

This Permit Expires One Year From the Date of Issue

APPLICANTJOHN SHADDINGERPHONE755-9349

ADDRESS213SW ANN PLACELAKE CITYFL32024

OWNERJOHN SHADDINGERPHONE755-9349

ADDRESS213SW ANN PLACELAKE CITYFL32024

CONTRACTOROWNER BUILDERPHONE

LOCATION OF PROPERTY90 WEST, PINEMOUNT RD, LEFT ANN PLACE, THEN
2ND HOUSE ON LEFT

TYPE DEVELOPMENTSTORAGE BUILDINGESTIMATED COST OF CONSTRUCTION10000.00

HEATED FLOOR AREATOTAL AREAHEIGHTSTORIES1

FOUNDATIONCONCRETEWALLSMETALROOF PITCH3/12FLOORSLAB

LAND USE & ZONINGRSF-2MAX. HEIGHT35

Minimum Set Back Requirments:STREET-FRONT25.00REAR15.00SIDE10.00

NO. EX.D.U.1FLOOD ZONEXDEVELOPMENT PERMIT NO.

PARCEL ID34-3S-16-02474-003SUBDIVISIONPINEMOUNT VILLAGE

LOT5BLOCK3PHASEUNITTOTAL ACRES0.50

Culvert Permit No.Culvert WaiverContractor's License NumberApplicant/Owner/Contractor

EXISTINGX06-0226BKJHN

Driveway ConnectionSeptic Tank NumberLU & Zoning checked byApproved for IssuanceNew Resident

COMMENTS:ACCESSORY USE BUILDING

Check # or Cash1931

FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

Temporary Powerdate/app. byFoundationdate/app. byMonolithicdate/app. by

Under slab rough-in plumbingdate/app. bySlabdate/app. bySheathing/Nailingdate/app. by

Framingdate/app. byRough-in plumbing above slab and below wood floordate/app. by

Electrical rough-indate/app. byHeat & Air Ductdate/app. byPeri. beam (Lintel)date/app. by

Permanent powerdate/app. byC.O. Finaldate/app. byCulvertdate/app. by

M/H tie downs, blocking, electricity and plumbingdate/app. byPooldate/app. by

Reconnectiondate/app. byPump poledate/app. byUtility Poledate/app. by

M/H Poledate/app. byTravel Trailerdater/app. byRe-roofdate/app. by

BUILDING PERMIT FEE \$50.00CERTIFICATION FEE \$0.00SURCHARGE FEE \$0.00

MISC. FEES \$0.00ZONING CERT. FEE \$50.00FIRE FEE \$0.00WASTE FEE \$

FLOOD DEVELOPMENT FEE \$FLOOD ZONE FEE \$CULVERT FEE \$TOTAL FEE100.00

INSPECTORS OFFICECLERKS 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 INCONVIENCE, 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

1st message 7/10/06
Revised 9-23-

For Office Use Only Application # 0606-106 Date Received 6-29-06 By LH Permit # 24748
Application Approved by - Zoning Official BLK Date 10.07.06 Plans Examiner OK JTH Date 6-29-06
Flood Zone X Development Permit N/A Zoning RSF-2 Land Use Plan Map Category Res Low Den
Comments Accessory Bld

Applicants Name John E. Shaddinger Fax: Cell - 386-965-3599
Address 213 SW ANN PL. Phone 386-755-9349
Owners Name SAME Phone _____
911 Address _____
Contractors Name Owner Phone _____
Address _____
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 Ener
Property ID Number R02474 - 003 34-35-16 Estimated Cost of Construction 10,000.00
Subdivision Name Pine Mount Village Lot 5 Block 3 Unit _____ Phase _____
Driving Directions 90 West To Pine Mount Rd - South 1/4 Mile To
SW ANN Place Left - East To 213 2nd House on Left

Type of Construction Steel Bldg (Storage) Number of Existing Dwellings on Property 1
Total Acreage 1/2 Lot Size _____ Do you need a - Culvert Permit or Culvert Waiver or Have an Existing Dr
Actual Distance of Structure from Property Lines - Front _____ Side 26-0 Side 66-0 Rear 16-0
Total Building Height _____ Number of Stories 1 Heated Floor Area 0 Roof Pitch 3/12
780 SQ FT

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.

John E. Shaddinger
Owner Builder or Agent (Including Contractor)

STATE OF FLORIDA
COUNTY OF COLUMBIA

Sworn to (or affirmed) and subscribed before me

this 6 day of 29 2006

Personally known _____ or Produced Identification ✓

Contractor Signature
Contractors License Number _____

Competency Card Number _____

NOTARY STAMP/SEAL



MY COMMISSION # DD 333503
EXPIRES: June 28, 2008
Bonded Thru Notary Public Underwriters

Notary Signature

Columbia County Property Appraiser

DB Last Updated: 6/19/2006

2006 Proposed Values

Parcel: 34-3S-16-02474-003 HX

[Tax Record](#)[Property Card](#)[Interactive GIS Map](#)[Print](#)**Owner & Property Info**

Search Result: 1 of 1

Owner's Name	SHADDINGER JOHN E & HAZEL G
Site Address	PINEMOUNT VILLAGE
Mailing Address	7145 SW 16TH ST PEMBROKE PINES, FL 33025
Description	LOT 5 BLOCK 3 PINEMOUNT VILLAGE S/D. DC 904-228, WD 904-229, WD 1079-1226.

