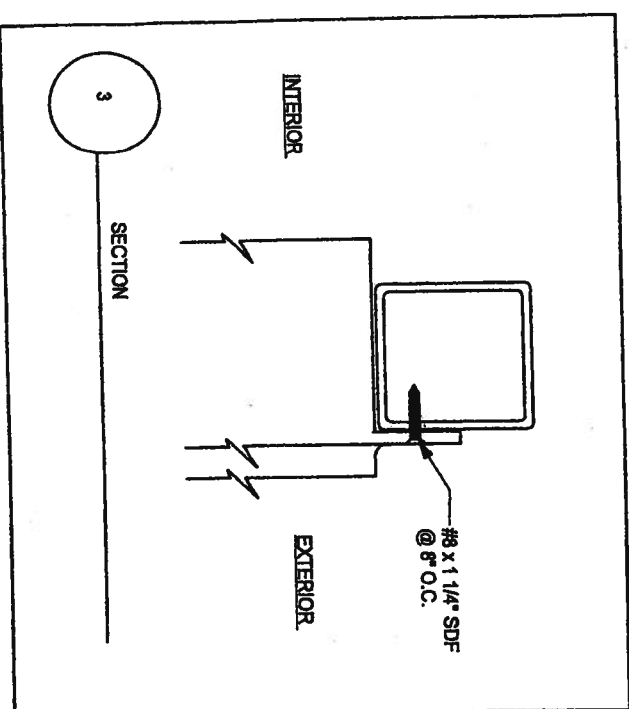
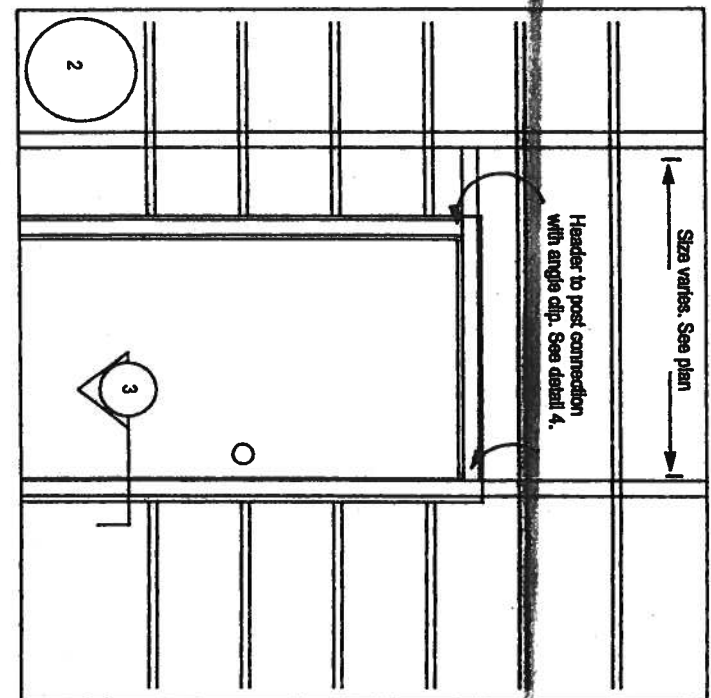
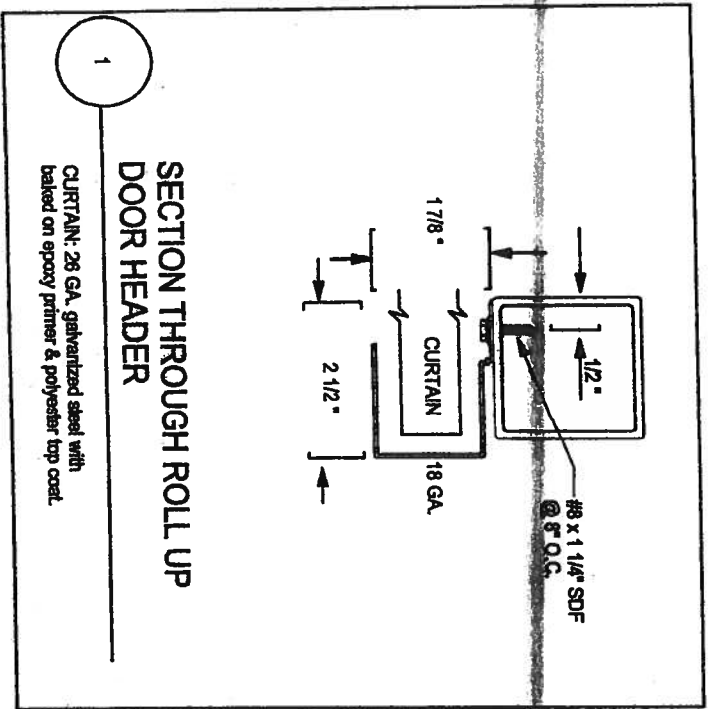
3
SCALE: 3/4" = 1'-0"
END BOW/BASE RAIL CONN.



