

DATE 04/12/2006

Columbia County Building Permit

PERMIT
000024380

This Permit Expires One Year From the Date of Issue

APPLICANT VINCE RICHARDSON PHONE 755-5779
 ADDRESS 696 SW ARLINGTON BLVD LAKE CITY FL 32025
 OWNER WAYNE & MICHELLE SAPP PHONE 386-590-0488
 ADDRESS 362 SW STORY PLACE LAKE CITY FL 32055
 CONTRACTOR VINCE RICHARDSON PHONE 755-5779
 LOCATION OF PROPERTY C-247, L KIRBY RD, L INTO CRESTPOINTE SD, ON RIGHT
NEXT TO RETENTION POND

TYPE DEVELOPMENT SCREEN ROOM ESTIMATED COST OF CONSTRUCTION 12962.00
 HEATED FLOOR AREA _____ TOTAL AREA _____ HEIGHT _____ STORIES _____
 FOUNDATION _____ WALLS SCREEN ROOF PITCH _____ FLOOR _____
 LAND USE & ZONING RSF-2 MAX. HEIGHT 35
 Minimum Set Back Requirments: STREET-FRONT 25.00 REAR 15.00 SIDE 10.00
 NO. EX.D.U. 1 FLOOD ZONE XPP DEVELOPMENT PERMIT NO. _____

PARCEL ID 11-4S-16-02905-416 SUBDIVISION CREST POINTE
 LOT 16 BLOCK _____ PHASE .00 UNIT 0 TOTAL ACRES 0.51

5129 Vince Richardson
 Culvert Permit No. _____ Culvert Waiver _____ Contractor's License Number _____ Applicant/Owner/Contractor _____
 EXISTING X06-0110 BK JH Y
 Driveway Connection _____ Septic Tank Number _____ LU & Zoning checked by _____ Approved for Issuance _____ New Resident _____

COMMENTS: NOC ON FILE

Check # or Cash 1927

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 \$ 65.00 CERTIFICATION FEE \$ 0.00 SURCHARGE FEE \$ 0.00
 MISC. FEES \$ 0.00 ZONING CERT. FEE \$ 50.00 FIRE FEE \$ 0.00 WASTE FEE \$ _____
 FLOOD DEVELOPMENT FEE \$ _____ FLOOD ZONE FEE \$ _____ CULVERT FEE \$ _____ **TOTAL FEE** 115.00

INSPECTORS OFFICE [Signature] CLERKS OFFICE [Signature]

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

ck 1927

Revised 9-23-04

For Office Use Only Application # 0603-110 Date Received 3/30/06 By G Permit # 24380
 Application Approved by - Zoning Official BLK Date 05.04.06 Plans Examiner OKJH Date 3-31-06
 Flood Zone X 1st lot Development Permit N/A Zoning RSF-2 Land Use Plan Map Category Res. Low Dev.
 Comments _____

Applicants Name Vince Richardson Richardson ALUMINUM. LLC Phone 386-755-5779
 Address 692 S.W. Arlington Blvd. LAKE CITY, FL 32025
 Owners Name Wayne + Michelle Sapp Phone 386-590-0488
 911 Address 362 S.W. Story Place
 Contractors Name Richardson ALUMINUM LLC Phone 386-755-5779
 Address 692 S.W. Arlington Blvd LAKE CITY, FL 32025
 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 11-45-16-02905-416 Estimated Cost of Construction 12,962.31
 Subdivision Name Crest Point S/D Lot 16 Block _____ Unit _____ Phase _____
 Driving Directions 247 South to Kirby rd Left into Crest point S/D. 362 S.W. story place on right next to retention pond

Type of Construction Screen Room Number of Existing Dwellings on Property 1
 Total Acreage .51 Lot Size _____ Do you need a - Culvert Permit or Culvert Waiver or Have an Existing Drive
 Actual Distance of Structure from Property Lines - Front 77 Side 19 Side 115 Rear 95
 Total Building Height 8' Number of Stories 1 Heated Floor Area 0 Roof Pitch 1/2"

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 COMMENCMENT 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.

Owner Builder or Agent (Including Contractor) _____

Contractor Signature Vince Richardson
 Contractors License Number _____
 Competency Card Number 5129

STATE OF FLORIDA
 COUNTY OF COLUMBIA



Sworn to (or affirmed) and subscribed before me this 30th day of March 2006.

Gale Tedder
 Notary Signature

Personally known or Produced Identification _____

NOTICE OF COMMENCEMENT

PERMIT NUMBER: _____
STATE OF: FLORIDA COUNTY OF: Columbia CITY OF: Lake City

THE UNDERSIGNED HEREBY gives notice that improvement(s) 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.

DESCRIPTION OF PROPERTY

LOT: 16 BLOCK: _____ SECTION: _____ TOWNSHIP: _____ RANGE: _____
TAX PARCEL NUMBER: 11-45-16 0100 / 0100
SUBDIVISION: Crest Point PLATBOOK: _____ MAP PAGE: _____
STREET ADDRESS: 362 S.W. Story Place

GENERAL DESCRIPTION OF IMPROVEMENTS

TO CONSTRUCT: Screen Room

OWNER INFORMATION

OWNER NAME: Wayne + Michelle Sapp
ADDRESS: 362 S.W. Story place PHONE NUMBER: 590-0489
CITY: Lake City STATE: Fla ZIP CODE: 32024

INTEREST IN PROPERTY: _____
FEE SIMPLE TITLEHOLDER NAME: _____
FEE SIMPLE TITLEHOLDER ADDRESS: _____
(if other than owner)

CONTRACTOR NAME: Vince Richardson
ADDRESS: 692 S.W. Arlington Blvd. PHONE NUMBER: 386-755-5779
CITY: Lake City STATE: Fla. ZIP CODE: 32025

BONDING COMPANY: _____
ADDRESS: _____ PHONE NUMBER: _____
CITY: _____ STATE: _____ ZIP CODE: _____

LENDER NAME: _____
ADDRESS: _____ PHONE NUMBER: _____
CITY: _____ STATE: _____ ZIP CODE: _____

Persons within the State of Florida designated by Owner upon whom notices or other documents may be served as provided by Section 713.13(1)(a) 7., Florida Statutes:

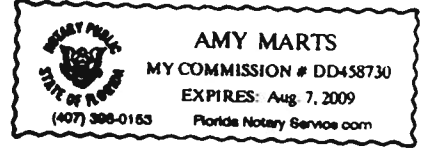
NAME: _____ ADDRESS: _____

In addition to himself, Owner designates _____ of _____ to receive a copy of Lienor's Notice as provided in Section 713.13(1)(b), Florida Statutes.

Expiration date is one (1) year from date of recording unless a different date is specified.

SIGNATURE OF OWNER: [Signature]
SWORN to and subscribed before me this 30 day of March, A.D. 2004.

Notary Public: [Signature]
My commission Expires: Aug 7, 2009



Inst: 2009008903 Date: 04/12/2006 Time: 09:30
DC, P. Dewitt Cason, Columbia County B: 1080 P: 875

• **RONNIE BRANNON, CFC**
COLUMBIA COUNTY TAX COLLECTOR

2005 REAL ESTATE
NOTICE OF AD VALOREM TAXES AND NON-AD VALOREM ASSESSMENTS

01097680000

ACCOUNT NUMBER	ESCROW CD	ASSESSED VALUE	EXEMPTIONS	TAXABLE VALUE	MILLAGE CODE
R02905-416	632	96,390	25,000	71,390	002

D
0000706 01 AV 0.278 **AUTO T3 0 0810 32024-
SAPP WAYNE J JR & MICHELLE V
362 SW STORY PLACE
LAKE CITY FL 32024-1104

11-4S-16 0100/0100 .51 Acres
LOT 16 CREST POINTE S/D. ORB
1000-621

SEE INSERT FOR IMPORTANT INFO
AND TELEPHONE NUMBERS
WWW.COLUMBIATAXCOLLECTOR.COM



AD VALOREM TAXES		
TAXING AUTHORITY	MILLAGE RATE (DOLLARS PER \$1,000 OF TAXABLE VALUE)	TAXES LEVIED
C001 BOARD OF COUNTY COMMISSIONERS	8.7260	
S002 COLUMBIA COUNTY SCHOOL BOARD		622.95
DISCRETIONARY	.7600	
LOCAL	5.1950	54.26
CAPITAL OUTLAY	2.0000	370.87
W SR SUWANNEE RIVER WATER MGT DIST	.4914	142.78
HLSH SHANDS AT LAKE SHORE	1.7500	35.08
IIDA INDUSTRIAL DEVELOPEMENT AUTH	.1380	124.93
		9.85
TOTAL MILLAGE 19.0604		AD VALOREM TAXES \$1,360.72

NON-AD VALOREM ASSESSMENTS		
LEVYING AUTHORITY	RATE	AMOUNT
FFIR FIRE ASSESSMENTS		71.00
GGAR SOLID WASTE - ANNUAL		147.00
PAY ONLY ONE AMOUNT IN YELLOW SHADED AREA		NON-AD VALOREM ASSESSMENTS \$218.00

COMBINED TAXES AND ASSESSMENTS		\$1,578.72		See reverse side for important information.	
IF PAID BY PLEASE PAY	Nov 30 1,515.57	Dec 31 1,531.36	Jan 31 1,547.15	Feb 28 1,562.93	Mar 31 1,578.72

RONNIE BRANNON, CFC
COLUMBIA COUNTY TAX COLLECTOR

2005 REAL ESTATE
NOTICE OF AD VALOREM TAXES AND NON-AD VALOREM ASSESSMENTS

01097680000

ACCOUNT NUMBER	ESCROW CD	ASSESSED VALUE	EXEMPTIONS	TAXABLE VALUE	MILLAGE CODE
R02905-416	632	96,390	25,000	71,390	002

AV0000706 D
SAPP WAYNE J JR & MICHELLE V
362 SW STORY PLACE
LAKE CITY FL 32024-1104

11-4S-16 0100/0100 .51 Acres
LOT 16 CREST POINTE S/D. ORB
1000-621

IF PAID BY

11-4S-16-02905-416

LOT 16 CREST POINTE S/D. ORB SAPP WAYNE J JR & MICHELLE V 11-4S-16-02905-416 Columbia Cou
1000-621 362 SW STORY PLACE

LAKE CITY

FL 32024

PRINTED 3/07/2006 9:34
APPR 11/18/2003 CM

USE 000100 SINGLE FAM	AE? Y	1569 HTD AREA	113.355 INDEX	11416.00 NBHD	PROP USE 000
MOD 1 SFR BATH	2.00	1829 EFF AREA	51.010 E-RATE	100.000 INDX	STR 11- 4S- 16
EXW 19 COMMON BRK FIXT		93297 RCN		2002 AYB	MKT AREA 06
30% 31 VINYL SID BDRM	3	96.77 %GOOD	90,283 B BLDG VAL	2002 EYB	(PUD1
RSTR 08 IRREGULAR RMS					AC .890
RCVR 03 COMP SHNGL UNITS		FIELD CK:			NTCD
% N/A C-W%		LOC: 362 STORY PL SW LAKE CITY			APPR CD
INT 05 DRYWALL HGHT					CNDO
% N/A PMTR			+---14---+		SUBD
FLR 14 CARPET STYS	1.0		IPTO2003 I		BLK
10% 08 SHT VINYL ECON			1 1		LOT
HTP 04 AIR DUCTED FUNC			*-5*2 2		MAP# 70-C
A/C 03 CENTRAL SPCD			+---13---* *---14---+---17---+		HX
QUAL 03 AVERAGE DEPR 52			IBAS2003	I	TXDT 002
FNDN N/A UD-1 N/A			I	I	
SIZE 02 L-SHAPED UD-2 N/A			I	I	----- BLDG TRA
CEIL N/A UD-3 N/A			3	3	BAS2003=W17 PTO2003=N12
ARCH N/A UD-4 N/A			0	0	/W2 N2/ W5 /S2 W2/ W13
FRME 02 WOOD FRAME UD-5 N/A			I	I	1 N20 W21\$ E33 FOP2003=
KTCH N/A UD-6 N/A			I	I	E7 S5 E13 N30\$.
WNDO N/A UD-7 N/A			I	I	
CLAS N/A UD-8 N/A			+-----21-----+ +---7---+ 1---13---+		
OCC N/A UD-9 N/A			IFGR2003 I I 0		
COND N/A % N/A			I I +---7---+		----- PERMIT:
SUB A-AREA % E-AREA SUB VALUE			2 2 FOP2003		NUMBER DESC
BAS03 1569 100 1569 77449			0 0		20778 SFR
PTO03 168 5 8 395			I I		
FGR03 420 55 231 11403			I I		----- SALE
FOP03 70 30 21 1036			+-----21-----+		BOOK PAGE DATE
					1000 621 11/18/200
					GRANTOR GIEBEIG
					GRANTEE WAYNE & MICHELL
					GRANTOR
					GRANTEE
TOTAL 2227 1829 90283					