Use Desc. (code)	SINGLE FAM (000100)
Neighborhood	34316.01
Tax District	2
UD Codes	MKTA06
Market Area	06
Total Land Area	0.502 ACRES

Property & Assessment Values

Mkt Land Value	cnt: (1)	\$15,000.00
Ag Land Value	cnt: (0)	\$0.00
Building Value	cnt: (1)	\$75,056.00
XFOB Value	cnt: (4)	\$2,446.00
Total Appraised Value		\$92,502.00

Just Value		\$92,502.00
Class Value		\$0.00
Assessed Value		\$67,298.00
Exempt Value	(code: HX)	\$25,000.00
Total Taxable Value		\$42,298.00

Sales History

Sale Date	Book/Page	Inst. Type	Sale Vlmp	Sale Qual	Sale RCode	Sale Price
3/31/2006	1079/1226	WD	I	Q		\$180,000.00
3/1/1987	621/196	WD	I	Q		\$59,900.00
3/1/1985	559/172	WD	I	Q		\$56,000.00

Building Characteristics

Bldg Item	Bldg Desc	Year Blt	Ext. Walls	Heated S.F.	Actual S.F.	Bldg Value
1	SINGLE FAM (000100)	1973	Common BRK (19)	1998	2634	\$75,056.00
Note: All S.F. calculations are based on exterior building dimensions.						

Extra Features & Out Buildings

Code	Desc	Year Blt	Value	Units	Dims	Condition (% Good)
0296	SHED METAL	1993	\$300.00	120.000	10 x 12 x 0	AP (50.00)
0296	SHED METAL	1993	\$250.00	100.000	10 x 10 x 0	AP (50.00)
0120	CLFENCE 4	1993	\$900.00	400.000	0 x 0 x 0	AP (50.00)
0166	CONC,PAVMT	1993	\$996.00	996.000	0 x 0 x 0	AP (50.00)

Land Breakdown

Lnd Code	Desc	Units	Adjustments	Eff Rate	Lnd Value
000100	SFR (MKT)	1.000 LT - (.502AC)	1.00/1.00/1.00/1.00	\$15,000.00	\$15,000.00

Columbia County Property Appraiser

DB Last Updated: 6/19/2006

1 of 1

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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 Steel Storage Bld.
☐ New Construction ☐ Addition, Alteration, Modification or other Improvement

NEW CONSTRUCTION OR IMPROVEMENT

I John E. Shaddinger, 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 24748

John E. Shaddinger
Signature

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 6-29-06 Building Official/Representative L. H.

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 R02444-003

PERMIT NUMBER _____

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

LOT 5 Block 3 PINEMOUNT VILLAGE SUBDIVISION

PLAT Book 3 Page 78 COLUMBIA COUNTY,
213 SW ANN PL. LAKE CITY, FLA. 32024

2. General description of Improvement: STEEL STORAGE Bldg

3. Owner Name & Address JOHN E. SHADDINGER

213 SW ANN PL. LAKE CITY Interest in Property OWNER

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

5. Contractor Name OWNER BUILDER

Phone Number 386-755-9949

Address 213 SW ANN PL. LAKE CITY, FLA. 32024

6. Surety Holders Name _____

Phone Number _____

Address _____

Amount of Bond _____

Inst:2006015692 Date:06/29/2006 Time:11:54

7. Lender Name _____

S.F.

DC, P. DeWitt Cason, Columbia County B:1088 P:1094

Address _____

8. Persons within the State of Florida designated by the Owner to be served as provided by section 718.13 (1)(a) 7; Florida Statutes:

Name _____ Phone Number _____

Address _____

9. In addition to himself/herself the owner designates _____ 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) _____

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.

John E. Shaddinger
Signature of Owner

Sworn to (or affirmed) and subscribed before
day of 06-29, 20 06

NOTARY STAMP/SEAL



[Signature]
Signature of Notary

Warranty Deed

Individual to Individual

THIS WARRANTY DEED made the 31st day of March, 2006 by

Thomas D. Talmage, A Single Person

hereinafter called the grantor, to

John E. Shaddinger, and his wife, Hazel G. Shaddinger

whose post office address is: 7145 SW 16th Street, Pembroke Pines, FL 33025
hereinafter called the grantee:

(Wherever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives and assigns of individuals, and the successors and assigns of corporation)

Witnesseth: That the grantor, for and in consideration of the sum of \$10.00 and other valuable considerations, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys, and confirms unto the grantee, all that certain land situate in COLUMBIA County, FLORIDA, viz: Parcel ID# R02474-003

Lot 5, Block 3, of Pinemount Village Subdivision, a subdivision according to the plat thereof recorded in Plat Book 3, Page 78, of the Public Records of Columbia County, Florida.

TOGETHER with all tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

TO HAVE AND TO HOLD, the same in fee simple forever.

AND the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except taxes accruing subsequent to December 31, 2005.

IN WITNESS WHEREOF, the said grantor has signed and sealed these presents the day and year first above written.

Signed, sealed and delivered in our presence:

Witness

Printed Name

Witness

Printed Name

Thomas D. Talmage

STATE OF FLORIDA
COUNTY OF COLUMBIA

The foregoing instrument was acknowledged before me this 31st day of March, 2006 by Thomas D. Talmage, A Single Person personally known to me or, if not personally known to me, who produced _____ for identification and who did not take an oath.

(SEAL)

Notary Public

My Commission Expires:

**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

OFFICE COPY

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.

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.


 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 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: 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

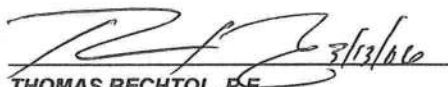
MAXIMUM ALLOWABLE BOW SPACING = $(150) / (.67)(29.1) = 7.69'$
MAXIMUM ALLOWABLE END BOW FASTENER SPACING = $(150) / (49.1)(3.0) = 1.02' = 12.2"$

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: 02/06/06

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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: 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: $q = (48.3)(1.00)(0.77) = 37.2 \text{ PSF}$
END BOWS: $q = (81.2)(1.00)(0.77) = 62.5 \text{ PSF}$

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: 02/06/06

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: 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: $q = (65.7)(1.00)(0.77) = 50.6 \text{ PSF}$
END BOWS: $q = (110.6)(1.00)(0.77) = 85.2 \text{ PSF}$