4
SCALE: 3/4" = 1'-0"
HEADER TO POST CONN. DETAIL

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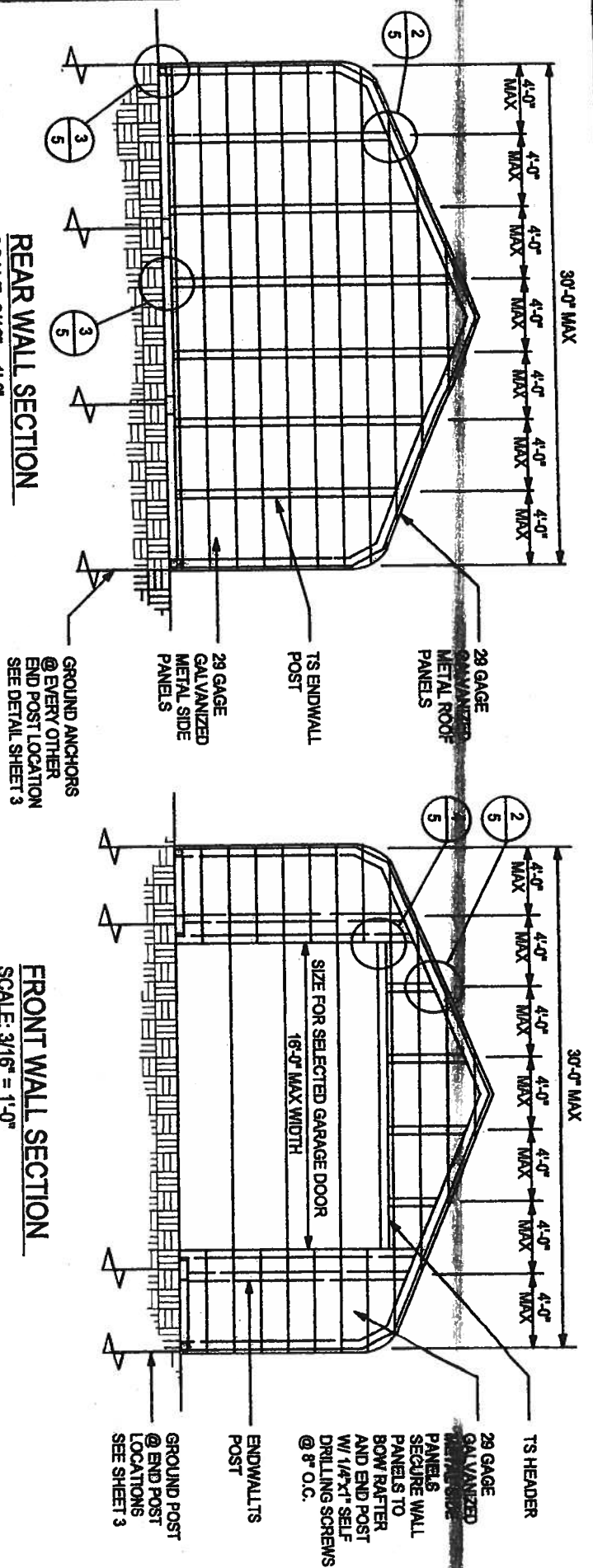