EXTRA FEATURES

AE BN CODE	DESC	LEN	WID	HGHT	QTY	QL	YR	ADJ	UNITS	UT	PRICE	ADJ	UT	PR	SPCD	%
Y 0166	CONC, PAVMT				1		2003	1.00	838.000	SF	2.000		2.000			10

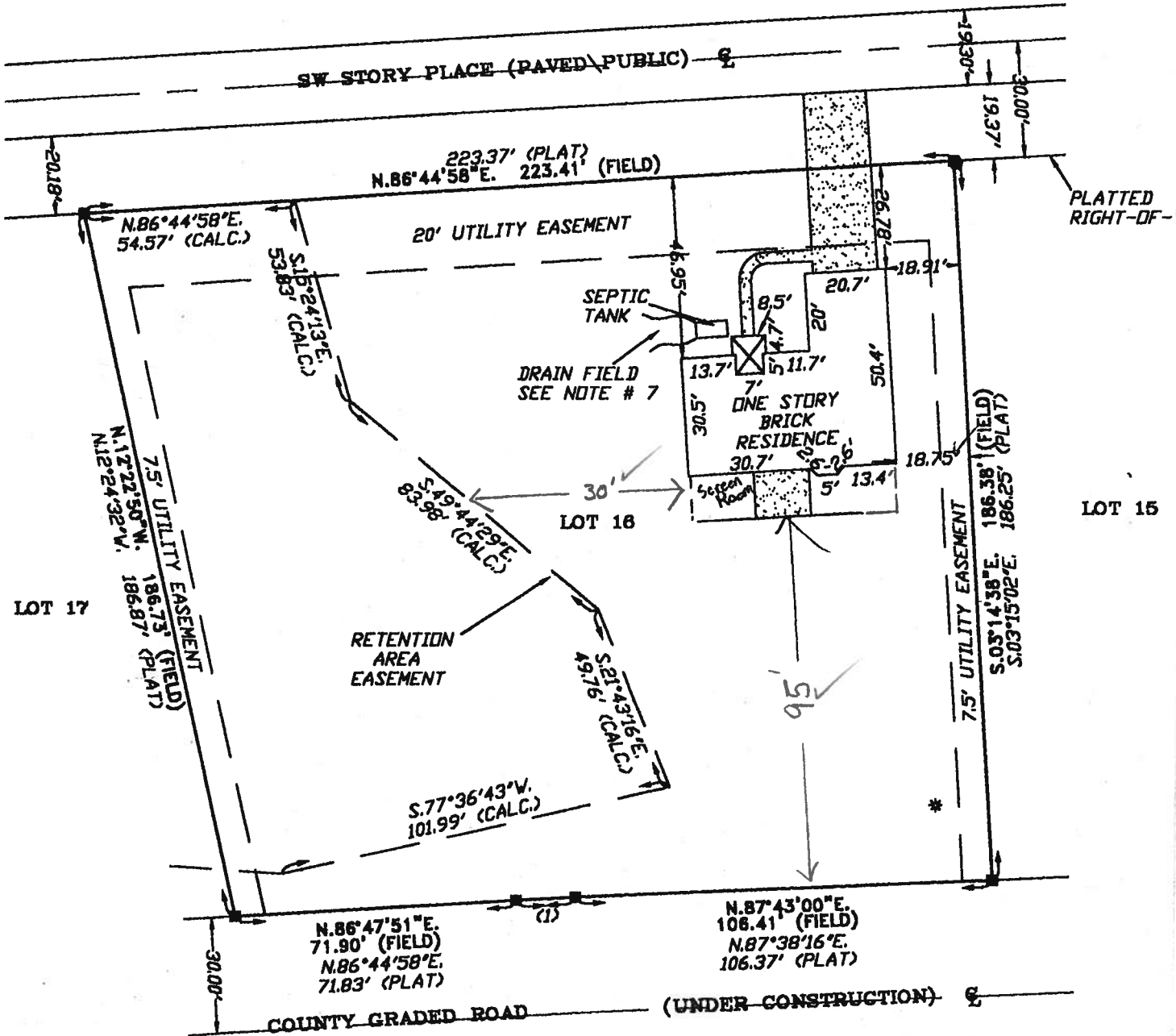
LAND DESC ZONE ROAD {UD1 {UD3 FRONT DEPTH FIELD CK:

AE CODE	DESC	ZONE	ROAD	{UD1	{UD3	FRONT	DEPTH	FIELD CK:	ADJUSTMENTS	UNITS	UT	PRICE	ADJ	UT	PR
Y 000100	SFR	RSF-1	0007					1.00 1.00 1.00 1.00		1.000	LT	17000.000		17000.0	
		0002	0003												

2006

Curve number 1

Radius= 1000.00'
Delta= 00°53'09" (00°53'05" PLAT)
Arc= 15.46' (15.44' PLAT)
Tangent= 7.73' (7.72' PLAT)
Chord= 15.46' (15.44' PLAT)
Chord Brg. N.87°19'29"E. (N.87°11'30"E. PLAT)



NOTE: ALL PROPERTY CORNERS AS SHOWN HEREON WERE IDENTIFIED

CERTIFIED TO:

WAYNE J., JR. & MICHELLE V. SAPP
FIRST FEDERAL SAVINGS BANK OF FLORIDA
ABSTRACT AND TITLE SERVICES, INC.
CHICAGO TITLE INSURANCE COMPANY

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THIS SURVEY WAS MADE UNDER MY A
TECHNICAL STANDARDS AS SET FORTH BY THE FLORIDA BOARD
IN CHAPTER 61G17-6, FLORIDA ADMINISTRATIVE CODE, PURSUANT

10/15/03
FIELD SURVEY DATE

10/19/03
DRAWING DATE

NOTE: UNLESS IT BEARS THE SIGNATURE AND THE ORIGINAL RAISE
MAPPER THIS DRAWING, SKETCH, PLAT OR MAP IS FOR INFORMATIO

SECTION 3A

SCREEN, ACRYLIC & VINYL ROOMS

General Notes and Specifications:

1. The following structures are designed to be married to block and wood frame structures of adequate structural capacity. The contractor / home owner shall verify that the host structure is in good condition and of sufficient strength to hold the proposed addition.
2. If there is a question about the host structure, the owner (at his own expense) shall hire an architect, engineer, or a certified home inspection company to verify host structure capacity.
3. The structures designed using this section shall be limited to a maximum projection of 16' from the host structure. Freestanding structures shall be limited to the maximum spans and size limits of component parts. Larger than these limits shall have site specific engineering.
4. The following rules apply to attachments involving mobile and manufactured homes:
 - a. Structures to be placed adjacent to a mobile / manufactured home built prior to 1994 shall use "fourth wall construction" or shall provide detailed plans of the mobile / manufactured home and inspection report along with addition plans for site specific review and seal by the engineer. This applies to all screen / glass rooms and / or structures to be attached.
 - b. "Fourth wall construction" means the addition shall be free standing with only the roof flashing of the two units being attached. The most common "fourth wall construction" is a post & beam frame adjacent to the mobile / manufactured home. The same span tables can be used as for the front wall beam. For fourth wall beam use the carrier beam table. The post shall be sized according to this manual and/or as a minimum be a 2" x 3" x 0.050" with an 18" x 2" x 0.044" knee brace at each end of the beam.
 - c. For mobile / manufactured homes built after 1994, structures may be attached, provided the project follows the plan provided in this manual. The contractor / owner shall provide verification that the structural system of the host structure is adequate for the addition to be attached.
 - d. If the mobile / manufactured home manufacturer certifies in writing that the mobile home may be attached to, then a "fourth wall" is NOT required.
5. Section 7 contains span tables and the attachment details for pans and composite panels.
6. Screen walls between existing walls, floors, and ceilings are considered infills and shall be allowed and heights shall be selected from the same tables as for other screen walls.
7. When using TEK screws in lieu of S.M.S., longer screws must be used to compensated for drill head.
8. For high velocity hurricane zones the minimum live load / applied load shall be 30 PSF.
9. All specified anchors are based on an enclosed building with a 16' projection and a 2' over hang for up to a wind velocity of 120 MPH.
10. Spans may be interpolated between values but not extrapolated outside values.
11. For Design Check List and Inspection Guides for Sreen, Acrylic & Vinyl Rooms, see Appendix (Section 10).
12. When notes refer to screen rooms, they shall apply to acrylic / vinyl rooms also.

Section 3A Design Statement:

The structures designed for Section 3A are solid roofs with screen or vinyl walls and are considered part of an open structural system which is designed to be married to an existing structure.

The design wind loads used for screen & vinyl rooms are from Chapter 20 of the 2004 Florida Building Code. The loads assume a mean roof height of less than 30'; roof slope of 0° to 20°; I = 0.77. All loads are based on 20 / 20 screen or larger. All pressures shown in the below table are in PSF (#/SF). Negative internal pressure coefficient is 0.00 for open structures.

Anchors for composite panel roof systems were computed on a load width of 10' and 16' projection with a 2' overhang. Any greater load width shall be site specific.

General Notes and Specifications for Section 3A Tables:

Section 3A Design Loads for Screen, Acrylic & Vinyl Rooms

	Roof	Wall	Over Hang All Roofs
100 MPH	+10 / -10	9	+20 / -30
110 MPH	+10 / -11	11	+20 / -36
120 MPH	+10 / -13	13	+20 / -43
123 MPH	+10 / -14	14	+20 / -45
130 MPH	+10 / -15	15	+20 / -50
140A MPH	+30 / -17	18	+30 / -58
140B MPH	+30 / -18	18	+30 / -58
150 MPH	+30 / -20	20	+30 / -67

Note 1: Framing systems of screen, vinyl, and glass rooms are considered to be main frame resistance components. Wind loads are listed as minus loads for roofs and plus loads for walls. To convert above wind loads to "C" Exposure loads multiply by 1.4.