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 = $(150) / (.67)(50.6) = 4.42'$
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 1609.6(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: $q = (75.5)(1.00)(0.77) = 58.1$ 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

MAXIMUM ALLOWABLE BOW SPACING = $(150) / (.67)(58.1) = 3.85'$
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: 02/06/06

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: 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

MAXIMUM ALLOWABLE BOW SPACING = $(150) / (.67)(35.3) = 6.34'$

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: 02/06/06

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: 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: $q = (40.6)(1.21)(0.77) = 37.8$ 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


MAXIMUM ALLOWABLE BOW SPACING = $(150) / (.67)(37.8) = 5.92'$
MAXIMUM ALLOWABLE END BOW FASTENER SPACING = $(150) / (63.6)(3.0) = 0.79" = 9.4"$

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 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

$$\text{MAXIMUM ALLOWABLE BOW SPACING} = (150) / (.67)(45.0) = 4.98'$$

$$\text{MAXIMUM ALLOWABLE END BOW FASTENER SPACING} = (150) / (75.7)(3.0) = 0.66' = 7.9"$$

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 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: 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: 02/06/06

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: 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

$$\text{MAXIMUM ALLOWABLE BOW SPACING} = (150) / (.67)(61.2) = 3.66'$$

$$\text{MAXIMUM ALLOWABLE END BOW FASTENER SPACING} = (150) / (103.0)(3.0) = 0.49" = 5.8"$$

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

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: 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: $q = (75.5)(1.21)(0.77) = 70.3 \text{ PSF}$
END BOWS: $q = (126.9)(1.21)(0.77) = 118.2 \text{ PSF}$

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

$$\text{MAXIMUM ALLOWABLE BOW SPACING} = (150) / (.67)(70.3) = 3.18'$$

$$\text{MAXIMUM ALLOWABLE END BOW FASTENER SPACING} = (150) / (118.2)(3.0) = 0.42" = 5.1"$$

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: 02/06/06

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:

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

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

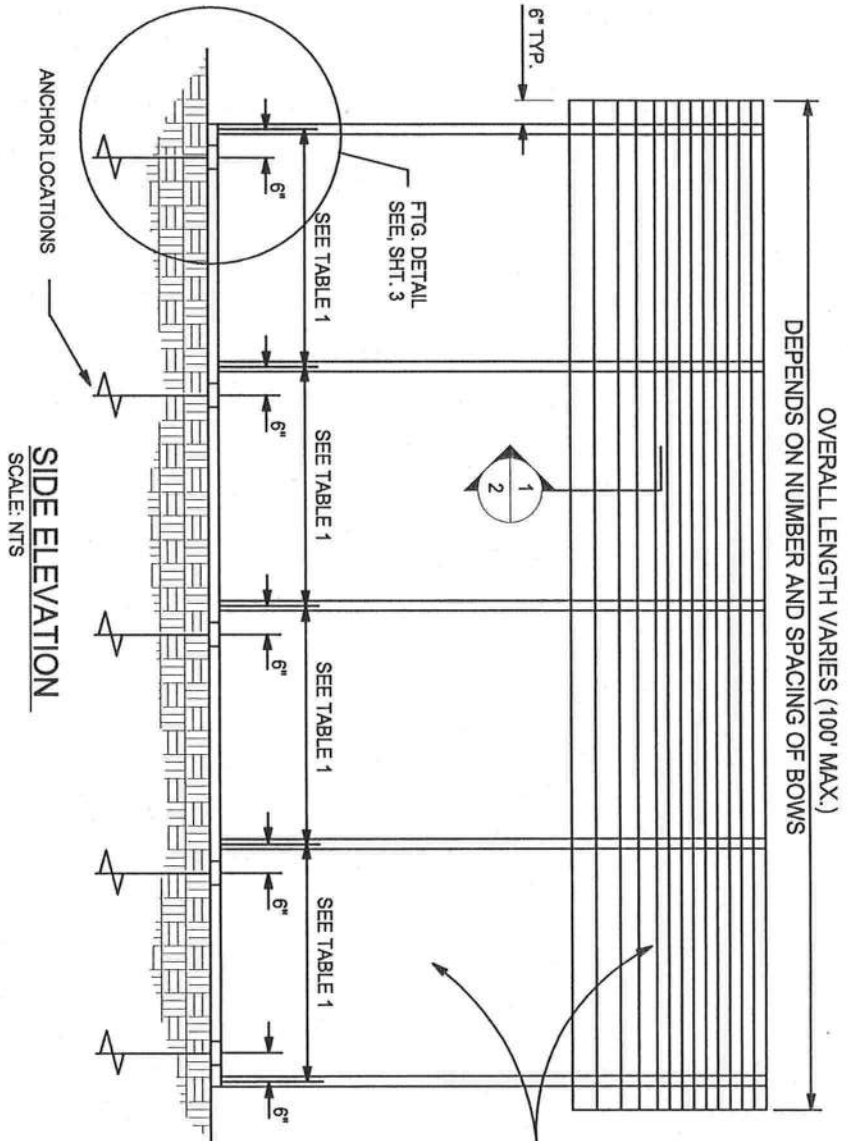
DESIGN: MAXIMUM END POST SPACING = 4.0'