**BECHTOL ENGINEERING
AND TESTING, Inc.**
CONSULTING GEOTECHNICAL, ENVIRONMENTAL, AND MATERIALS TESTING ENGINEERS
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NOTE:
14 GA FRAMING IS 2-1/2\"/>

CAROLINA CARPORTS
SHEET 6 OF 8

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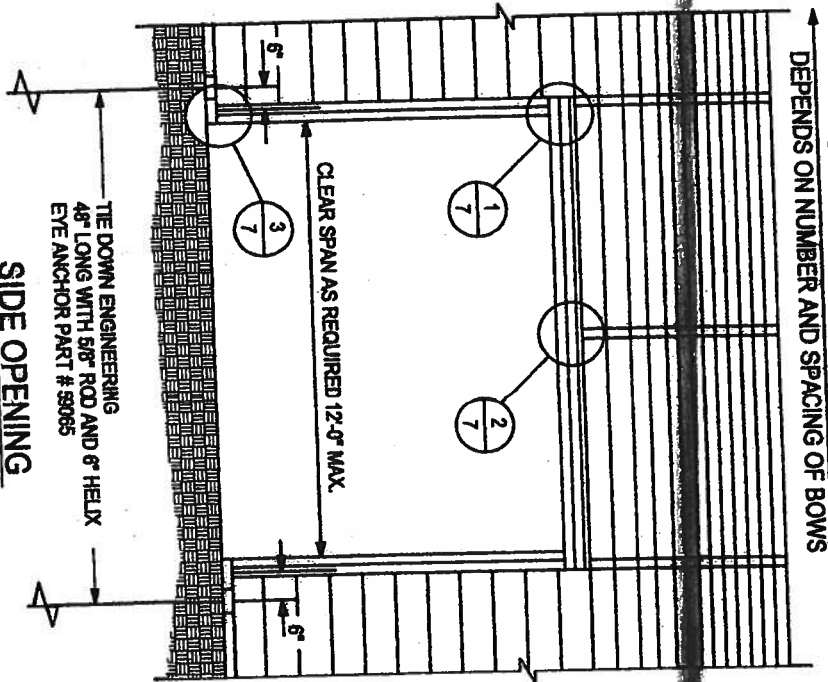
NOTE:
 14 GA FRAMING IS 2-1/2"x2-1/2" TUBE STEEL.
 12 GA FRAMING IS 2-1/4"x2-1/4" TUBE STEEL.
 NIPPLES ARE 2-1/4"x2-1/4" 12 GA T.S. FOR 14 GA FRAMING.
 NIPPLES ARE 2"x2" 12 GA T.S. FOR 12 GA FRAMING.

NOTE:
 EXTERIOR WINDOWS AND GLASS DOORS SHALL BE TESTED BY AN APPROVED INDEPENDENT TESTING LABORATORY, AND BEAR AN AAMA OR WDMA OR OTHER APPROVED LABEL IDENTIFYING THE MANUFACTURER, PERFORMANCE CHARACTERISTICS AND APPROVED PRODUCT EVALUATION ENTITY TO INDICATE COMPLIANCE WITH THE REQUIREMENTS OF THE FOLLOWING SPECIFICATION:
 ANSI/AAMA/NWMA 101/IS2 287
 THE CONSTRUCTION SHALL BE TESTED IN ACCORDANCE WITH ASTM E 330, STANDARD TEST METHODS FOR STRUCTURAL PERFORMANCE OF EXTERIOR WINDOWS, CURTAIN WALLS, AND DOORS BY UNIFORM STATIC AIR PRESSURE.