Conversion Table 3A-A Wind Zone Conversions for Screen & Vinyl Rooms

From 120 MPH Wind Zone to Others

Wind Zone MPH	Roofs			Walls		
	Applied Load (#/SF)	Deflection (d)	Bending (b)	Applied Load (#/SF)	Deflection (d)	Bending (b)
100	10	1.09	1.14	10	1.12	1.18
110	11	1.06	1.09	11	1.08	1.13
120	13	1.00	1.00	14	1.00	1.00
123	14	0.98	0.96	15	0.98	0.97
130	15	0.95	0.93	16	0.96	0.94
140A	17	0.91	0.87	18	0.92	0.88
140B	18	0.90	0.85	18	0.92	0.88
150	30	0.76	0.66	21	0.87	0.82

Conversion Table 3A-B Wind Zone Conversions for Over Hangs All Room Types

From 120 MPH Wind Zone to Others

Wind Zone MPH	Applied Load (#/SF)	Deflection (d)	Bending (b)
100	30	1.13	1.20
110	36	1.06	1.09
120	43	1.00	1.00
123	45	0.98	0.98
130	50	0.95	0.93
140A	58	0.91	0.86
140B	58	0.91	0.86
150	67	0.86	0.80

Conversion Table 3A-C Conversion Based on Mean Height of Host Structure for Screen Rooms From Exposure 'B' to 'C'

Mean Host Structure Height	Load Multiplier	Span Multiplier	
		Pans	Composite Panels
0 - 15'	1.21	0.94	0.91
15' - 20'	1.29	0.92	0.88
20' - 25'	1.34	0.91	0.86
25' - 30'	1.40	0.89	0.85

COMPOSITE ROOF PANELS:
 (4) 1/4" x 4" LAG BOLTS W/
 1-1/4" FENDER WASHERS PER
 4'-0" PANEL ACROSS THE
 FRONT AND 24" O.C. ALONG
 SIDES

RISER PANELS ATTACHED PER
 CHAPTER 7

2" x 2" OR 2" x 3" HOLLOW

HEADER ATTACHED TO POST
 W/ MIN. (3) #10 x 1-1/2" S.M.S.
 IN SCREW BOSSES

GIRT AND KICK PLATE 2" x 2"
 HOLLOW RAIL

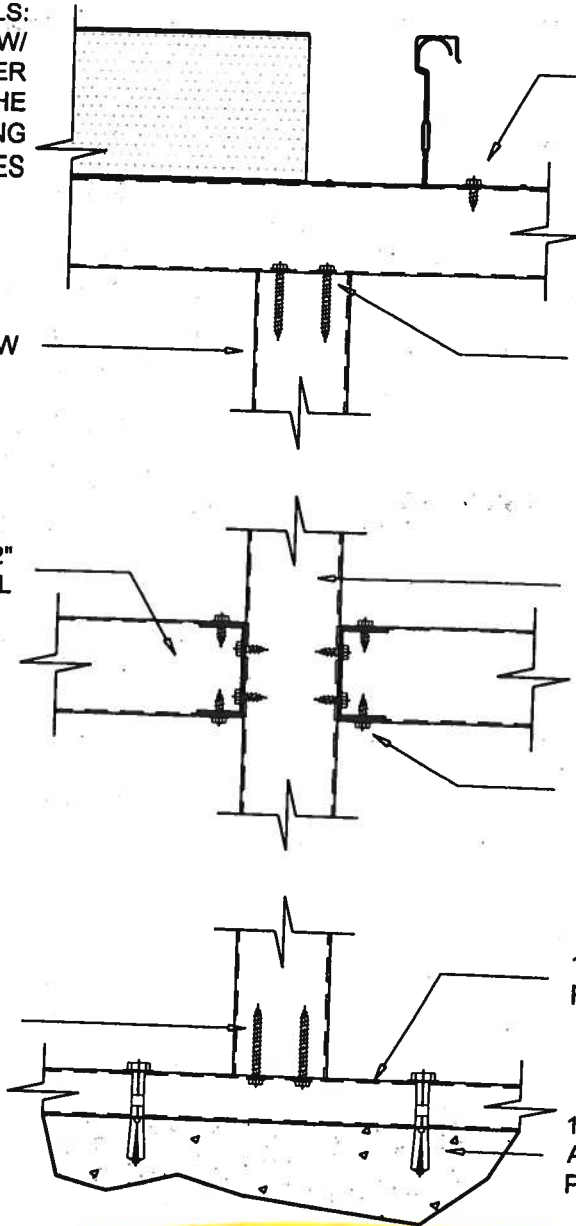
2" x 2", 2" x 3" OR 3" x 2"
 HOLLOW (SEE SPAN TABLES)

FOR SNAP EXTRUSIONS GIRT
 ATTACHED TO POST WITH
 MIN. (3) #10 x 1/2" S.M.S. IN
 SCREW BOSSES

POST ATTACHED TO BOTTOM
 W/ MIN. (3) #10 x 1-1/2" S.M.S. IN
 SCREW BOSSES

1" x 2" OPEN BACK BOTTOM
 RAIL

1/4" x 2-1/4" MASONRY
 ANCHOR @ 6" FROM EACH
 POST AND 24" O.C. (MAX.)



TYPICAL UPRIGHT DETAIL

SCALE: 3" = 1'-0"

Lawrence E. Bennett, P.E.
 CIVIL ENGINEER - DEVELOPMENT CONSULTANT
 P.O. BOX 214368, SOUTH DAYTONA, FL 32121
 TELEPHONE (386) 787-4774
 FAX (386) 787-6556

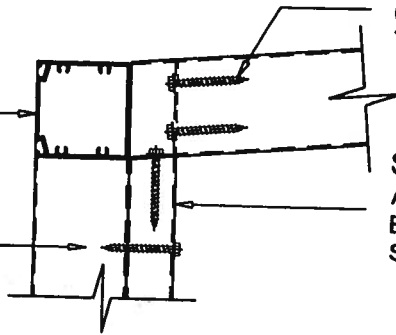
SECTION 3

SCREEN, ACRYLIC / VINYL, GLASS & MODULAR ROOMS

ALTERNATE CONNECTION:
(2) #10 x 1-1/2" S.M.S.
THROUGH SPLINE GROOVES

EDGE BEAM

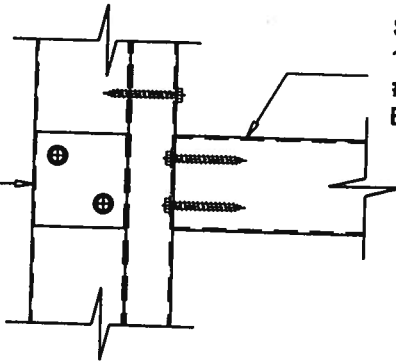
1" x 2" OPEN BACK ATTACHED
TO FRONT POST W/
#10 x 1-1/2" S.M.S. MAX. 6"
FROM EACH END OF POST
AND 24" O.C.



SIDE WALL HEADER
ATTACHED TO 1" x 2" OPEN
BACK W/ MIN. (2) #10 x 1-1/2"
S.M.S.

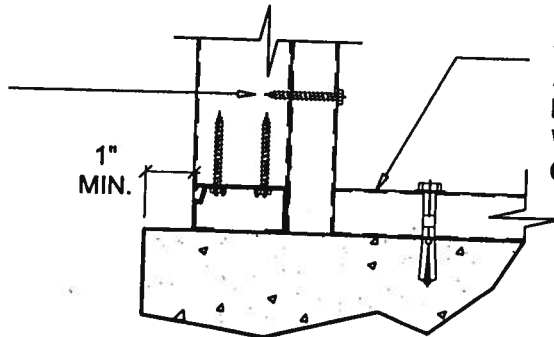
FRONT WALL GIRT

SIDE WALL GIRT ATTACHED TO
1" x 2" OPEN BACK W/ MIN. (3)
#10 x 1-1/2" S.M.S. IN SCREW
BOSSSES



1" x 2" OPEN BACK ATTACHED
TO FRONT POST W/
#10 x 1-1/2" S.M.S. MAX. 6"
FROM EACH END OF POST
AND 24" O.C.

FRONT AND SIDE BOTTOM
RAILS ATTACHED TO
CONCRETE W/ 1/4" x 2-1/4"
CONCRETE / MASONRY
ANCHORS @ 6" FROM EACH
POST AND 24" O.C. MAX. AND
WALLS MIN. 1" FROM EDGE OF
CONCRETE



TYPICAL & ALTERNATE CORNER DETAIL

SCALE: 3" = 1'-0"

Lawrence E. Bennett, P.E.
CIVIL ENGINEER - DEVELOPMENT CONSULTANT
P.O. BOX 214368, SOUTH DAYTONA, FL 32121
TELEPHONE (386) 767-4774
FAX (386) 767-6556

PAGE

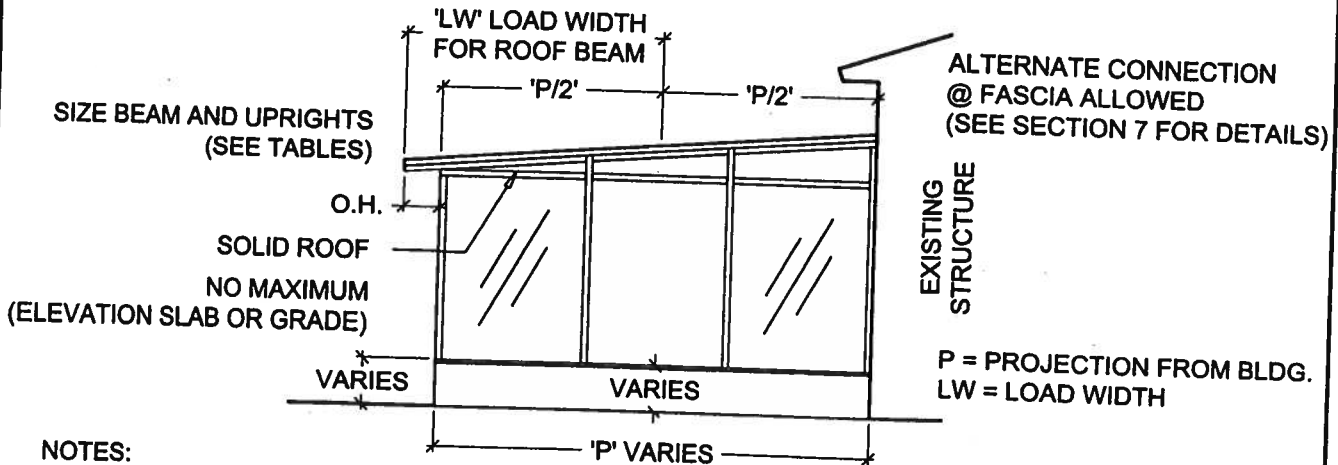
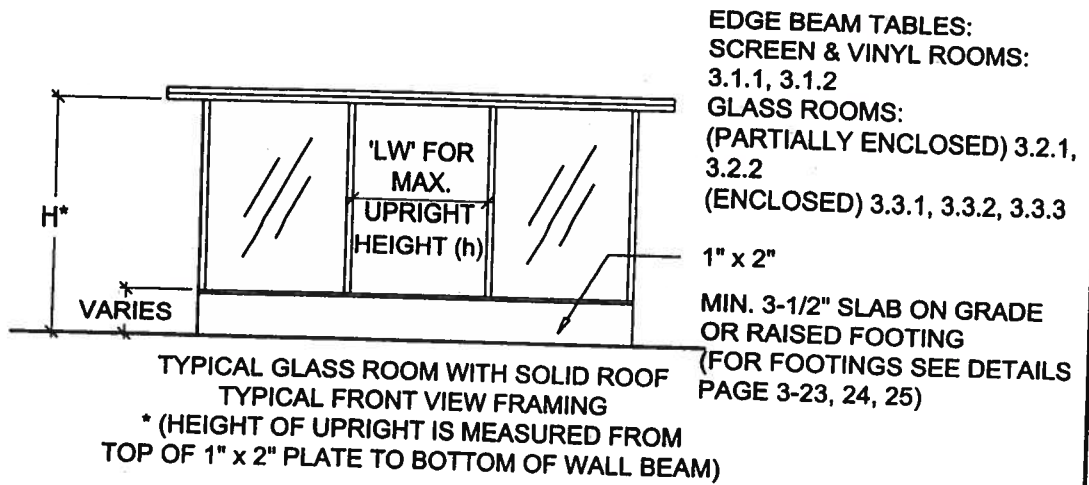
3-16

© COPYRIGHT 2003

NOT TO BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF LAWRENCE E. BENNETT, P.E.

