Columbia County Building Permit Application

Revised 9-23-04

For Office Use Only Application # 0509-62 Date Received 9-21-05 By LH Permit # 23792

Application Approved by - Zoning Official BLK Date 9.10.05 Plans Examiner OKJH Date 10-24-05

Flood Zone X Development Permit N/A Zoning A-3 Land Use Plan Map Category A-3

Comments

* 911 address pending - Cite. confirms out of office unit; / 10-11-3-05

Applicants Name Maurice E. Perkins Phone (386) 364-4439

Address P.O. Box 6141 Live Oak Fl. 32064

Owners Name EMMA HAVIARAS -6140 Brookstone Blvd Columbus GA 31907 Phone

911 Address 467 SW California Terrace, Fl White 32038

Contractors Name Maurice E. Perkins Phone (386) 364-4439

Address P.O. Box 6141 Live Oak Fl. 32064

Fee Simple Owner Name & Address N/A

Bonding Co. Name & Address N/A

Architect/Engineer Name & Address Gary J. Gill P.E. 51942 130 West Howard St Live Oak Fl. 320

Mortgage Lenders Name & Address ~~First American Title~~ M&T Mortgage 2270 Erin Court Lancaster P.A. 17601 LANCOSTER P.A. 17601

Circle the correct power company - FL Power & Light - (Clay Elec.) - Suwannee Valley Elec. - Progressive Energy

Property ID Number Between Lots 43 & 42 00-00-00-00914-000 Estimated Cost of Construction 200,000.00

Subdivision Name Three Rivers Estate Lot ~~42~~ 43 Block — Unit 14 Phase

Driving Directions 90 47 To FT. White Right Turn ~~Old~~ 27 North To Three Rivers Estate Entrance (Left) Hand River Rd Turn Follow Pavement ~~Left~~ Utah To Left go To Bridge Road (graded Road) Right hand Turn Follow To California Terrace go To Lot 43-44 3rd Place on (R)

Type of Construction New Construction SFD Number of Existing Dwellings on Property 0 on Rd.

Total Acreage 2 Lot Size 1ac Each Do you need a - Culvert Permit or Culvert Waiver or (Have an Existing Drive)

Actual Distance of Structure from Property Lines - Front 150 Side 46 Side 65 Rear 280

Total Building Height App. 25' Number of Stories 2 Heated Floor Area 2500 Roof Pitch 12/12

Porches 400 2887.12 TOTAL 3287

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.

Maurice E. Perkins

Owner Builder or Agent (Including Contractor)

Contractor Signature

Contractors License Number CBC1251469

Competency Card Number

NOTARY STAMP/SEAL

STATE OF FLORIDA
COUNTY OF COLUMBIA

Sworn to (or affirmed) and subscribed before me

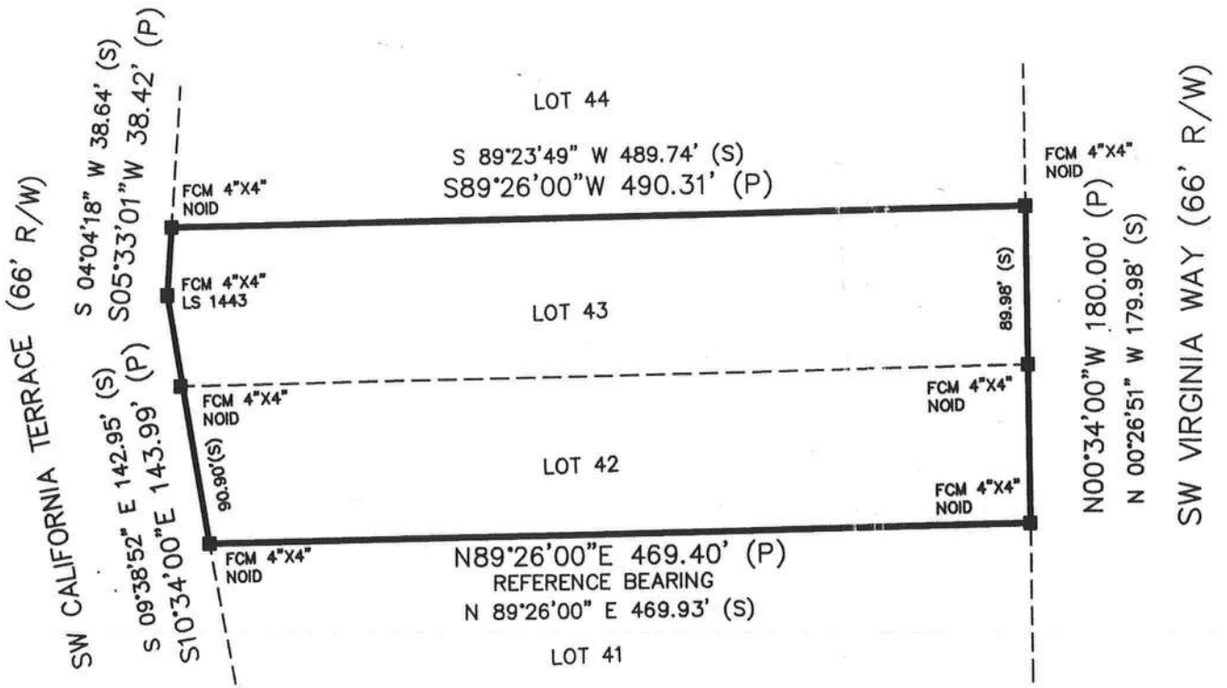
this 21 day of September 20 05.