| CARPORT WIDTH | MAX DOOR WIDTH |
|---------------|----------------|
| 16' | 8' |
| 18' | 10' |
| 20' | 12' |
| 22' | 12' |
| 24' | 16' |
| 26' | 16' |
| 28' | 16' |
| 30' | 16' |

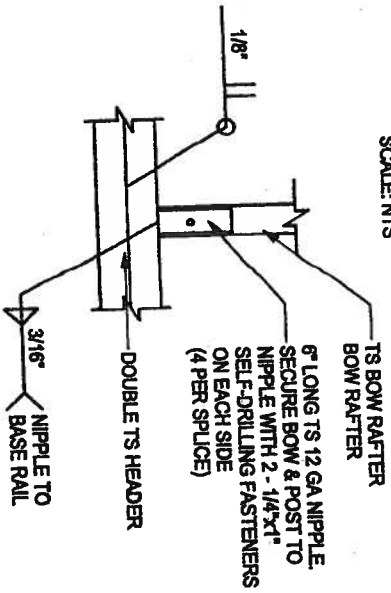
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 3/13/06

OVERALL LENGTH VARIES (100' MAX.)
DEPENDS ON NUMBER AND SPACING OF BOWS



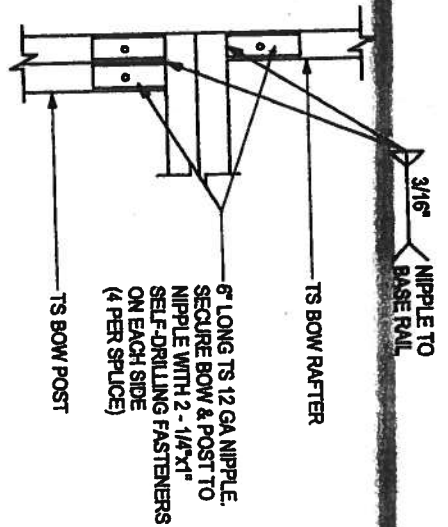
SIDE OPENING

SCALE: NTS



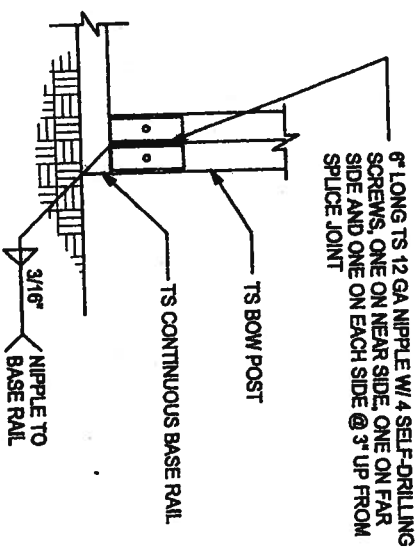
BOW/HEADER DETAIL

2
SCALE: 3/4" = 1'-0"



BOW/POST DETAIL

1.
SCALE: 3/4" = 1'-0"



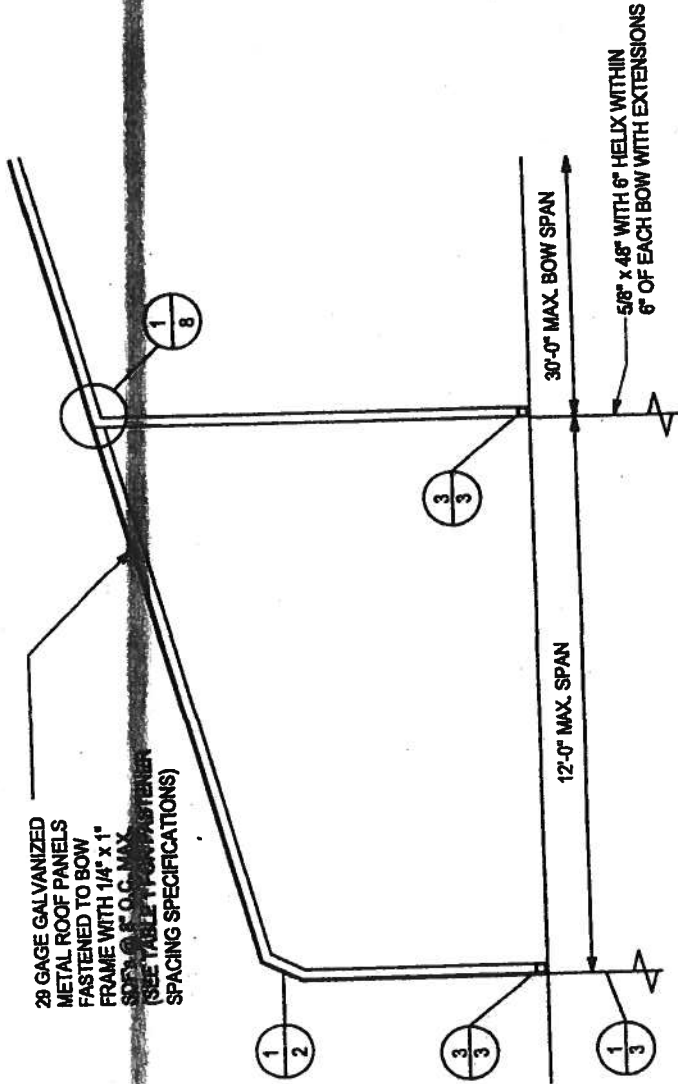