SECTION 3

SCREEN, ACRYLIC / VINYL, GLASS & MODULAR ROOMS



NOTES:

1. ANCHOR 1" x 2" OPEN BACK EXTRUSION W/ 1/4" x 2-1/4" CONCRETE FASTENER MAX. OF 2'-0" O.C. AND W/ IN 6" EACH SIDE OF UPRIGHT ANCHOR 1" x 2" TO WOOD WALL W/ #10 x 2-1/2" S.M.S. W/ WASHERS OR #10 x 2-1/2" WASHER HEADED SCREW 2'-0" O.C.. ANCHOR BEAM AND COLUMN INTERNALLY OR W/ ANCHOR CLIPS AND (2) #8 SCREWS W/ WASHERS @ EACH POINT OF CONNECTION.
2. SELECT FRONT WALL BEAM FROM TABLE USING LARGER LOAD WIDTH VALUE OF P/2 OR P/2 + O.H.
3. SELECT SCREEN ROOM FORTH WALL BEAM FROM TABLE 3.1.3 AND GLASS ROOM FOURTH WALL BEAMS FROM TABLE 3.1.5 USING P/2
4. ANCHORS BASED ON 120 MPH WIND VELOCITY. FOR HIGHER WIND ZONES USE THE FOLLOWING CONVERSION:

100 - 123	130	140	150
#8	#10	#12	#12

TYPICAL SCREEN / GLASS ROOM

SCALE: 3/16" = 1'-0"

Lawrence E. Bennett, P.E.
 CIVIL ENGINEER - DEVELOPMENT CONSULTANT
 P.O. BOX 214388, SOUTH DAYTONA, FL 32121
 TELEPHONE (386) 787-4774
 FAX (386) 787-6558

**Table 3.1.5 Allowable Upright Heights, Chair Rail Spans or Header Spans
For Screen Rooms or Vinyl Rooms
Aluminum Alloy 6063 T-6**

For 3 second wind gust at 110 MPH velocity; using design load of 11 #/SF

Sections	Tributary Load Width 'W' = Purlin Spacing									
	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"
	Allowable Height 'H' / bending 'b' or deflection 'd'									
2" x 2" x 0.044" Hollow	9'-5" b	8'-9" b	8'-2" b	7'-8" b	7'-4" b	6'-11" b	6'-8" b	6'-5" b	6'-2" b	5'-11" b
2" x 2" x 0.055" Hollow	10'-3" b	9'-6" b	8'-11" b	8'-5" b	7'-11" b	7'-7" b	7'-3" b	6'-11" b	6'-9" b	6'-6" b
3" x 2" x 0.045" Hollow	11'-3" b	10'-5" b	9'-9" b	9'-3" b	8'-9" b	8'-4" b	7'-11" b	7'-8" b	7'-5" b	7'-2" b
3" x 2" x 0.070" Hollow	12'-9" d	12'-2" d	11'-7" d	10'-11" b	10'-5" b	9'-11" b	9'-6" b	9'-2" b	8'-10" b	8'-6" b
2" x 3" x 0.045" Hollow	12'-9" b	11'-9" b	11'-0" b	10'-5" b	9'-10" b	9'-5" b	8'-11" b	8'-8" b	8'-4" b	8'-1" b
2" x 4" x 0.050" Hollow	16'-3" b	15'-1" b	14'-1" b	13'-3" b	12'-7" b	12'-0" b	11'-6" b	11'-0" b	10'-8" b	10'-3" b
2" x 5" x 0.050" S.M.B.	23'-7" b	21'-10" b	20'-5" b	19'-3" b	18'-3" b	17'-5" b	16'-8" b	16'-0" b	15'-5" b	14'-11" b
2" x 6" x 0.050" S.M.B.	26'-1" b	24'-2" b	22'-7" b	21'-3" b	20'-2" b	19'-3" b	18'-5" b	17'-9" b	17'-1" b	16'-6" b
2" x 2" x 0.044" Snap	11'-3" b	10'-5" b	9'-9" b	9'-2" b	8'-8" b	8'-3" b	7'-11" b	7'-7" b	7'-4" b	7'-1" b
2" x 3" x 0.045" Snap	14'-4" b	13'-4" b	12'-5" b	11'-9" b	11'-2" b	10'-7" b	10'-2" b	9'-9" b	9'-5" b	9'-1" b
2" x 4" x 0.045" Snap	17'-7" b	16'-3" b	15'-3" b	14'-4" b	13'-7" b	12'-11" b	12'-5" b	11'-11" b	11'-6" b	11'-1" b

For 3 second wind gust at 120 MPH velocity; using design load of 13 #/SF

Sections	Tributary Load Width 'W' = Purlin Spacing									
	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"
	Allowable Height 'H' / bending 'b' or deflection 'd'									
2" x 2" x 0.044" Hollow	8'-8" b	8'-0" b	7'-6" b	7'-1" b	6'-8" b	6'-5" b	6'-1" b	5'-11" b	5'-8" b	5'-6" b
2" x 2" x 0.055" Hollow	9'-5" b	8'-9" b	8'-2" b	7'-9" b	7'-4" b	6'-11" b	6'-8" b	6'-5" b	6'-2" b	5'-11" b
3" x 2" x 0.045" Hollow	10'-5" b	9'-7" b	8'-11" b	8'-6" b	8'-0" b	7'-8" b	7'-4" b	7'-1" b	6'-10" b	6'-7" b
3" x 2" x 0.070" Hollow	12'-1" d	11'-5" b	10'-8" b	10'-1" b	9'-7" b	9'-2" b	8'-9" b	8'-5" b	8'-1" b	7'-10" b
2" x 3" x 0.045" Hollow	12'-10" b	11'-11" b	11'-2" b	10'-6" b	9'-11" b	9'-6" b	9'-1" b	8'-9" b	8'-5" b	8'-2" b
2" x 4" x 0.050" Hollow	14'-11" b	13'-10" b	12'-11" b	12'-2" b	11'-7" b	11'-0" b	10'-7" b	10'-2" b	9'-9" b	9'-5" b
2" x 5" x 0.050" S.M.B.	21'-8" b	20'-1" b	18'-9" b	17'-9" b	16'-10" b	16'-0" b	15'-4" b	14'-9" b	14'-2" b	13'-9" b
2" x 6" x 0.050" S.M.B.	23'-11" b	22'-2" b	20'-9" b	19'-7" b	18'-7" b	17'-9" b	16'-11" b	16'-3" b	15'-8" b	15'-2" b
2" x 2" x 0.044" Snap	10'-4" b	9'-7" b	8'-11" b	8'-5" b	7'-11" b	7'-7" b	7'-0" b	6'-9" b	6'-9" b	6'-6" b
2" x 3" x 0.045" Snap	13'-3" b	12'-3" b	11'-5" b	10'-9" b	10'-3" b	9'-9" b	9'-4" b	8'-11" b	8'-8" b	8'-4" b
2" x 4" x 0.045" Snap	16'-2" b	14'-11" b	14'-0" b	13'-2" b	12'-6" b	11'-11" b	11'-5" b	10'-11" b	10'-7" b	10'-3" b

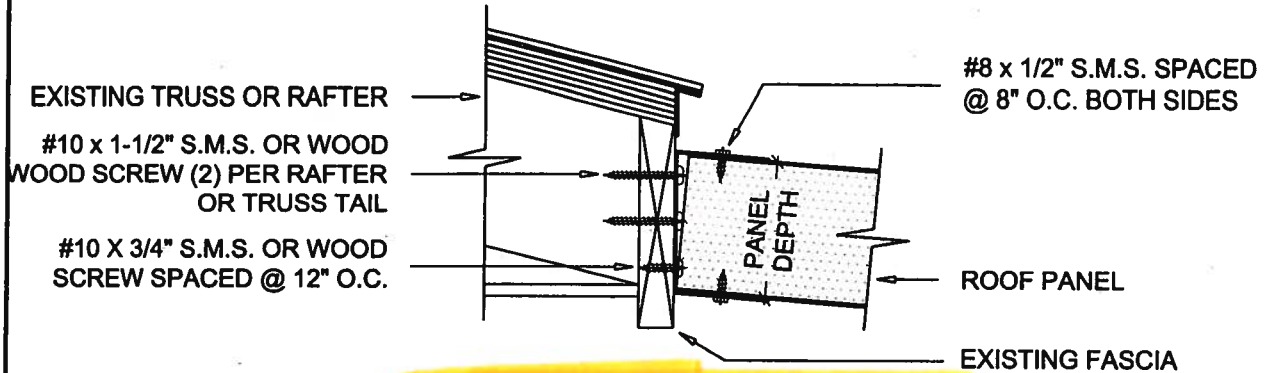
For 3 second wind gust at 130 MPH velocity; using design load of 15 #/SF

Sections	Tributary Load Width 'W' = Purlin Spacing									
	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"
	Allowable Height 'H' / bending 'b' or deflection 'd'									
2" x 2" x 0.044" Hollow	8'-1" b	7'-6" b	6'-11" b	6'-7" b	6'-3" b	5'-11" b	5'-8" b	5'-8" b	5'-3" b	5'-1" b
2" x 2" x 0.055" Hollow	8'-10" b	8'-2" b	7'-7" b	7'-2" b	6'-10" b	6'-6" b	6'-3" b	5'-11" b	5'-9" b	5'-7" b
3" x 2" x 0.045" Hollow	9'-8" b	8'-11" b	8'-4" b	7'-11" b	7'-6" b	7'-2" b	6'-10" b	6'-7" b	6'-4" b	6'-1" b
3" x 2" x 0.070" Hollow	11'-6" b	10'-8" b	9'-11" b	9'-5" b	8'-11" b	8'-6" b	8'-2" b	7'-10" b	7'-6" b	7'-3" b
2" x 3" x 0.045" Hollow	11'-11" b	11'-1" b	10'-4" b	9'-9" b	9'-3" b	8'-10" b	8'-5" b	8'-2" b	7'-10" b	7'-7" b
2" x 4" x 0.050" Hollow	13'-11" b	12'-11" b	12'-1" b	11'-4" b	10'-9" b	10'-3" b	9'-10" b	9'-5" b	9'-1" b	8'-10" b
2" x 5" x 0.050" S.M.B.	20'-2" b	18'-8" b	17'-6" b	16'-6" b	15'-8" b	14'-11" b	14'-3" b	13'-9" b	13'-3" b	12'-9" b
2" x 6" x 0.050" S.M.B.	22'-4" b	20'-8" b	19'-4" b	18'-3" b	17'-3" b	16'-6" b	15'-9" b	15'-2" b	14'-7" b	14'-1" b
2" x 2" x 0.044" Snap	9'-7" b	8'-11" b	8'-4" b	7'-10" b	7'-5" b	7'-1" b	6'-9" b	6'-6" b	6'-3" b	6'-1" b
2" x 3" x 0.045" Snap	12'-4" b	11'-5" b	10'-8" b	10'-1" b	9'-6" b	9'-1" b	8'-8" b	8'-4" b	8'-1" b	7'-9" b
2" x 4" x 0.045" Snap	15'-1" b	13'-11" b	13'-0" b	12'-4" b	11'-8" b	11'-1" b	10'-8" b	10'-3" b	9'-10" b	9'-6" b

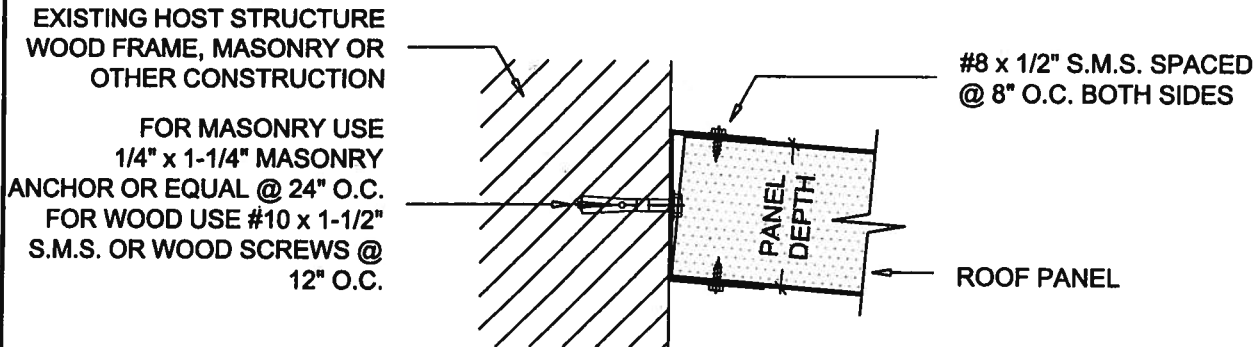
Notes:

1. Above spans do not include length of knee brace. Add horizontal distance from upright to center of brace to beam connection to the above spans for total beam spans.
2. Spans may be interpolated.