Personally known ✓ or Produced Identification

Notary Signature

MAP OF BOUNDARY SURVEY

SHOWING LOT 42 AND 43, THREE RIVERS ESTATES UNIT 14,
ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 4,
PAGES 118 AND 118A, OF THE PUBLIC RECORDS OF COLUMBIA COUNTY,
FLORIDA.



CERTIFIED TO:
EMMA HAVIARAS

SURVEYORS NOTES

1. BEARING BASED ON PLAT.
2. SUBJECT LOTS SHOWN HEREON ARE ONE AND THE SAME AS LOTS 42 AND 43, TRACT 3, MARKED N.A.P. (NOT A PART) ON THE PLAT OF THREE RIVERS ESTATES UNIT 14, PUBLIC RECORDS OF COLUMBIA COUNTY, FLORIDA.
3. SUBJECT LOTS SHOWN HEREON LIES IN FLOOD ZONE X AS BEST DETERMINED FROM F.E.M.A. FLOOD MAPS PANEL NO. 120070 0255 B DATED JAN. 6, 1988.
4. THIS SURVEY BASED ON LEGAL DESCRIPTION FURNISHED. THE PUBLIC RECORDS, WERE NOT SEARCHED BY THIS SURVEYOR FOR EASEMENTS, TITLE, COVENANTS, RESTRICTIONS, CLOSURES, TAKINGS OR ORDINANCES, ETC., THERE COULD BE OTHER MATTER OF RECORD THAT EFFECT THIS PARCEL.

I HEREBY CERTIFY THIS SURVEY WAS DONE UNDER MY DIRECT SUPERVISION AND IT MEETS THE MINIMUM TECHNICAL STANDARDS FOR LAND SURVEYING PURSUANT TO CHAPTER 61G17-6, FLORIDA ADMINISTRATION CODE, CHAPTER 472, FLORIDA STATUES.

WILLIAM N. KITCHEN PSM 5490

William N. Kitchen 12-10-04

LEGEND

(P) = PLAT PB&P = PLAT BOOK & PAGE
(S) = SURVEY MEASUREMENT
NOID = NO SURVEYORS IDENTIFICATION
LS = LAND SURVEYOR
LB = LICENSE BUSINESS
FCM = FOUND CONCRETE MONUMENT
PRM = PERMANENT REFERENCE MONUMENT
R/W = RIGHT OF WAY