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

28 GAGE R-PANEL ROOFING
(OPTIONAL SIDE PANELS)

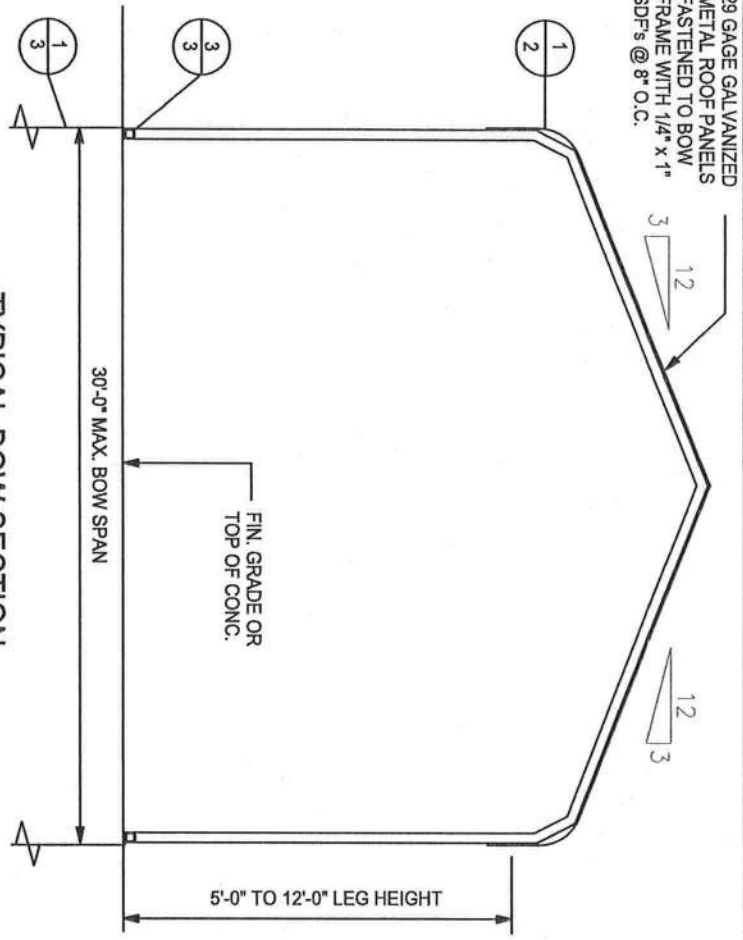
NOTES:

1. ALL STEEL TUBING SHALL BE 50 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 3/13/04
Thomas Bechtol, P.E.
Florida License No. 38538

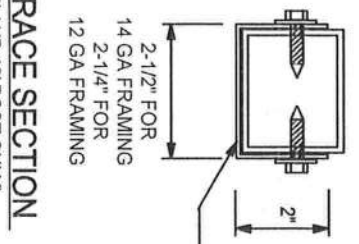
29 GAGE GALVANIZED
METAL ROOF PANELS
FASTENED TO BOW
FRAME WITH 1/4" x 1"
SDFs @ 8" O.C.



TYPICAL BOW SECTION

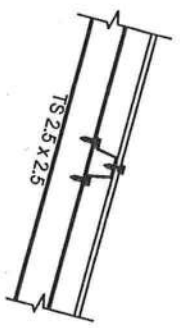
SCALE: NTS

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



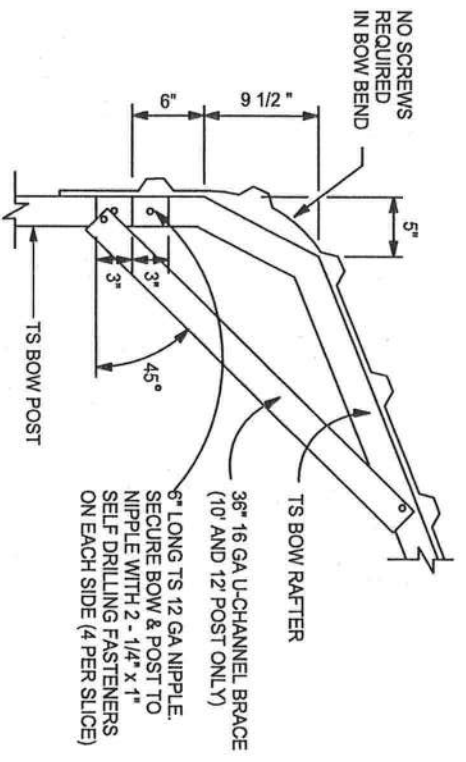
3'-0" 16 GAUGE
U-CHANNEL BRACE
FASTENED TO THE LEG
AND BOW POSITIONED
AT 45 DEGREES
W/ 2 - 1/4" x 1" SELF
DRILLING SCREWS
AT EACH END
(4 PER BRACE)

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



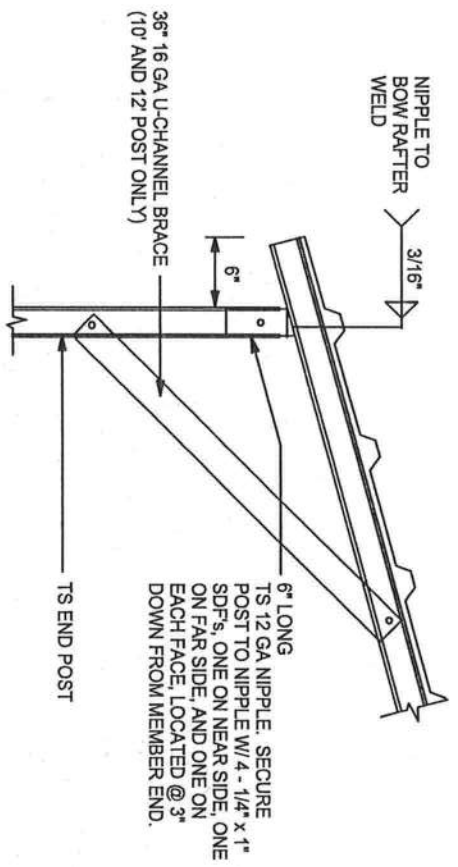
ROOF PANEL ATTACHMENT
(ALTERNATE FOR VERTICAL ROOF PANELS)

SCALE: 1" = 1'-0"