Lawrence E. Bennett, P.E.
 CIVIL ENGINEER - DEVELOPMENT CONSULTANT
 P.O. BOX 214588, SOUTH DAYTONA, FL 32121
 TELEPHONE (386) 767-4774
 FAX (386) 767-6556

COMPOSITE ROOF ANCHORING DETAILS**ROOF PANEL TO FASCIA DETAIL**

SCALE: 3" = 1'-0"

**ROOF PANEL TO WALL DETAIL**

SCALE: 3" = 1'-0"

NOTES: WOOD STRUCTURES SHOULD CONNECT TO TRUSS BUTTS OR THE SUB-FASCIA FRAMING WHERE POSSIBLE ONLY. 15% OF SCREWS CAN BE OUTSIDE THE TRUSS BUTTS. SUB-FASCIA AND THOSE AREAS SHALL HAVE DOUBLE ANCHORS. ALL SCREWS INTO THE HOST STRUCTURE SHALL HAVE MINIMUM 1-1/4" WASHERS OR SHALL BE WASHER HEADED SCREWS.

HEADER INSIDE DIMENSION SHALL BE EQUAL TO PANEL OR PAN'S DEPTH "t". THE WALL THICKNESS SHALL BE THE THICKNESS OF THE ALUMINUM PAN OR COMPOSITE PANEL WALL THICKNESS. HEADERS SHALL BE ANCHORED TO THE HOST STRUCTURE WITH ANCHORS APPROPRIATE FOR THE MATERIAL CONNECTED TO. THE ANCHORS DETAILED ABOVE ARE BASED ON A LOAD FROM 120 M.P.H. FOR SBC SECTION 1606 FOR A MAXIMUM POSSIBLE SPAN OF THE ROOF PANEL FROM THE HOST STRUCTURE.

Lawrence E. Bennett, P.E.

CIVIL ENGINEER - DEVELOPMENT CONSULTANT

P.O. BOX 214368, SOUTH DAYTONA, FL 32121

TELEPHONE (386) 767-4774

FAX (386) 767-6556

SOLID ROOF PANEL PRODUCTS

SECTION 7

**Table 7.1.4 Allowable Spans for Industry Standard Riser Panels for Various Loads
Aluminum Alloy 3105 H-28**

3" x 12" x 0.024" 2 or 5 Rib Riser Panels

Wind Region	Open Structures Mono-Sloped Roof						Screen Rooms & Attached Covers			Glass Rooms						Overhang / Cantilever All Roofs
	Partially Enclosed			Enclosed			Partially Enclosed			Enclosed						
	1&2 span	3 span	4 span	1&2 span	3 span	4 span	1&2 span	3 span	4 span	1&2 span	3 span	4 span				
100 MPH	16'-1"	19'-10"	20'-3"	15'-1"	19'-2"	19'-7"	11'-5"	14'-7"	14'-11"	12'-9"	15'-9"	16'-1"	4'-0"			
110 MPH	15'-7"	19'-10"	20'-3"	14'-0"	18'-2"	18'-6"	10'-8"	13'-7"	13'-10"	11'-6"	14'-10"	15'-1"	4'-0"			
120 MPH	14'-8"	19'-2"	19'-7"	13'-5"	17'-4"	17'-8"	10'-1"	12'-10"	13'-1"	10'-11"	13'-11"	14'-2"	4'-0"			
123 MPH	14'-6"	18'-9"	19'-1"	13'-3"	16'-4"	17'-4"	9'-11"	12'-7"	12'-10"	10'-9"	13'-8"	13'-11"	4'-0"			
130 MPH	14'-0"	17'-9"	18'-1"	12'-9"	15'-9"	16'-1"	9'-7"	11'-10"	12'-5"	10'-4"	13'-2"	13'-5"	3'-11"			
140 MPH	11'-2"	13'-9"	14'-0"	11'-2"	13'-9"	14'-0"	9'-2"	11'-4"	11'-6"	9'-10"	12'-7"	12'-10"	3'-9"			
150 MPH	11'-2"	13'-9"	14'-0"	11'-2"	13'-9"	14'-0"	8'-9"	10'-10"	11'-0"	9'-5"	11'-7"	12'-3"	3'-7"			

3" x 12" x 0.030" 2 or 5 Rib Riser Panels

Wind Region	Open Structures Mono-Sloped Roof						Screen Rooms & Attached Covers			Glass Rooms						Overhang / Cantilever All Roofs
	Partially Enclosed			Enclosed			Partially Enclosed			Enclosed						
	1&2 span	3 span	4 span	1&2 span	3 span	4 span	1&2 span	3 span	4 span	1&2 span	3 span	4 span				
100 MPH	17'-4"	21'-5"	21'-10"	16'-4"	20'-9"	21'-2"	12'-9"	15'-9"	16'-1"	13'-9"	17'-7"	17'-11"	4'-0"			
110 MPH	17'-4"	21'-5"	21'-10"	15'-2"	19'-7"	20'-0"	11'-6"	14'-8"	14'-11"	12'-11"	15'-11"	16'-4"	4'-0"			
120 MPH	15'-10"	20'-9"	21'-2"	14'-6"	18'-8"	19'-1"	10'-11"	13'-10"	14'-1"	11'-9"	15'-0"	15'-4"	4'-0"			
123 MPH	15'-8"	20'-2"	20'-7"	14'-3"	18'-4"	18'-9"	10'-9"	13'-7"	13'-11"	11'-7"	14'-9"	15'-1"	4'-0"			
130 MPH	15'-2"	19'-2"	19'-6"	13'-9"	17'-7"	17'-11"	10'-4"	13'-2"	13'-5"	11'-2"	14'-3"	14'-6"	4'-0"			
140 MPH	12'-0"	14'-10"	15'-2"	12'-0"	14'-10"	15'-2"	9'-11"	12'-6"	12'-9"	10'-8"	13'-7"	13'-10"	4'-0"			
150 MPH	12'-0"	14'-10"	15'-2"	12'-0"	14'-10"	15'-2"	9'-5"	11'-8"	11'-11"	10'-2"	12'-11"	13'-3"	3'-10"			

3" x 12" x 0.050" 2 or 5 Rib Riser Panels

Wind Region	Open Structures Mono-Sloped Roof						Screen Rooms & Attached Covers			Glass Rooms						Overhang / Cantilever All Roofs
	Partially Enclosed			Enclosed			Partially Enclosed			Enclosed						
	1&2 span	3 span	4 span	1&2 span	3 span	4 span	1&2 span	3 span	4 span	1&2 span	3 span	4 span				
100 MPH	20'-3"	25'-0"	25'-6"	19'-7"	24'-3"	24'-9"	14'-11"	18'-11"	19'-4"	16'-1"	20'-7"	20'-11"	4'-0"			
110 MPH	20'-3"	25'-0"	25'-6"	18'-7"	22'-11"	23'-5"	13'-11"	17'-9"	18'-1"	15'-2"	19'-7"	19'-11"	4'-0"			
120 MPH	19'-7"	24'-3"	24'-9"	17'-8"	21'-10"	22'-4"	13'-1"	16'-2"	16'-6"	14'-2"	18'-5"	18'-10"	4'-0"			
123 MPH	19'-1"	23'-7"	24'-1"	17'-4"	21'-5"	21'-10"	12'-11"	15'-11"	16'-3"	13'-11"	18'-1"	18'-5"	4'-0"			
130 MPH	18'-1"	22'-4"	22'-10"	16'-1"	20'-7"	20'-11"	12'-5"	15'-5"	15'-8"	13'-6"	17'-4"	17'-8"	4'-0"			
140 MPH	14'-1"	17'-4"	17'-8"	14'-1"	17'-4"	17'-8"	11'-7"	14'-8"	14'-11"	12'-10"	15'-11"	16'-3"	4'-0"			
150 MPH	14'-1"	17'-4"	17'-8"	14'-1"	17'-4"	17'-8"	11'-0"	14'-0"	14'-4"	12'-3"	15'-2"	15'-6"	4'-0"			

Note: Total roof panel width = room width + wall width + overhang.

Lawrence E. Bennett, P.E.
 CIVIL ENGINEER - DEVELOPMENT CONSULTANT
 P.O. BOX 214368, SOUTH DAYTONA, FL 32121
 TELEPHONE (386) 767-4774
 FAX (386) 767-6556

SECTION 7

SOLID ROOF PANEL PRODUCTS

General Notes and Specifications:

1. The following attachments are designed to be married to block and wood frame structures of adequate structural capacity. The contractor / home owner shall verify that the host structure is in good condition and of sufficient strength to hold the proposed addition.
2. If there is a question about the host structure, the owner (at his own expense) shall hire an architect, engineer, or a certified home inspection company to verify host structure capacity.
3. Roll formed roof panels (pans) are designed for uniform loads and can not be walked on unless plywood is laid across the ribs. Pans have been tested and perform better in wind uplift loads than dead load + live loads. Spans for pans are based on deflection of L/80 for high wind zone criteria.
4. Composite panels can be loaded as walk on or uniform loads and have, when tested performed well in either test. The composite panel tables are based on bending properties determined at a deflection limit of L/180.
5. The following rules apply to attachments involving mobile and manufactured homes:
 - a. Structures to be placed adjacent to a mobile / manufactured home built prior to 1994 shall use "fourth wall construction" or shall provide detailed plans of the mobile / manufactured home along with addition plans for site specific review and seal by the engineer. This applies to all screen / glass rooms, and / or other structures to be attached.
 - b. For mobile / manufactured homes built after 1994, structures may be attached provided the project follows the plan for attachment of this manual. The contractor / home owner shall provide verification of the structural system used to build the host structure.
6. The shapes and capacities of pans and composite panels are from "Industry Standard" shapes, except for manufacturers proprietary shapes. Unless the manufacturer of the product is known, use the "Industry Standard" Tables for allowable spans.
7. When converting a screen room to a glass room or a carport to a garage, the roof must be checked and reinforced for the enclosed building requirements.
8. When using TEK screws in lieu of S.M.S. longer screws must be used to compensate for drill head.
9. For high velocity hurricane zones the minimum live load / applied load shall be 30 PSF.
10. Interior walls & ceilings of composite panels may have 1/2" sheet rock added by securing the sheet rock w/ 1" fine thread sheet rock screws at 16" O.C. each way.
11. All fascia gutter end caps shall have water relief ports.
12. Spans may be interpolated between values but not extrapolated outside values.
13. Design Check List and Inspection Guides for Solid Roof Panel Systems are included in inspection guides for sections 2, 3A & B, 4 & 5. Use section 2 inspection guide for solid roof in Section 1.
14. All exposed screw heads through roof panels into the roof sub structure shall be caulked w/ silicon sealant.

Section 7 Design Statement:

The roof systems designed for section 7 are Main Wind Force Resisting Systems and Components and Cladding. In conformance with the 2004 Florida Building Code such systems must be designed using loads for components & cladding. Thus, Section 7 uses several different categories of these loads as described below. All pressures shown in the table below are in PSF (#/SF).

1. **Free-standing Structures with Mono-sloped Roofs** with a minimum live load of 10 PSF except for 140B and 150 MPH loads which are 30 PSF. The design wind loads used are from ASCE 7-98 Section 6.5, Analytical Procedure. The loads assume a mean roof height of less than 30'; roof slope of 0° to 10°; $I = 0.77$ for open structures & 1.00 for all others. Negative internal pressure coefficient is 0.18 for enclosed and 0.55 for partially enclosed structures.

2. **Attached Covers** such as carports, patio covers, gabled carports, and screen rooms with a minimum live load of 10 PSF except for 140B and 150 MPH loads which are 30 PSF. The design wind loads used are from ASCE 7-98 Section 6.5, Analytical Procedure. Roof slope of 0° to 25° (+/- 10°); $I = 1.00$. Negative internal pressure coefficient is 0.18 for enclosed and 0.55 for partially enclosed structures.