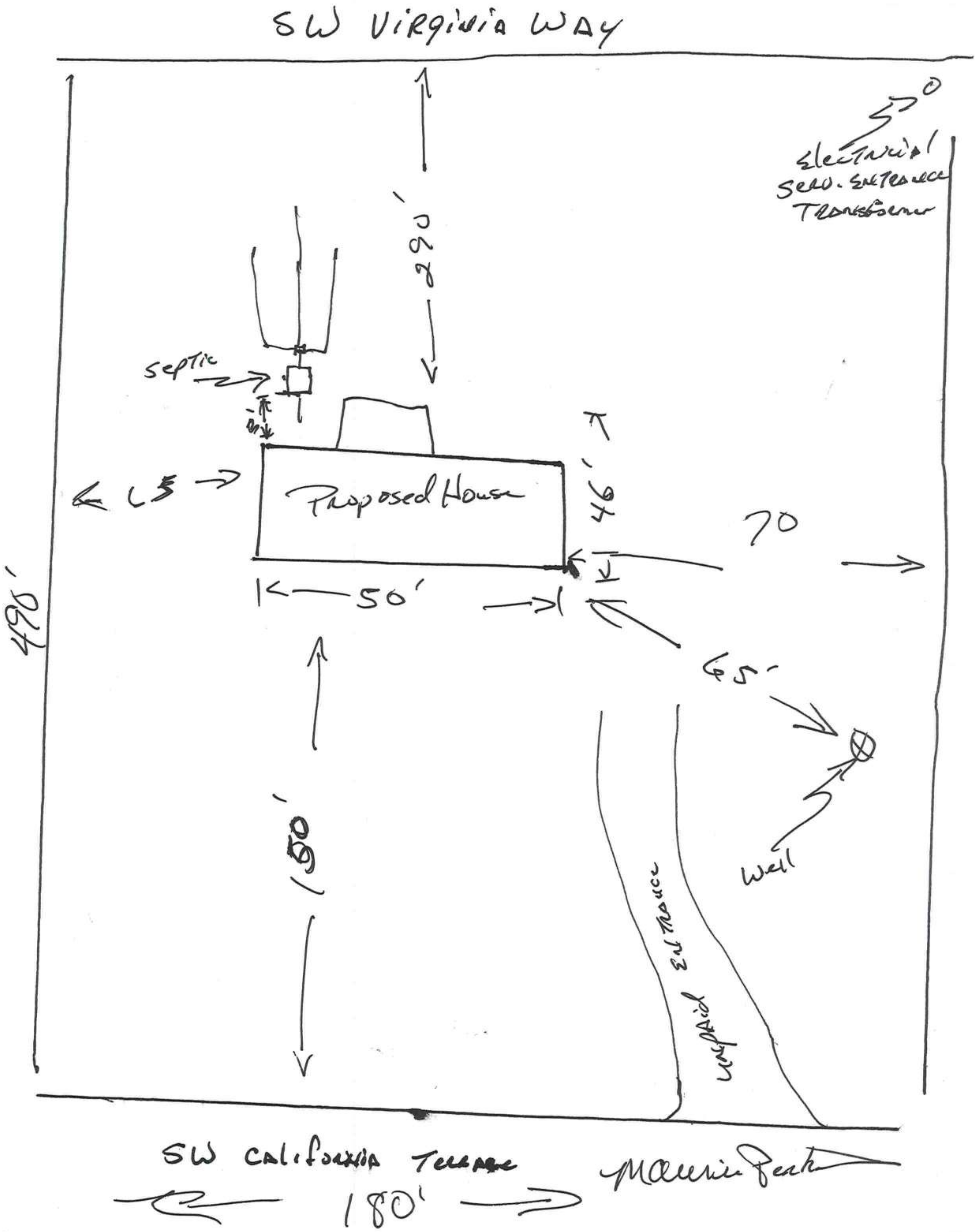
NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

REV:

WILLIAM N. KITCHEN
PROFESSIONAL SURVEYOR AND MAPPER
152 N MARION AVENUE
LAKE CITY, FLORIDA 32055
PHONE (386) 755-7786

CLIENT: EMMA HAVIARAS

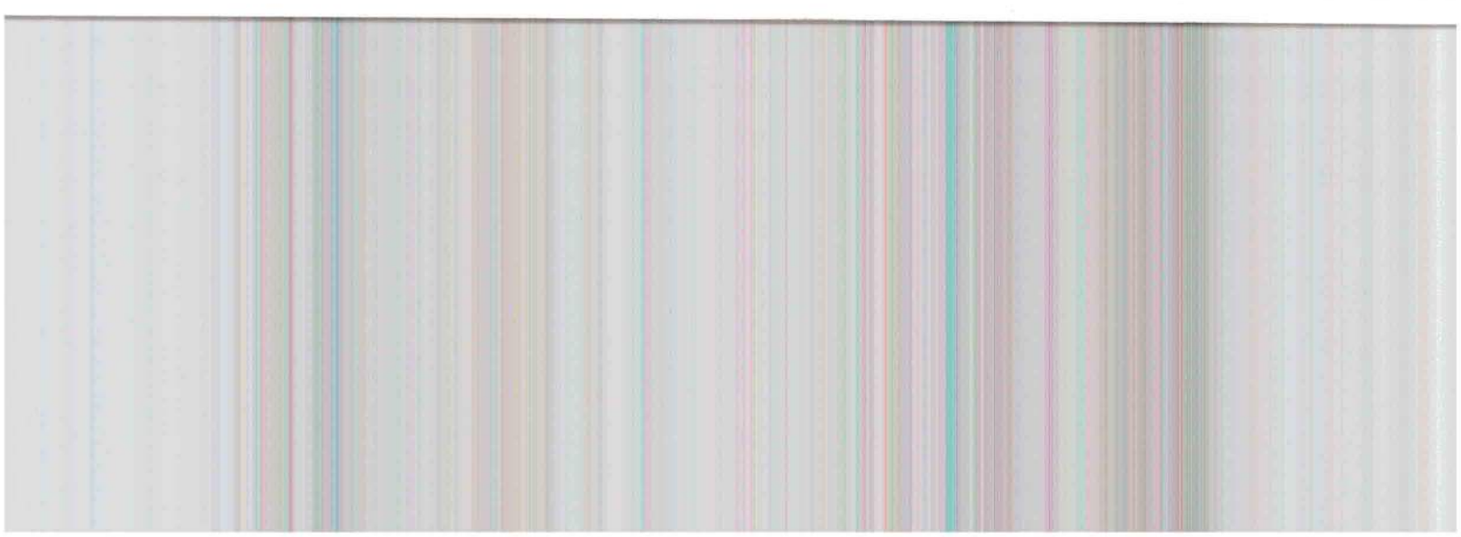
DRAWN BY: WNK	FIELD BOOK: 04335
SCALE: 1" = 100'	
SURVEY DATE: DECEMBER 2, 2004	
JOB NUMBER	SHEET
04335	1 OF 1