BOW/POST DETAIL

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



BOW/POST DETAIL

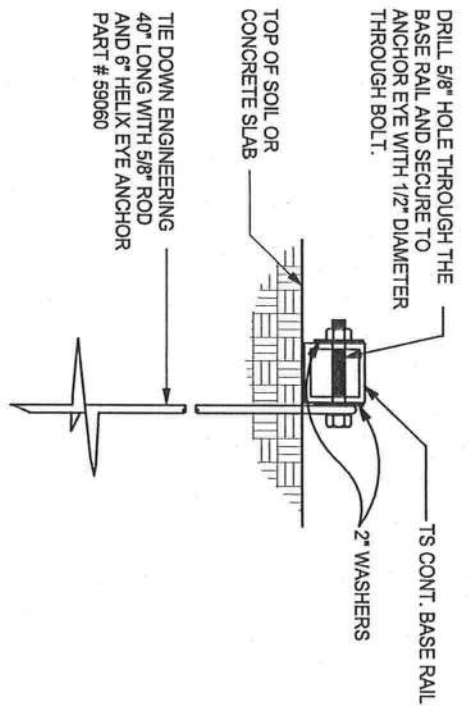
SCALE: 3/4" = 1'-0"

(BOXED EAVE OPTION)

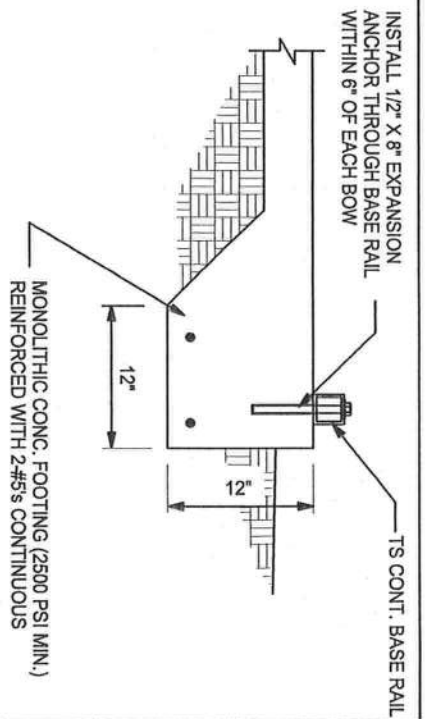
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Thomas Bechtol, P.E.
Florida License No. 38538

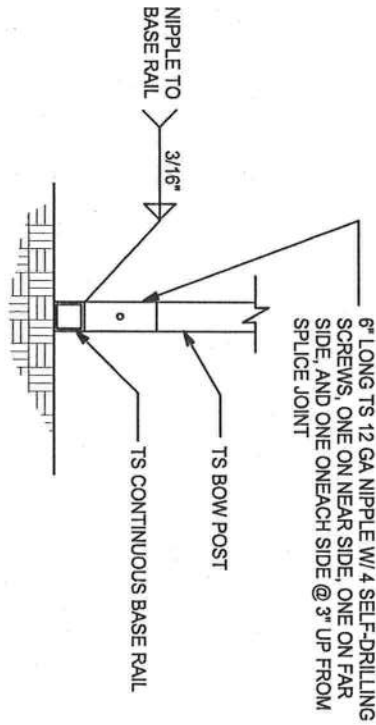
NOTE:
14 GA FRAMING IS 2-1/2" x 2-1/2" TUBE STEEL.
12 GA FRAMING IS 2-1/4" x 2-1/4" TUBE STEEL.
NIPPLES ARE 2-1/4" x 2-1/4" 12 GA T.S. FOR 14 GA FRAMING.
NIPPLES ARE 2" x 2" 12 GA T.S. FOR 12 GA FRAMING.



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.

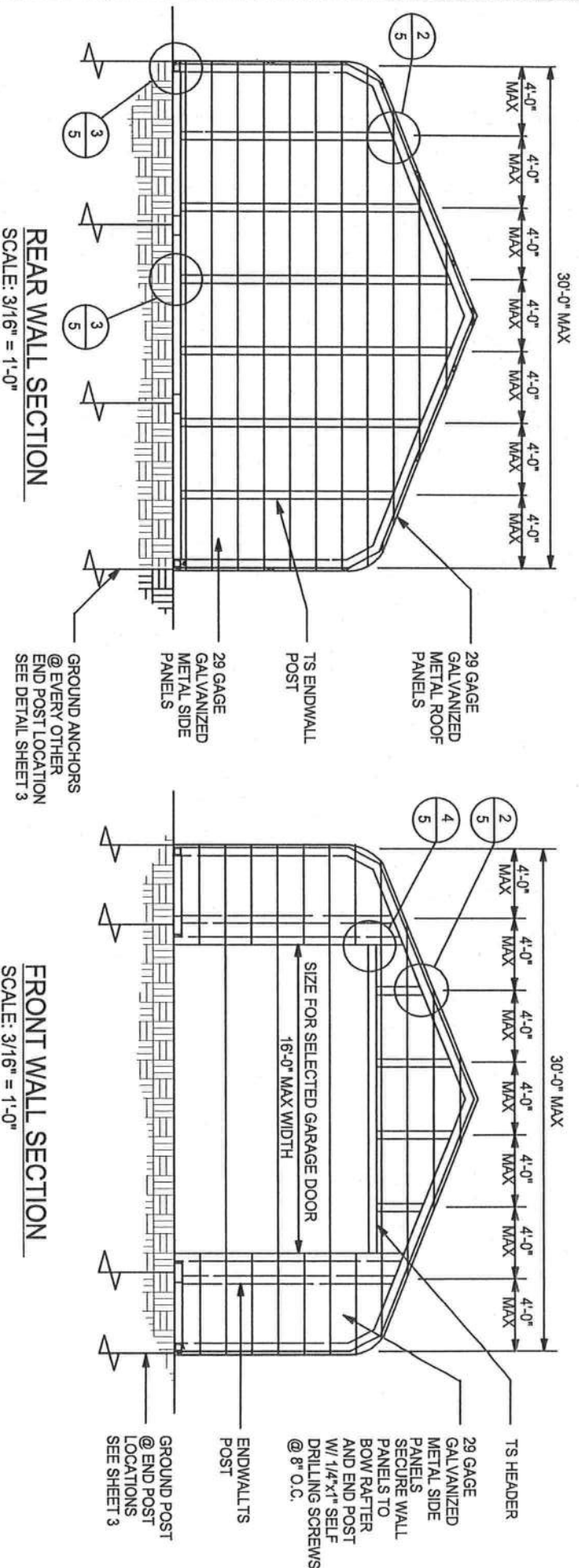
CONCRETE:
CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 2500 PSI AT 28 DAYS.