3. **Glass & Modular Rooms** design loads use a minimum live load of 20 PSF and wind loads are from ASCE 7-98 Section 6.5, Analytical Procedure and the 2004 Florida Building Code. The loads assume a mean roof height of less than 30'; roof slope of 20° to 30° (+/- 10°); $I = 1.00$.

a. **Enclosed** structural systems use a negative internal pressure coefficient = +/- 0.18.

b. **Partially Enclosed** structural systems use a negative internal pressure coefficient = +/- 0.55.

4. **Overhangs** use a minimum live load of 20 PSF except for 140B and 150 MPH loads which are 30 PSF. Wind loads are from ASCE 7-98 Section 6.5, Analytical Procedure for Components & Cladding for Enclosed or Partially Enclosed Structural Systems. The loads assume a mean roof height of less than 30'; roof slope of 20° to 30° (+/- 10°); $I = 1.0$. Negative internal pressure coefficient is 0.18 for enclosed and 0.55 for partially enclosed structures.

5. Anchors for composite panel roof systems were computed on a load width of 10' and 16' projection with a 2' overhang. Any greater load width shall be site specific.

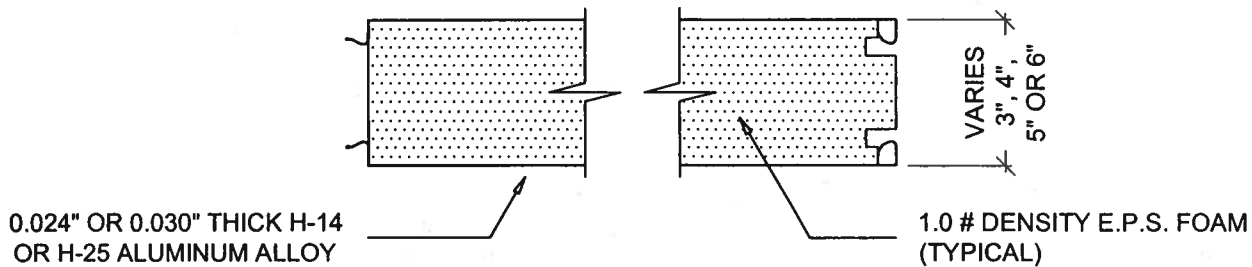
Conversion Table 7A
Load Conversion Factors Based on
Mean Roof Height of Host Structure
For All Components
Exposure "B" to "C"

Mean Host Structure Height	Pans	Composite Panels
0 - 15'	0.91	0.94
15' - 20'	0.88	0.92
20' - 25'	0.86	0.91
25' - 30'	0.85	0.89

Conversion Table 7B
Conversion Based on Mean Height of Host
Structure for Solid Roof Systems
From Exposure 'B' to 'C'

Mean Host Structure Height	Load Multiplier	Span Multiplier	
		Pans	Composite Panels
0 - 15'	1.21	0.94	0.91
15' - 20'	1.29	0.92	0.88
20' - 25'	1.34	0.91	0.86
25' - 30'	1.40	0.89	0.85

MANUFACTURERS PROPRIETARY PRODUCTS

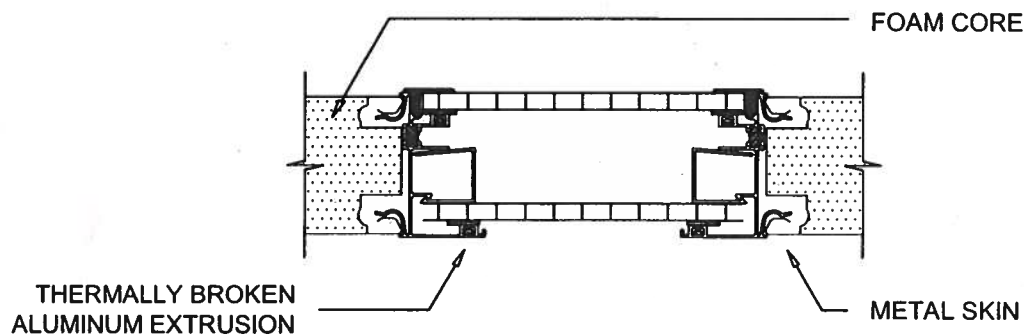


**METALS USA BUILDING PRODUCTS L.P.
PRO-FAB COMPOSITE PANEL W/ EZ-LOK**

SCALE: 3" = 1'-0"

Notes:

- 1) Total roof panel width = room width + wall width + overhang.
- 2) Spans may be interpolated between values but not extrapolated outside values.
- 3) The Sun Ray roof panel system is designed to span from support to support mated to a full 48" PRO-FAB panel between Sun Ray panels or between (2) 24" solid panels. Reference Table 7.3.6 or 7.3.7 for allowed spans of the Sun Ray roof panel system.



**SUN RAY ROOF PANEL
3" x 24" - TWIN WALL FULL LENGTH SYSTEM**

SCALE: 3" = 1'-0"

Lawrence E. Bennett, P.E. FL # 16644

CIVIL ENGINEER - DEVELOPMENT CONSULTANT
P.O. BOX 214368, SOUTH DAYTONA, FL 32121
TELEPHONE: (386) 767-4774
FAX: (386) 767-6556



Building Products L.P.

7815 American Way, Groveland, FL 34736
TEL: (352) 787-7766 x202 FAX: (352) 429-2011
TOLL FREE: 1-800-342-9077 bkaufmann@metalsusa.com

SOLID ROOF PANEL PRODUCTS

SECTION 7

Table 7.3.6 Allowable Spans for 0.024" PRO-FAB Composite Panels w/ EZ-LOCK for Various Loads Metals USA Building Products L.P.

Manufacturers Proprietary Products: Aluminum Alloy 3105 H-14 or H-25 Foam Core E.P.S. #1 Density 3" x 48" x 0.024" Roof Panel w/ EZ-LOCK

Wind Region	Open Structures Mono-Sloped Roof			Screen Rooms & Attached Covers			Glass & Modular Rooms Enclosed			Overhang / Cantilever All Roofs
	1&2 span	3 span	4 span	1&2 span	3 span	4 span	1&2 span	3 span	4 span	
100 MPH	21'-4"	23'-10"	23'-0"	20'-4"	22'-9"	21'-11"	15'-1"	17'-9"	16'-3"	4'-0"
110 MPH	21'-4"	23'-10"	23'-0"	18'-8"	20'-11"	20'-2"	13'-9"	15'-4"	14'-10"	4'-0"
120 MPH	20'-4"	22'-9"	21'-11"	17'-5"	19'-5"	18'-10"	12'-6"	13'-11"	13'-6"	4'-0"
123 MPH	19'-6"	21'-10"	21'-1"	15'-11"	18'-11"	18'-3"	11'-8"	13'-8"	13'-2"	4'-0"
130 MPH	18'-0"	20'-2"	19'-5"	15'-1"	17'-9"	16'-3"	11'-1"	12'-11"	12'-6"	4'-0"
140 MPH	12'-4"	13'-9"	13'-3"	12'-4"	13'-9"	13'-3"	10'-3"	11'-6"	11'-1"	4'-3"
150 MPH	12'-4"	13'-9"	13'-3"	12'-4"	13'-9"	13'-3"	9'-6"	10'-8"	10'-4"	3'-11"

4" x 48" x 0.024" Roof Panel w/ EZ-LOCK

Wind Region	Open Structures Mono-Sloped Roof			Screen Rooms & Attached Covers			Glass & Modular Rooms Enclosed			Overhang / Cantilever All Roofs
	1&2 span	3 span	4 span	1&2 span	3 span	4 span	1&2 span	3 span	4 span	
100 MPH	23'-5"	26'-2"	25'-3"	22'-3"	24'-11"	24'-1"	17'-5"	19'-6"	18'-10"	4'-0"
110 MPH	23'-5"	26'-2"	25'-3"	20'-6"	22'-11"	22'-2"	15'-1"	18'-0"	17'-5"	4'-0"
120 MPH	22'-3"	24'-11"	24'-1"	19'-1"	21'-4"	20'-7"	13'-9"	15'-4"	14'-10"	4'-0"
123 MPH	21'-5"	23'-11"	23'-2"	18'-6"	20'-9"	20'-0"	13'-5"	14'-11"	14'-6"	4'-0"
130 MPH	19'-9"	22'-1"	21'-4"	17'-5"	19'-6"	18'-10"	12'-8"	14'-2"	13'-8"	4'-0"
140 MPH	13'-6"	15'-1"	14'-7"	13'-6"	15'-1"	14'-7"	11'-3"	13'-3"	12'-9"	4'-0"
150 MPH	13'-6"	15'-1"	14'-7"	13'-6"	15'-1"	14'-7"	10'-5"	12'-4"	11'-4"	4'-0"

5" x 48" x 0.024" Roof Panel w/ EZ-LOCK

Wind Region	Open Structures Mono-Sloped Roof			Screen Rooms & Attached Covers			Glass & Modular Rooms Enclosed			Overhang / Cantilever All Roofs
	1&2 span	3 span	4 span	1&2 span	3 span	4 span	1&2 span	3 span	4 span	
100 MPH	26'-5"	29'-6"	28'-6"	25'-2"	28'-1"	27'-2"	19'-8"	21'-11"	21'-3"	4'-0"
110 MPH	26'-5"	29'-6"	28'-6"	23'-2"	25'-10"	24'-11"	18'-2"	20'-4"	19'-8"	4'-0"
120 MPH	25'-2"	28'-1"	27'-2"	21'-6"	24'-1"	23'-3"	15'-6"	18'-8"	18'-0"	4'-0"
123 MPH	24'-2"	27'-0"	26'-1"	20'-11"	23'-5"	22'-7"	15'-1"	18'-1"	17'-6"	4'-0"
130 MPH	22'-4"	24'-11"	24'-1"	19'-8"	21'-11"	21'-3"	14'-4"	15'-11"	15'-5"	4'-0"
140 MPH	15'-3"	17'-0"	16'-5"	15'-3"	17'-0"	16'-5"	13'-4"	14'-11"	14'-5"	4'-0"
150 MPH	15'-3"	17'-0"	16'-5"	15'-3"	17'-0"	16'-5"	12'-5"	13'-11"	13'-5"	4'-0"

6" x 48" x 0.024" Roof Panel w/ EZ-LOCK

Wind Region	Open Structures Mono-Sloped Roof			Screen Rooms & Attached Covers			Glass & Modular Rooms Enclosed			Overhang / Cantilever All Roofs
	1&2 span	3 span	4 span	1&2 span	3 span	4 span	1&2 span	3 span	4 span	
100 MPH	29'-1"	32'-6"	31'-5"	27'-8"	30'-11"	29'-11"	21'-8"	24'-3"	23'-5"	4'-0"
110 MPH	29'-1"	32'-6"	31'-5"	25'-6"	28'-6"	27'-6"	20'-1"	22'-5"	21'-8"	4'-0"
120 MPH	27'-8"	30'-11"	29'-11"	23'-9"	26'-6"	25'-8"	18'-5"	20'-7"	19'-10"	4'-0"
123 MPH	26'-8"	29'-9"	28'-9"	23'-1"	25'-9"	24'-11"	17'-10"	19'-11"	19'-3"	4'-0"
130 MPH	24'-7"	27'-6"	26'-6"	21'-8"	24'-3"	23'-5"	15'-9"	18'-9"	18'-2"	4'-0"
140 MPH	16'-9"	18'-9"	18'-2"	16'-9"	18'-9"	18'-2"	14'-9"	17'-4"	15'-11"	4'-0"
150 MPH	16'-9"	18'-9"	18'-2"	16'-9"	18'-9"	18'-2"	13'-8"	15'-4"	14'-10"	4'-0"