SW VIRGINIA WAY
290'
Electrical
Serv. Entrance
Transformer
Septic
Proposed House
46'
70
50'
65'
Well
150'
490'
SW CALIFORNIA TERRACE
180'

@ CAM112M01 S CamaUSA Appraisal System Columbia County
9/21/2005 14:56 **Legal Description Maintenance** **5100 Land 001**
Year T Property Sel **AG 000**
2005 R 00-00-00-00914-000 ... .. **Bldg 000**
-- **Xfea 000**
HAVIARAS EMMA **5100 TOTAL B***

```
  1  LOT 42 UNIT 14 THREE RIVERS ...  ESTATES. WD 1027-1715,.....    2
  3  CWD 1037-2875.................  ..............................    4
  5  ..............................  ..............................    6
  7  ..............................  ..............................    8
  9  ..............................  ..............................   10
 11  ..............................  ..............................   12
 13  ..............................  ..............................   14
 15  ..............................  ..............................   16
 17  ..............................  ..............................   18
 19  ..............................  ..............................   20
 21  ..............................  ..............................   22
 23  ..............................  ..............................   24
 25  ..............................  ..............................   26
 27  ..............................  ..............................   28
                                                Mnt 2/22/2005 KYLIE
```

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



PRODUCT APPROVAL SPECIFICATION SHEET

Location: Three River ESTATES **Project Name:** EMMA HAVARI'S

As required by Florida Statute 553.842 and Florida Administrative Code 9B-72, please provide the information and the product approval number(s) on the building components listed below if they will be utilized on the construction project for which you are **applying for a building permit on or after April 1, 2004**. We recommend you contact your local product supplier should you not know the product approval number for any of the applicable listed products. More information about statewide product approval can be obtained at www.floridabuilding.org

Category/Subcategory	Manufacturer	Product Description	Approval Number(s)
A. EXTERIOR DOORS			
1. Swinging	MASONITE		FI 18
2. Sliding			
3. Sectional			
4. Roll up			
5. Automatic			
6. Other			
B. WINDOWS			
1. Single hung	Better Built		FI 663
2. Horizontal Slider			
3. Casement			
4. Double Hung			
5. Fixed			
6. Awning			
7. Pass -through			
8. Projected			
9. Mullion			
10. Wind Breaker			
11 Dual Action			
12. Other			
C. PANEL WALL			
1. Siding			
2. Soffits	ALCOA		FI 2641
3. EIFS			
4. Storefronts			
5. Curtain walls			
6. Wall louver			
7. Glass block			
8. Membrane			
9. Greenhouse			
10. Other			
D. ROOFING PRODUCTS			
1. Asphalt Shingles	TAMKO		FI 673
2. Underlayments	"		FI 1481
3. Roofing Fasteners	SIMPSON		FI 1423
4. Non-structural Metal Rf			
5. Built-Up Roofing			
6. Modified Bitumen			
7. Single Ply Roofing Sys			
8. Roofing Tiles			
9. Roofing Insulation			
10. Waterproofing			
11. Wood shingles /shakes			
12. Roofing Slate			

Category/Subcategory (cont.)	Manufacturer	Product Description	Approval Number(s)
13. Liquid Applied Roof Sys			
14. Cements-Adhesives – Coatings			
15. Roof Tile Adhesive			
16. Spray Applied Polyurethane Roof			
17. Other			
E. SHUTTERS			
1. Accordion			
2. Bahama			
3. Storm Panels			
4. Colonial			
5. Roll-up			
6. Equipment			
7. Others			
F. SKYLIGHTS			
1. Skylight			
2. Other			
G. STRUCTURAL COMPONENTS			
1. Wood connector/anchor			
2. Truss plates			
3. Engineered lumber			
4. Railing			
5. Coolers-freezers			
6. Concrete Admixtures			
7. Material			
8. Insulation Forms			
9. Plastics			
10. Deck-Roof			
11. Wall			
12. Sheds			
13. Other			
H. NEW EXTERIOR ENVELOPE PRODUCTS			
1.			
2.			