COVER OVER REINFORCING STEEL
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:
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 DOWEL 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.



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:

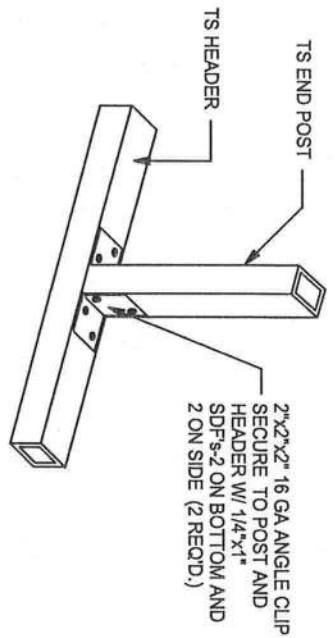
ANSI/AAMA/NWMA 101/IS2 2997
THE CONSTRUCTION SHALL BE TESTED IN ACCORDANCE WITH
ASTM E 330, STANDARD TEST METHODS FOR STRUCTURAL
PERFORMANCE OF EXTERIOR WINDOWS, CURTAIN WALLS, AND
DOORS BY UNIFORM STATIC AIR PRESSURE.

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

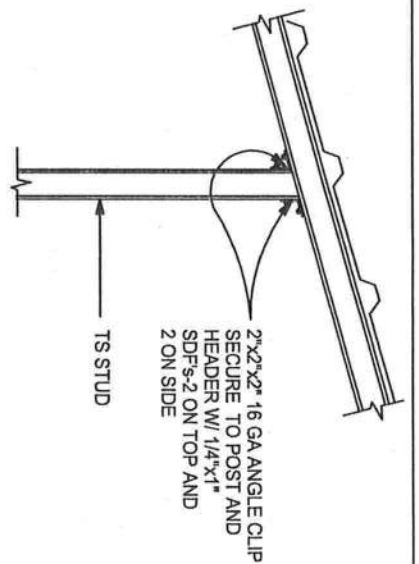
BECHTOL ENGINEERING AND TESTING, INC.

Certificate of Authorization No. 00005492

Thomas Bechtol 3/13/06
Thomas Bechtol, P.E.
Florida License No. 38538

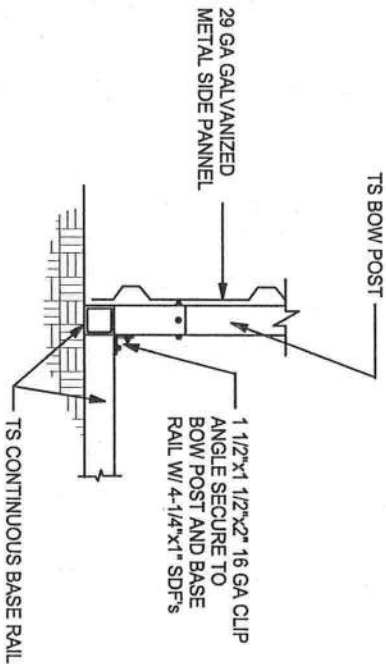


1
END POST TO HEADER/RAIL CONN.
NTS

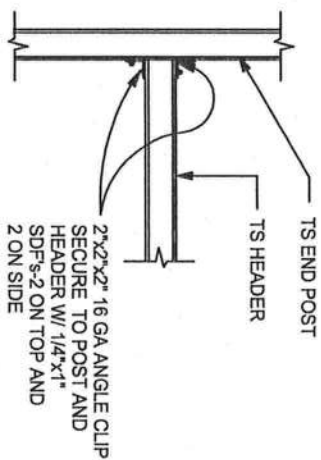


2
END POST/BOW CONN. DETAIL
SCALE: 3/4" = 1'-0"

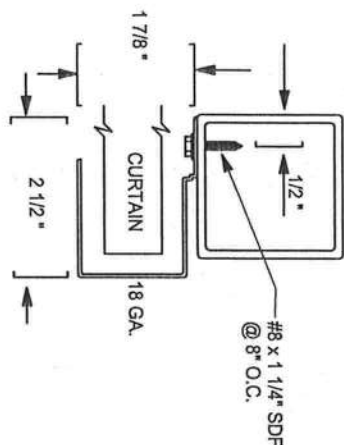
NOTE:
14 GA FRAMING IS 2-1/2"x2-1/2" TUBE STEEL.
12 GA FRAMING IS 2-1/4"x2-1/4" TUBE STEEL.
NIPPLES ARE 2-1/4"x2-1/4" 12 GA T.S. FOR 14 GA FRAMING.
NIPPLES ARE 2"x2" 12 GA T.S. FOR 12 GA FRAMING.