BOW/BASE RAIL CONN. DETAIL

3
SCALE: 3/4" = 1'-0"

NOTE:
14 GA FRAMING IS 2-1/2"x2-1/2" TUBE STEEL.
12 GA FRAMING IS 2-1/4"x2-1/4" TUBE STEEL.
NIPPLES ARE 2-1/4"x2-1/4" 12 GA T.S. FOR 14 GA FRAMING.
NIPPLES ARE 2"x2" 12 GA T.S. FOR 12 GA FRAMING.

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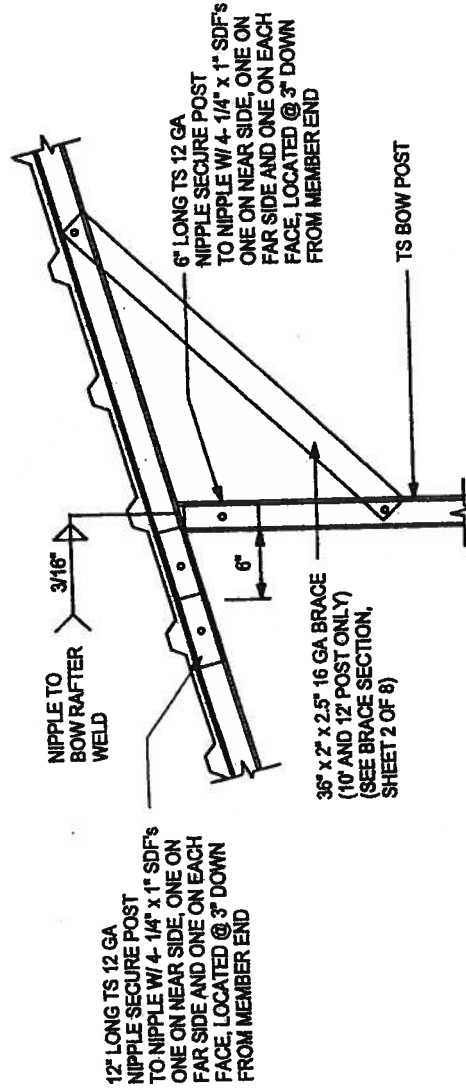
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Florida License No. 38538



NOTE:
 14 GA FRAMING IS 2-1/2"x2-1/2" TUBE STEEL
 12 GA FRAMING IS 2-1/4"x2-1/4" TUBE STEEL
 NIPPLES ARE 2-1/4"x2-1/4" 12 GA T.S. FOR 14 GA FRAMING.
 NIPPLES ARE 2"x2" 12 GA T.S. FOR 12 GA FRAMING.