The products listed below did not demonstrate product approval at plan review. I understand that at the time of inspection of these products, the following information must be available to the inspector on the jobsite; 1) copy of the product approval, 2) the performance characteristics which the product was tested and certified to comply with, 3) copy of the applicable manufacturers installation requirements.

I understand these products may have to be removed if approval cannot be demonstrated during inspection

Maurice E. Perkins

Contractor or Contractor's Authorized Agent Signature

Print Name

Date

P.O. Box 6141 Live Oak Fl. 32064

Location

Permit # **(FOR STAFF USE ONLY)**

Suwannee Valley Pump & Well Service, Inc.
P.O. Box 215
Live Oak, FL 32064
386-590-0188
386-364-3514- fax

October 13, 2005

Columbia County Building Dept.
Attn: Joe

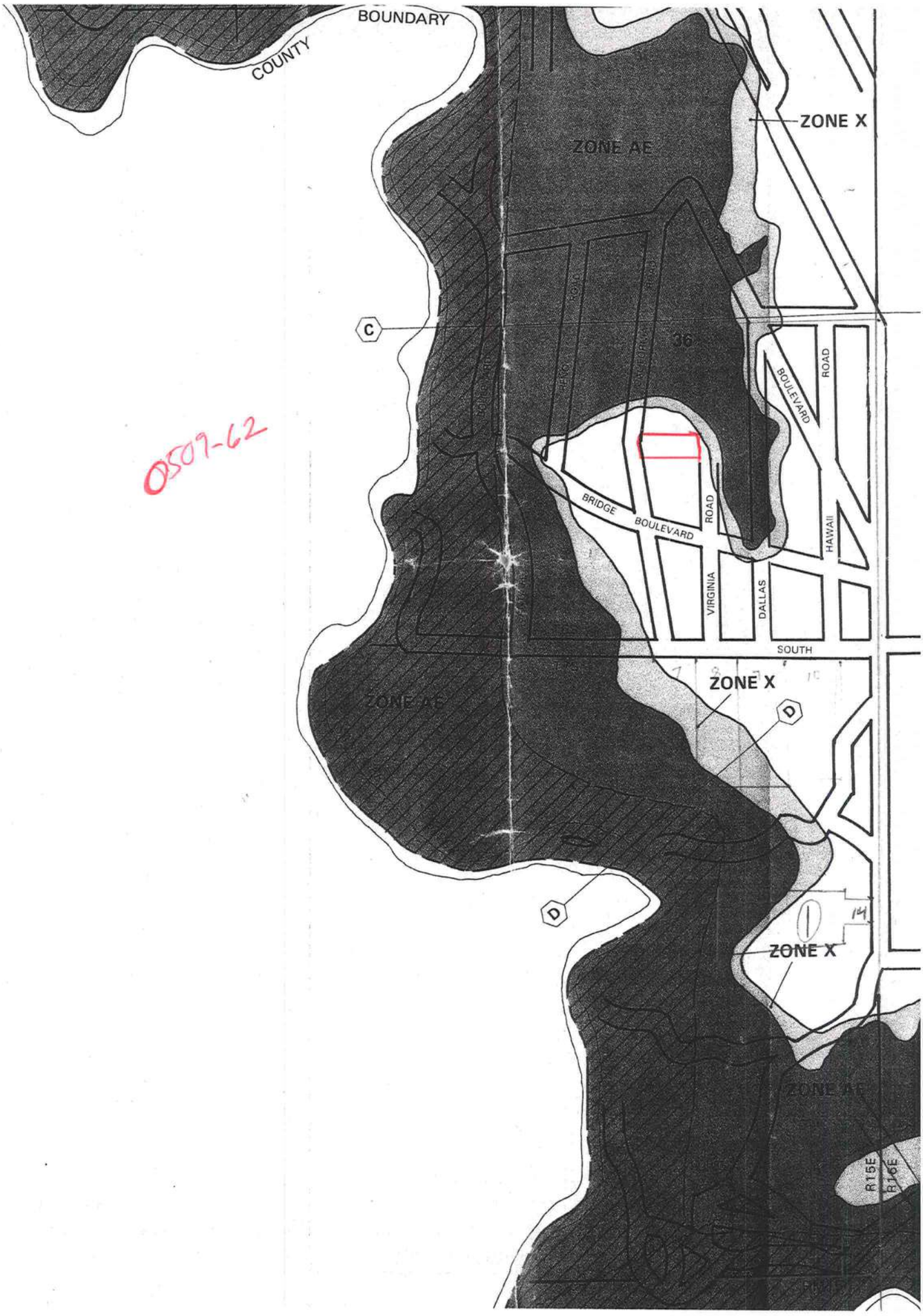
RE: Specification for New Well- Emma Havaires
Well Permit #- 0509-62