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

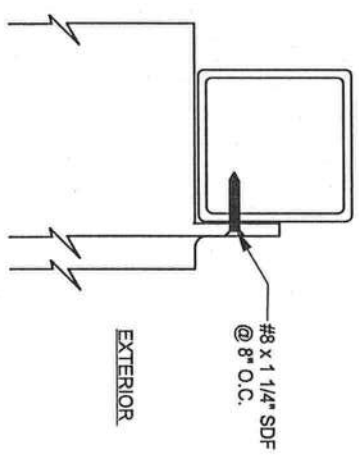
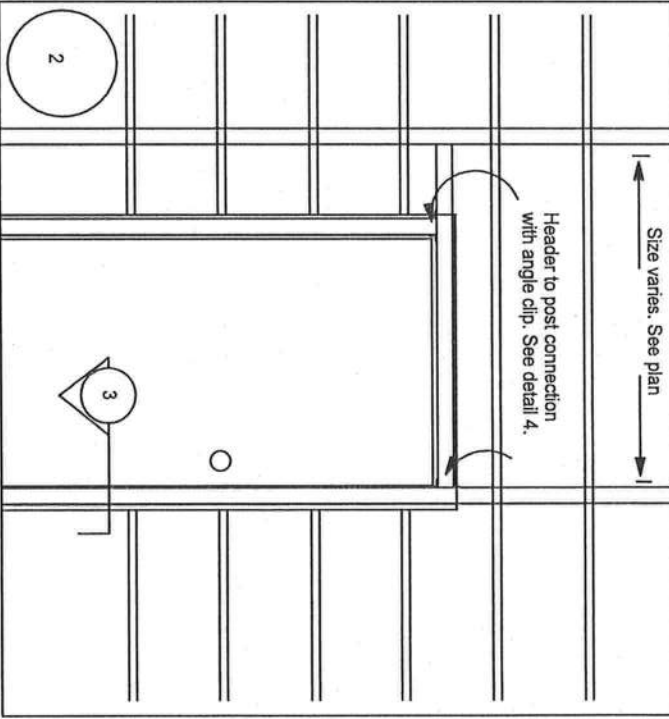


4
HEADER TO POST CONN. DETAIL
SCALE: 3/4" = 1'-0"



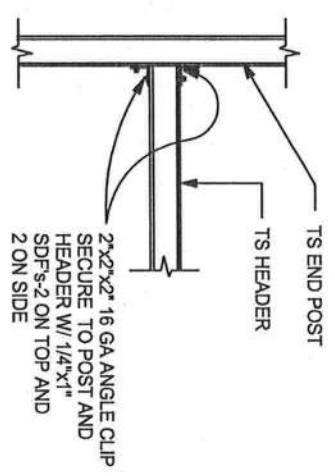
SECTION THROUGH ROLL UP DOOR HEADER

CURTAIN: 26 GA. galvanized steel with
baked on epoxy primer & polyester top coat.



SECTION

3



HEADER TO POST CONN. DETAIL

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

4

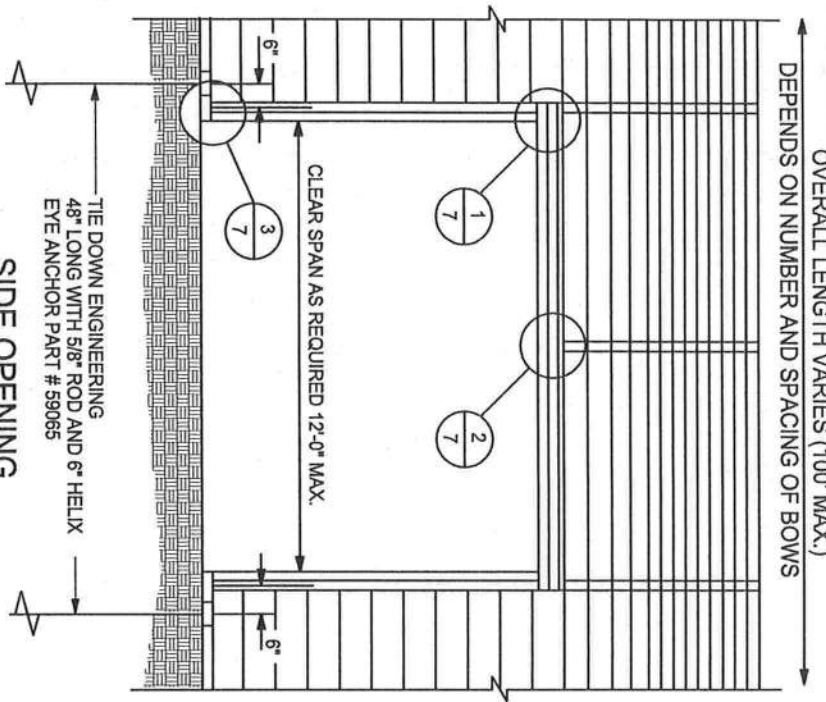
NOTE:

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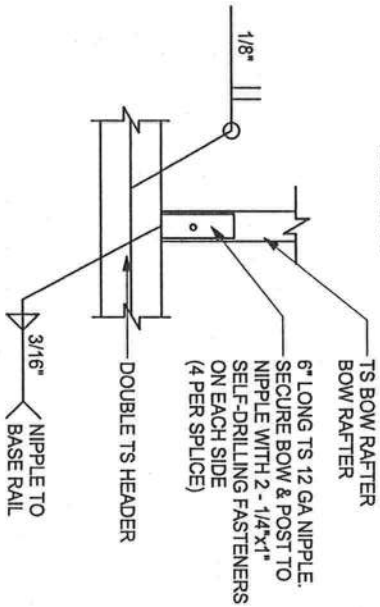
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OVERALL LENGTH VARIES (100' MAX.)
DEPENDS ON NUMBER AND SPACING OF BOWS