TYPICAL SIDE EXTENSION SECTION

SCALE: NTS



BOW/POST DETAIL

SCALE: 3/4" = 1'-0"

BECHTOL ENGINEERING AND TESTING, INC.
 Certificate of Authorization No. 00005492
 Thomas Bechtol, P.E.
 Florida License No. 38538
 3/13/06

NOTICE OF COMMENCEMENT FORM
COLUMBIA COUNTY, FLORIDA

*****THIS DOCUMENT MUST BE RECORDED AT THE COUNTY
CLERKS OFFICE BEFORE YOUR FIRST INSPECTION.*****

THE UNDERSIGNED hereby gives notice that improvement will be made to certain real property, and in accordance with Chapter 713, Florida Statutes, the following information is provided in this Notice of Commencement.

Tax Parcel ID Number 34-6 S 16 040 56 137

PERMIT NUMBER 000024861

1. Description of property: (legal description of the property and street address or 911 address)

122- GREENWOOD TERR Ft White FL 32038
475, TL ON 27, TL ON CR 18, TL ON GREENWOOD TERR, 1 ST LOT ON LEFT
THORNWOOD, Lot 37

2. General description of improvement: Shed

3. Owner Name & Address 3826 NW. 26th St Gainesville FL 32605
George BOHLMANN Interest in Property _____

4. Name & Address of Fee Simple Owner (if other than owner): _____

5. Contractor Name GEORGE BOHLMANN Phone Number 352-376-6230
Address 3826 NW. 26th St. Gainesville, FL 32605

6. Surety Holders Name N/A

Phone Number _____

Address _____

Amount of Bond _____

7. Lender Name N/A

Phone Number _____

Address _____

8. Persons within the State of Florida designated by the Owner upon whom notices or other documents may be served as provided by section 718.13 (1)(a) 7; Florida Statutes:

Name N/A

Phone Number _____

Address _____

9. In addition to himself/herself the owner designates N/A

of

_____ to receive a copy of the Lienor's Notice as provided in Section 713.13 (1) -

(a) 7. Phone Number of the designee _____

10. Expiration date of the Notice of Commencement (the expiration date is 1 (one) year from the date of recording, (Unless a different date is specified) 1 YEAR

NOTICE AS PER CHAPTER 713, Florida Statutes:

The owner must sign the notice of commencement and no one else may be permitted to sign in his/her stead.

George Bohlmann
Signature of Owner

Sworn to (or affirmed) and subscribed before
day of Aug, 20 06 14th

NOTARY STAMP/SEAL

Free Talch
Signature of Notary

COLUMBIA COUNTY FLORIDA DEPARTMENT OF BUILDING AND ZONING

OCCUPANCY

COLUMBIA COUNTY, FLORIDA

Department of Building and Zoning Inspection

This Certificate of Occupancy is issued to the below named permit holder for the building and premises at the below named location, and certifies that the work has been completed in accordance with the Columbia County Building Code.

Parcel Number 34-6S-16-04056-137

Building permit No. 000024861

Use Classification SHED

Fire: 0.00

Permit Holder GEORGE BOHLMANN

Waste: 0.00

Owner of Building GEORGE BOHLMANN

Total: 0.00

Location: 122 SW GREENWOOD TERR(THORNWOOD, LOT 37)



Date: 09/12/2006

Harry Dieke

Building Inspector

POST IN A CONSPICUOUS PLACE
(Business Places Only)