This is to certify the Suwannee Valley Pump & Well Service, Inc. will be installing the following:

(1) 4" Well, 1 hp submersible pump and 1 ¼ galvanized drop pipe, and 81 diaphragmatic tank

Troy Wadford

Troy Wadford, owner
Suwannee Valley Pump & Well Service, Inc.


BOUNDARY
COUNTY
ZONE X
ZONE AE
C
36
ROAD
BOULEVARD
ROAD
BRIDGE
BOULEVARD
ROAD
HAWAII
VIRGINIA
DALLAS
SOUTH
ZONE X
ZONE AE
D
D
14
ZONE X
ZONE AE
R15E
R16E

0509-62

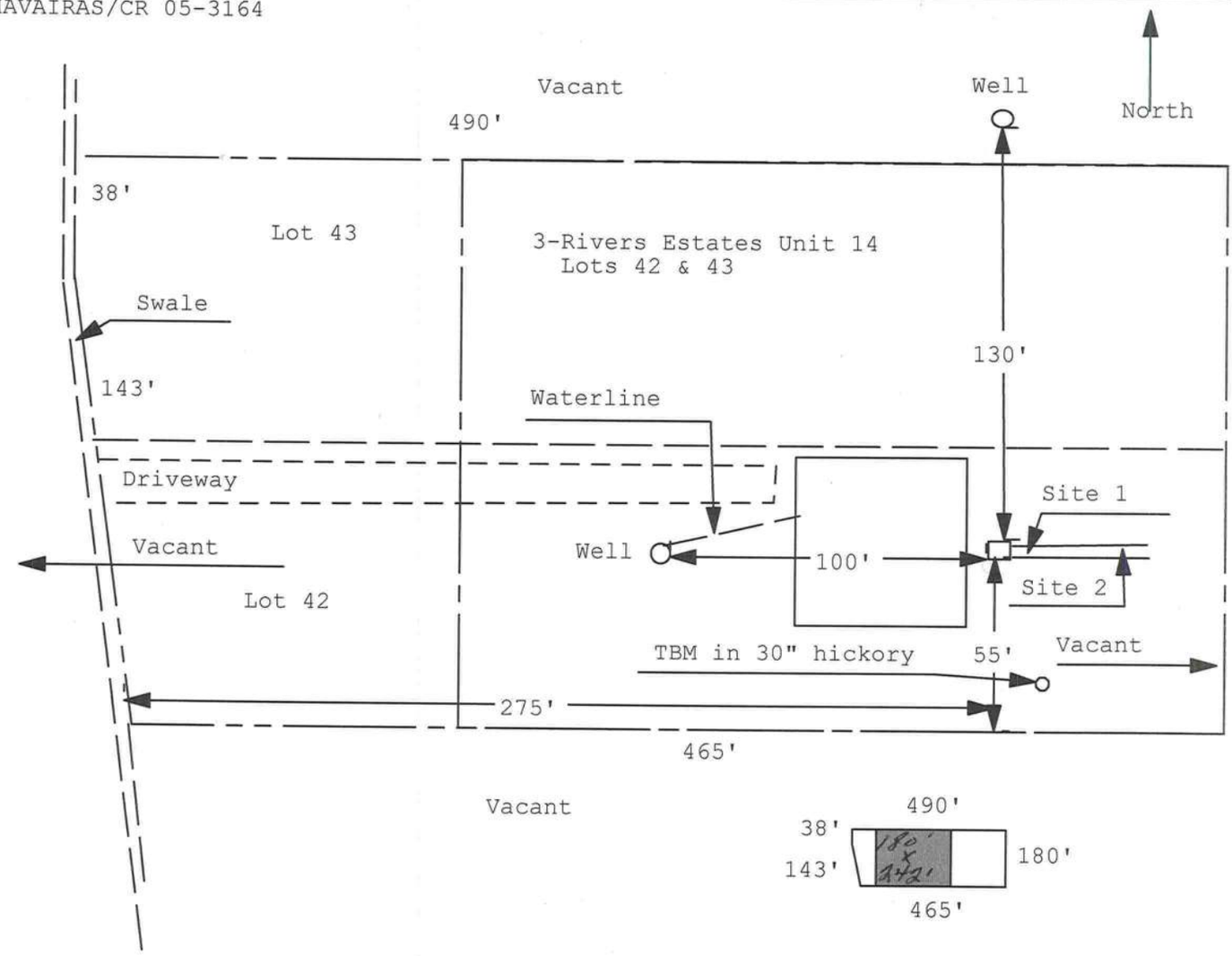
0509-62

Application for Onsite Sewage Disposal System Construction Permit. Part II Site Plan

Permit Application Number: 05-1097N

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH UNIT

HAVAIRAS/CR 05-3164



1 inch = 50 feet

Site Plan Submitted By Paul Lloyd **Date** 10/21/05

Plan Approved ✓ **Not Approved** ____ **Date** 10/24/05

By _____ Columbia **CPHU**

Notes: _____

Residential Heat Loss and Heat Gain Calculation

In accordance with ACCA Manual J

Registered For: **GTC Design Group**
Live Oak, Florida 32064

For: SRLH – EMMA HAVIARAS
Columbia County, Florida

Design Conditions: Gainesville

Indoor:
Summer temperature: 75
Winter temperature: 70
Relative humidity:55

Outdoor:
Summer temperature: 93
Winter temperature: 31
Summer grains of moisture: 116
Daily temperature range: Medium

Building Component	Sensible Gain (BTUH)	Latent Gain (BTUH)	Total Heat Gain (BTUH)	Total Heat Loss (BTUH)
People	16,800	12,880	29,680	0
Windows	12,569	0	12,569	14,625
Ceilings	4,427	0	4,427	4,113
Infiltration	1,621	2,505	4,126	5,268
Walls	3,942	0	3,942	9,432
Glassdoors	3,712	0	3,712	2,917
Misc	1,500	0	1,500	0
Doors	1,020	0	1,020	1,840
Skylights	0	0	0	0
Fireplaces	0	0	0	3,512
Floors	0	0	0	23,919
Duct	0	0	0	0
Whole House	**45,591**	**15,385**	**60,976 (5 tons)**	**65,626**