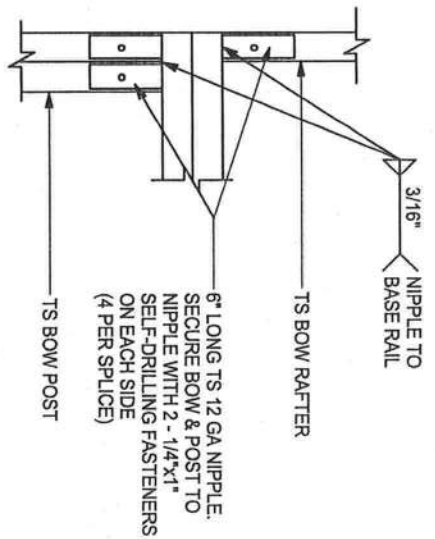
SIDE OPENING

SCALE: NTS



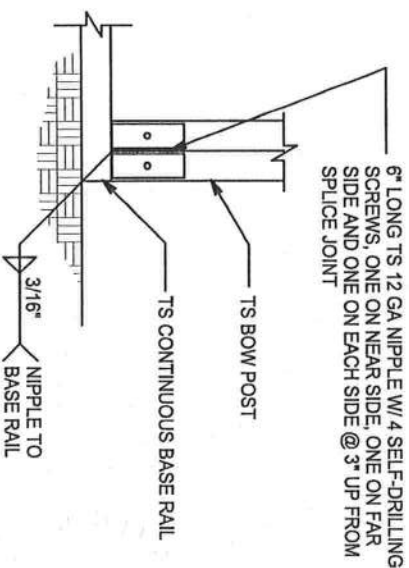
BOW/HEADER DETAIL

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



BOW/POST DETAIL

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

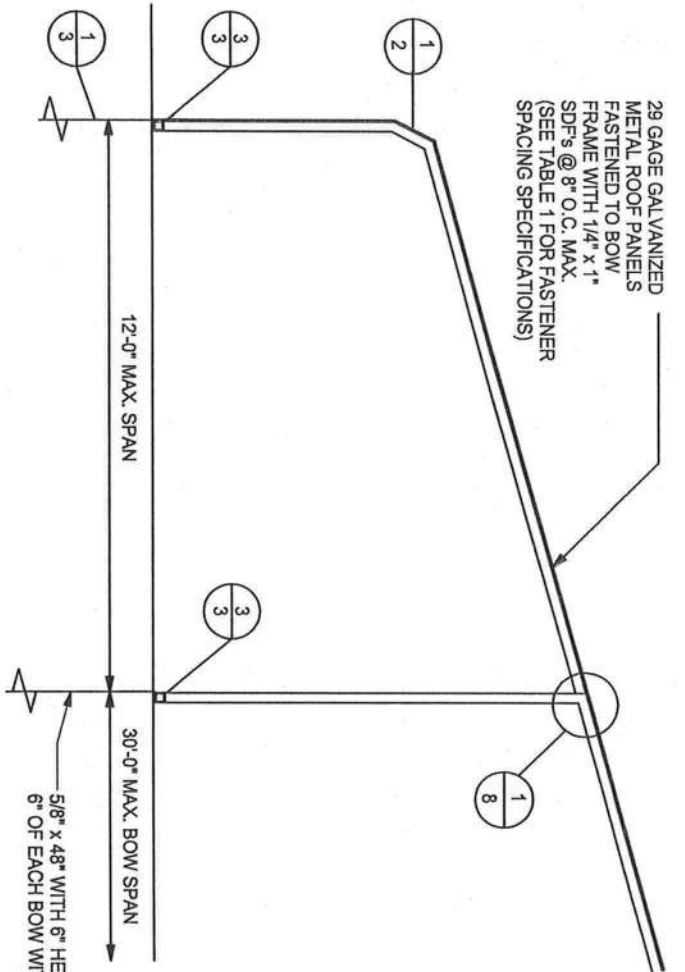


BOW/BASE RAIL CONN. DETAIL

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.

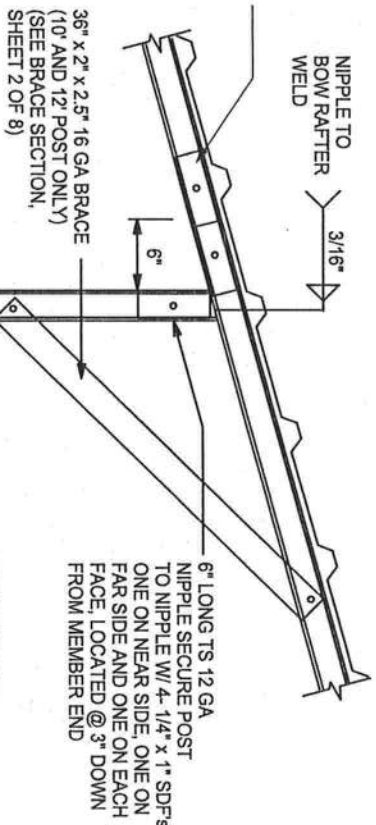
29 GAGE GALVANIZED
METAL ROOF PANELS
FASTENED TO BOW/
FRAME WITH 1/4" x 1"
SDFs @ 8" O.C. MAX.
(SEE TABLE 1 FOR FASTENER
SPACING SPECIFICATIONS)



TYPICAL SIDE EXTENSION SECTION

SCALE: NTS

12" LONG TS 12 GA
NIPPLE SECURE POST
TO NIPPLE W/ 4- 1/4" x 1" SDFs
ONE ON NEAR SIDE, ONE ON
FAR SIDE AND ONE ON EACH
FACE, LOCATED @ 3" DOWN
FROM MEMBER END



BOW/POST 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.

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

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

Notice of Prevention for Subterranean Termites
(As required by Florida Building Code (FBC) 104.2.6)



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24748

JOHN SHADDINGER 213 SW ANN PL. LAKE CITY FL

Address of Treatment or Lot/Block of Treatment

7-20-06
Date

3:00 PM
Time

AARON J CUMMINGS
Applicator

PREVAIL
Product Used

CYPERMETHRIN
Chemical used (active ingredient)

123
Number of gallons applied

.25%
Percent Concentration

780
Area treated (square feet)

112
Linear feet treated

HORIZONTAL/VERTICAL
Stage of treatment (Horizontal, Vertical, Adjoining Slab, retreat of disturbed area)

As per 104.2.6 - If soil chemical barrier method for Subterranean termite prevention is used, final exterior treatment shall be completed prior to final building approval.
If this notice is for the final exterior treatment, initial and date this line. _____