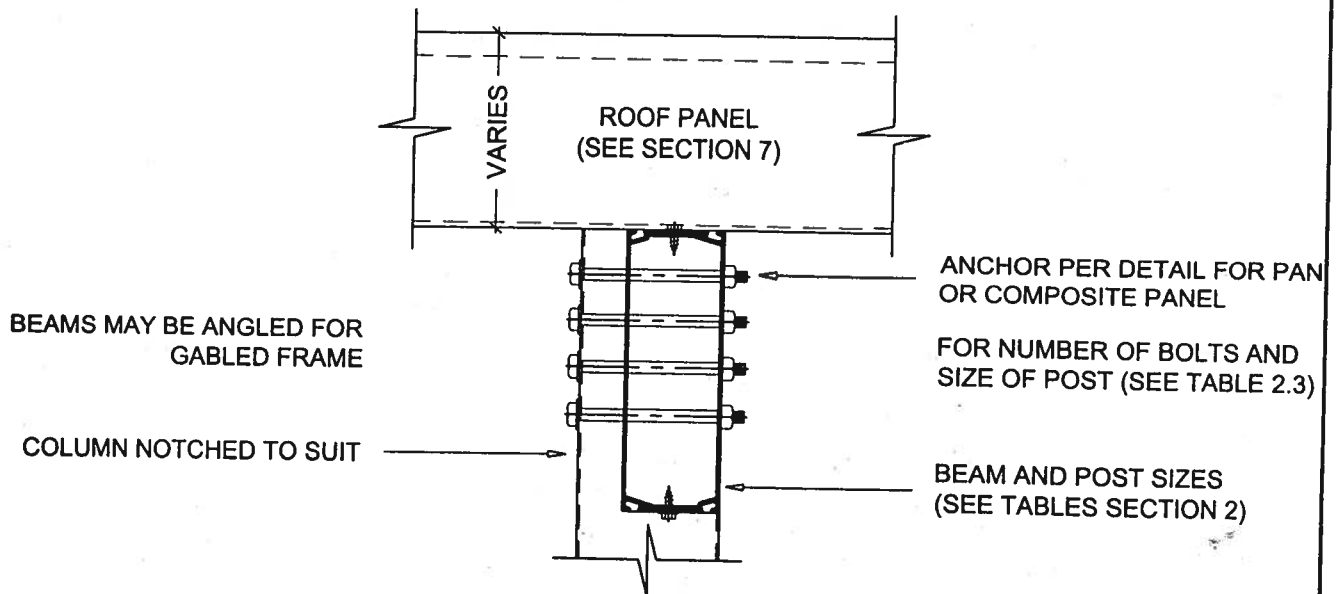
Note: Total roof panel width = room width + wall width + overhang



Building Products L.P.
 7815 American Way, Groveland, FL 34736
 TEL: (352) 787-7766 x202 FAX: (352) 429-2011
 TOLL FREE: 1-800-342-9077 bkaufmann@metalsusa.com

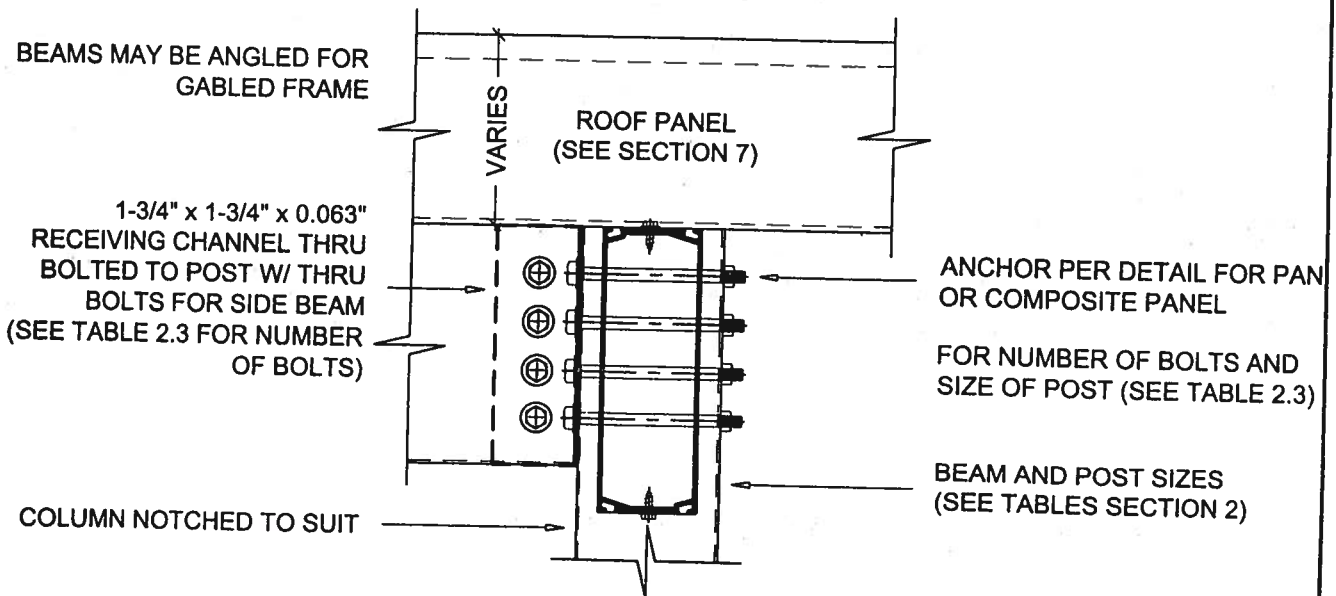
Lawrence E. Bennett, P.E. FL # 16644

CIVIL ENGINEER - DEVELOPMENT CONSULTANT
 P.O. BOX 214368, SOUTH DAYTONA, FL 32121
 TELEPHONE: (386) 767-4774
 FAX: (386) 767-6556



SIDE NOTCH POST TO BEAM CONNECTION

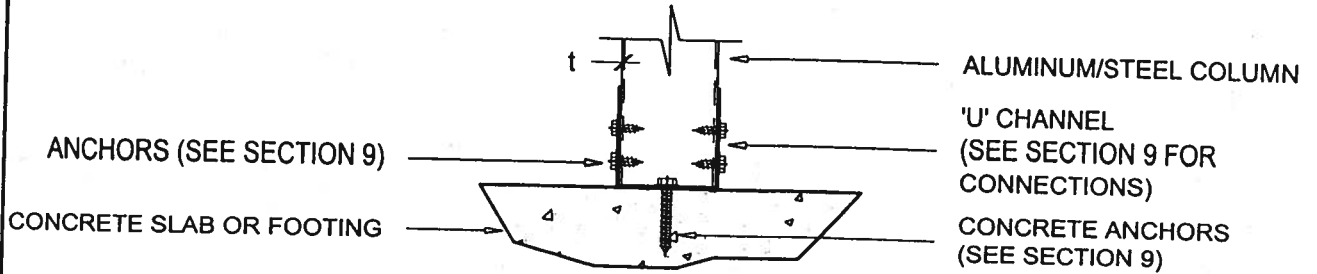
SCALE: 3" = 1'-0"



CENTER NOTCH POST TO BEAM CONNECTION

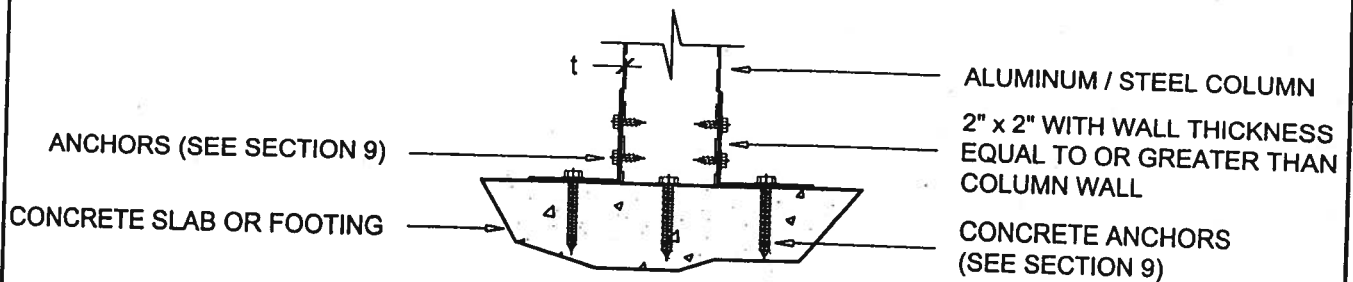
SCALE: 3" = 1'-0"

Lawrence E. Bennett, P.E.
 CIVIL ENGINEER - DEVELOPMENT CONSULTANT
 P.O. BOX 214368, SOUTH DAYTONA, FL 32121
 TELEPHONE (386) 767-4774
 FAX (386) 767-6556



**POST TO CONCRETE CONNECTION
INTERNAL OR EXTERNAL RECEIVING CHANNEL**

SCALE: 3" = 1'-0"

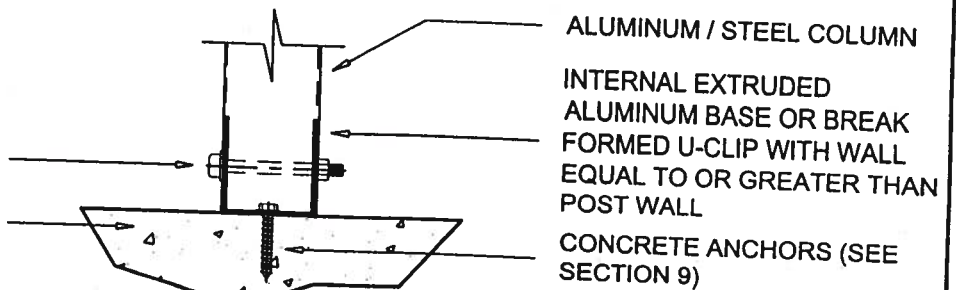


**POST TO CONCRETE CONNECTION
INTERNAL OR EXTERNAL ANGLE CLIPS**

SCALE: 3" = 1'-0"

NOTE:
ATTACHMENT DETAILS SHOWN
REQUIRE DIAGONAL BRACING
FOR FREE-STANDING COVERS

CORROSION RESISTIVE STEEL
THRU BOLT PER SCHEDULE
CONCRETE SLAB OR FOOTING



**POST TO CONCRETE CONNECTION
TUBE COLUMN BASE SCHEMATIC INTERNAL BASE**

SCALE: 3" = 1'-0"

Lawrence E. Bennett, P.E.
CIVIL ENGINEER - DEVELOPMENT CONSULTANT
P.O. BOX 214368, SOUTH DAYTONA, FL 32121
TELEPHONE (386) 767-4774
FAX (386) 767-6556

SECTION 2

ATTACHED & FREE-STANDING COVERS AND UTILITY SHEDS

**Table 2.1.1 A-110 Allowable Roof Beam Spans
for Freestanding Carports or Patio Covers with Mono-Sloped* Roofs
For 3 sec. wind gust for 110 MPH velocity;
Using design load of 10 #/SF (36 #/SF for Max. Cantilever)
Aluminum Alloy 6063 T-6**