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs

Residential Whole Building Performance Method A

Project Name:	**PF05-024 HAVIARAS RESIDENCE**	Builder:	
Address:		Permitting Office:	Columbia
City, State:	,	Permit Number:	23792
Owner:	**EMMA HAVIARAS**	Jurisdiction Number:	221000
Climate Zone:	**North**		

1. New construction or existing		New	
2. Single family or multi-family		Single family	
3. Number of units, if multi-family		1	
4. Number of Bedrooms		4	
5. Is this a worst case?		Yes	
6. Conditioned floor area (ft²)		2887.12 ft²	
7. Glass area & type	Single Pane	Double Pane	
a. Clear glass, default U-factor	0.0 ft²	291.6 ft²	
b. Default tint, default U-factor	0.0 ft²	0.0 ft²	
c. Labeled U-factor or SHGC	0.0 ft²	0.0 ft²	
8. Floor types			
a. Slab-On-Grade Edge Insulation		R=0.0, 176.7(p) ft	
b. N/A			
c. N/A			
9. Wall types			
a. Frame, Wood, Exterior		R=19.0, 1158.4 ft²	
b. N/A			
c. N/A			
d. N/A			
e. N/A			
10. Ceiling types			
a. Under Attic		R=30.0, 2085.0 ft²	
b. N/A			
c. N/A			
11. Ducts			
a. Sup: Con. Ret: Con. AH: Garage		Sup. R=6.0, 150.0 ft	
b. N/A			

12. Cooling systems		
a. Central Unit	Cap: 60.0 kBtu/hr	
	SEER: 11.00	
b. N/A		
c. N/A		
13. Heating systems		
a. Electric Heat Pump	Cap: 60.0 kBtu/hr	
	HSPF: 7.00	
b. N/A		
c. N/A		
14. Hot water systems		
a. Electric Resistance	Cap: 40.0 gallons	
	EF: 0.97	
b. N/A		
c. Conservation credits (HR-Heat recovery, Solar DHP-Dedicated heat pump)		
15. HVAC credits (CF-Ceiling fan, CV-Cross ventilation, HF-Whole house fan, PT-Programmable Thermostat, MZ-C-Multizone cooling, MZ-H-Multizone heating)		

Glass/Floor Area: 0.10

Total as-built points: 32563
Total base points: 37635

PASS

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code.