2" x 3" x 0.045" Hollow					2" x 3" x 0.050" Hollow Tilt				
Load Width (ft.)	Max. Span 'L'/(bending 'b' or deflection 'd')				Load Width (ft.)	Max. Span 'L'/(bending 'b' or deflection 'd')			
	1&2 Span	3 Span	4 Span	Max. Cantilever		1&2 Span	3 Span	4 Span	Max. Cantilever
4	8'-4" d	10'-3" d	10'-6" d	1'-7" d	4	8'-2" d	10'-1" d	10'-4" d	1'-7" d
5	7'-9" d	9'-6" d	9'-9" d	1'-6" d	5	7'-7" d	9'-5" d	9'-7" d	1'-6" d
6	7'-3" d	8'-11" d	9'-1" b	1'-5" d	6	7'-2" d	8'-10" d	8'-11" b	1'-5" d
7	6'-11" d	8'-6" d	8'-5" b	1'-4" d	7	6'-9" d	8'-5" d	8'-3" b	1'-4" d
8	6'-7" d	8'-2" d	7'-11" b	1'-3" d	8	6'-6" d	7'-11" b	7'-8" b	1'-3" d
9	6'-4" d	7'-8" b	7'-5" b	1'-3" d	9	6'-3" d	7'-6" b	7'-3" b	1'-2" d
10	6'-2" d	7'-4" b	7'-1" b	1'-2" d	10	6'-0" d	7'-1" b	6'-11" b	1'-2" d
11	5'-11" d	6'-11" b	6'-9" b	1'-2" d	11	5'-10" d	6'-10" b	6'-7" b	1'-2" d
12	5'-9" d	6'-8" b	6'-5" b	1'-1" d	12	5'-8" d	6'-6" b	6'-3" b	1'-1" d
2" x 4" x 0.045" Hollow Tilt					2" x 4" x 0.044" x 0.100" Self Mating Beam				
Load Width (ft.)	Max. Span 'L'/(bending 'b' or deflection 'd')				Load Width (ft.)	Max. Span 'L'/(bending 'b' or deflection 'd')			
	1&2 Span	3 Span	4 Span	Max. Cantilever		1&2 Span	3 Span	4 Span	Max. Cantilever
4	10'-4" d	12'-9" d	13'-0" d	1'-11" d	4	12'-0" d	14'-10" d	15'-2" d	2'-4" d
5	9'-7" d	11'-10" d	11'-11" b	1'-10" d	5	11'-2" d	13'-10" d	14'-1" d	2'-2" d
6	9'-0" d	11'-2" d	10'-11" b	1'-9" d	6	10'-6" d	12'-11" d	13'-3" d	2'-0" d
7	8'-7" d	10'-6" b	10'-1" b	1'-8" d	7	9'-11" d	12'-4" d	12'-7" d	1'-11" d
8	8'-2" d	9'-10" b	9'-6" b	1'-7" d	8	9'-7" d	11'-10" d	11'-10" b	1'-10" d
9	7'-11" d	9'-3" b	8'-11" b	1'-6" d	9	9'-2" d	11'-4" d	11'-2" b	1'-9" d
10	7'-7" d	8'-9" b	8'-6" b	1'-6" d	10	8'-10" d	10'-11" b	10'-7" b	1'-9" d
11	7'-5" d	8'-4" b	8'-1" b	1'-5" d	11	8'-7" d	10'-5" b	10'-1" b	1'-8" d
12	7'-2" b	7'-11" b	7'-9" b	1'-5" d	12	8'-4" d	9'-11" b	9'-8" b	1'-7" d
2" x 5" x 0.050" x 0.100" Self Mating Beam					2" x 6" x 0.050" x 0.120" Self Mating Beam				
Load Width (ft.)	Max. Span 'L'/(bending 'b' or deflection 'd')				Load Width (ft.)	Max. Span 'L'/(bending 'b' or deflection 'd')			
	1&2 Span	3 Span	4 Span	Max. Cantilever		1&2 Span	3 Span	4 Span	Max. Cantilever
4	14'-11" d	18'-5" d	18'-10" d	2'-11" d	4	17'-6" d	21'-7" d	21'-11" d	3'-4" d
5	13'-10" d	17'-1" d	17'-5" d	2'-8" d	5	16'-2" d	20'-0" d	20'-5" d	3'-2" d
6	13'-0" d	16'-1" d	16'-5" d	2'-6" d	6	15'-3" d	18'-10" d	19'-3" d	2'-11" d
7	12'-5" d	15'-3" d	15'-7" d	2'-5" d	7	14'-6" d	17'-11" d	18'-1" b	2'-10" d
8	11'-10" d	14'-7" d	14'-8" b	2'-3" d	8	13'-10" d	17'-1" d	16'-11" b	2'-8" d
9	11'-5" d	14'-1" d	13'-10" b	2'-2" d	9	13'-4" d	16'-5" d	15'-11" b	2'-7" d
10	10'-11" d	13'-7" b	13'-1" b	2'-1" d	10	12'-10" d	15'-8" b	15'-2" b	2'-6" d
11	10'-8" d	12'-11" b	12'-6" b	2'-1" d	11	12'-6" d	14'-11" b	14'-5" b	2'-5" d
12	10'-4" d	12'-4" b	11'-11" b	1'-11" d	12	12'-1" d	14'-4" b	13'-10" b	2'-4" d

* Mono-sloped roofs include gables where the slope of the roof is less than 1" in 12".

Notes:

1. Above spans do not include length of knee brace. Add horizontal distance from upright to center of brace to beam connection to the above spans for total beam spans.
2. Spans may be interpolated.

Lawrence E. Bennett, P.E. FL # 16644

CIVIL ENGINEER - DEVELOPMENT CONSULTANT
P.O. BOX 214368, SOUTH DAYTONA, FL 32121
TELEPHONE: (386) 767-4774
FAX: (386) 767-6556

Table 2.3 Schedule of Post to Beam Size and Number of Thru-Bolts Required
Aluminum Alloy 6063 T-6

Beam Size	Minimum Post Size	# Thru-Bolts @ L=D+1/4"		Minimum Knee Brace*	Minimum # Knee Brace Screws
		1/4" Ø	3/8" Ø		
Hollow Sections					
2" x 3" x 0.050" Hollow Tilt	3" x 3" x 0.060" Scalloped	2	-	2" x 3" x 0.050"	(3) #8
2" x 4" x 0.050" Hollow	3" x 3" x 0.060" Scalloped	2	-	2" x 3" x 0.050"	(3) #8
Self Mating Beams					
2" x 4" x 0.038" X 0.100	3" x 3" x 0.060" Scalloped	2	-	2" x 3" x 0.050"	(3) #8
2" x 5" x 0.050" X 0.100	3" x 3" x 0.060" Scalloped	2	-	2" x 3" x 0.050"	(3) #8
2" x 6" x 0.050" X 0.120	3" x 3" x 0.060" Scalloped	2	-	2" x 3" x 0.050"	(3) #10
2" x 7" x 0.055" x 0.120"	3" x 3" x 0.093"	3	2	2" x 4" x 0.050"	(3) #10
2" x 7" x 0.055" x 0.120"	3" x 3" x 0.093"	3	2	2" x 4" x 0.050"	(3) #10
2" x 8" x 0.072" x 0.224"	3" x 3" x 0.093"	3	2	2" x 4" x 0.050"	(3) #12
2" x 9" x 0.072" x 0.224"	3" x 3" x 0.125"	4	3	2" x 4" x 0.050"	(3) #14
2" x 9" x 0.082" x 0.306"	3" x 3" x 0.125"	4	3	2" x 4" x 0.050"	(3) #14
2" x 10" x 0.092" x 0.369"	4" x 4" x 0.125"	6	4	2" x 4" x 0.050"	(4) #14

The minimum number of thru bolts is (2)

* Minimum post/beam may be used as minimum knee brace

Table 2.4.1 Footings - Maximum Roof Area for Attached Carport Posts

Wind Zone =	100 MPH	110 MPH	120 MPH	123 MPH	130 MPH	140 MPH	150 MPH
Attached Cover Uplift * =	10 #/SF	12 #/SF	14 #/SF	15 #/SF	16 #/SF	19 #/SF	21 #/SF
Free Standing Uplift =	8 #/SF	9 #/SF	11 #/SF	12 #/SF	13 #/SF	15 #/SF	17 #/SF
Existing Slab on Grade with unknown reinforcement	22	19	15	15	13	11	10

Isolated Footing Dimensions**	Uplift Rating (lbs.)	Maximum Attributable Roof Area in Square Feet						
		100 MPH	110 MPH	120 MPH	123 MPH	130 MPH	140 MPH	150 MPH
1'-0" x 1'-0" x 1'-0"	293	26	21	18	17	15	13	11
1'-4" x 1'-4" x 1'-4"	689	50	41	34	33	29	26	22
1'-6" x 1'-6" x 1'-6"	988	66	55	45	43	39	34	29
1'-8" x 1'-8" x 2'-0"	1,791	102	85	70	67	60	52	45
1'-8" x 1'-8" x 2'-6"	2,537	127	106	88	84	75	65	57
2'-0" x 2'-0" x 2'-0"	2,343	132	110	91	87	78	68	59
2'-0" x 2'-0" x 2'-6"	3,286	165	138	114	108	97	85	73
2'-6" x 2'-6" x 2'-6"	4,573	230	191	158	151	135	118	102
2'-6" x 2'-6" x 3'-0"	6,024	276	230	190	181	162	141	123

* Roof areas based on attached cover uplift loads.

Notes:

1. Isolated Footing is a poured concrete rectangular solid (Length x Width x Depth).
2. Slab on grade must be new or in good condition.
3. For free standing covers, multiply above roof areas by 1.25.

Pre-Cast Block Footing

Pre-cast footing block (16" x 16" x 4") at 24" below grade with 80 # bag pre-mix concrete and backfilled to grade.

Dimensions	Uplift Rating (lbs.)	Maximum Attributable Roof Area in Square Feet						
		100 MPH	110 MPH	120 MPH	123 MPH	130 MPH	140 MPH	150 MPH
(1) x 80# Bag	1,734	87	72	60	57	51	44	38
(2) x 80# Bag	1,819	91	76	63	59	54	46	40
(3) x 80# Bag	1,904	95	79	66	62	56	49	42

Note: Maximum uplift on post is determined by multiplying maximum attributable roof area x applied load.

Example: Post tributary roof area = 77', Applied load for 110 MPH wind zone = 24#/Sq. Ft., Uplift on post = 77 x 24 = 1,540#

Lawrence E. Bennett, P.E.

CIVIL ENGINEER - DEVELOPMENT CONSULTANT
P.O. BOX 214368, SOUTH DAYTONA, FL 32121
TELEPHONE (386) 767-4774
FAX (386) 767-6556

January 01, 2006

LAWRENCE E. BENNETT, P.E.
P.O. BOX 214368
SOUTH DAYTONA, FL 32121
386-767-4774

TO ALL BUILDING DEPARTMENTS

Re: Master File Engineering
"ALUMINUM STRUCTURES DESIGN MANUAL"
2004 edition & 2006 edition

Dear Building Official/Plans Examiner,

This is to certify that the following contractor/company is hereby authorized to use my 2004 ed "ALUMINUM STRUCTURES DESIGN MANUAL" during the year 2006. When we publish and distribute the 2006 ed of the "ALUMINUM STRUCTURES DESIGN MANUAL", they will be authorized to use that manual for the remainder of 2006.

Our authorization is based on a January to January basis regardless of the edition of the manual. This authorization also applies to contractor master file drawings, "ONE PERMIT ONLY" drawings or any "site specific" drawings that I may furnish the contractor.

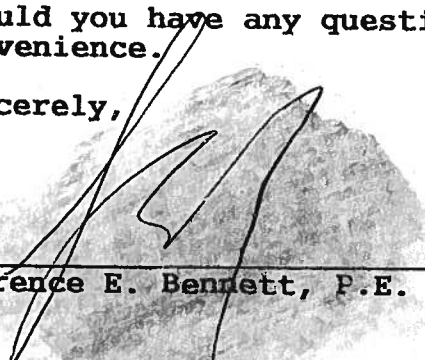
Vince Richardson

Richardson Aluminum LLC
692 SW Arlington Blvd
Lake City, FL 32025

They are hereby added to my 2006 MASTERFILE LIST

Should you have any questions please contact me at your convenience.

Sincerely,



Lawrence E. Bennett, P.E. #16644

CHERRYBROOK PLIC AVENUE OPEN

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 11-4S-16-02905-416

Building permit No. 000024380

Use Classification SCREEN ROOM

Fire: 0.00

Permit Holder VINCE RICHARDSON

Waste: _____

Owner of Building WAYNE & MICHELLE SAPP

Total: 0.00

Location: 362 SW STORY PLACE(CREST POINTE, LOT 16)

Date: 04/19/2006

Wayne Sicks

Building Inspector



POST IN A CONSPICUOUS PLACE
(Business Places Only)