PREPARED BY: GARY GILL

DATE: 10/7/05

I hereby certify that this building, as designed, is in compliance with the Florida Energy Code.

OWNER/AGENT: _____

DATE: _____

Review of the plans and specifications covered by this calculation indicates compliance with the Florida Energy Code. Before construction is completed this building will be inspected for compliance with Section 553.908 Florida Statutes.

GREAT SEAL OF THE STATE OF FLORIDA — IN GOD WE TRUST

BUILDING OFFICIAL: _____

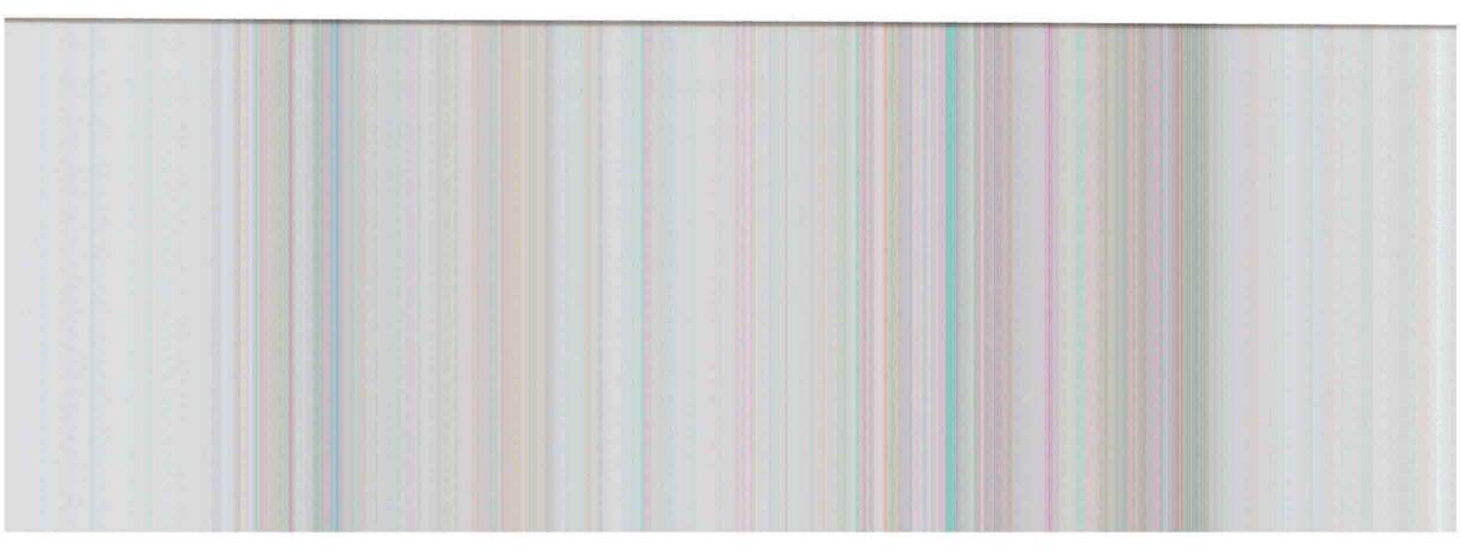
DATE: _____

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , , PERMIT #:

BASE				AS-BUILT							
GLASS TYPES .18 X Conditioned Floor Area	X BSPM	= Points		Type/SC	Overhang Ornt	Len	Hgt	Area X	SPM X	SOF	= Points
.18	2887.1	20.04	10414.4	Double, Clear	W	0.0	0.0	57.8	38.52	1.00	2226.7
				Double, Clear	W	0.0	0.0	26.0	38.52	1.00	1001.6
				Double, Clear	N	0.0	0.0	45.0	19.20	1.00	864.0
				Double, Clear	N	0.0	0.0	13.0	19.20	1.00	249.6
				Double, Clear	S	0.0	0.0	45.0	35.87	1.00	1614.0
				Double, Clear	E	0.0	0.0	40.0	42.06	1.00	1682.6
				Double, Clear	E	0.0	0.0	20.0	42.06	1.00	841.3
				Double, Clear	E	0.0	0.0	44.8	42.06	1.00	1884.5
				As-Built Total:				**291.6**			**10364.2**
WALL TYPES	Area X	BSPM =	Points	Type			R-Value	Area X	SPM =		Points
Adjacent	0.0	0.00	0.0	Frame, Wood, Exterior			19.0	1158.4	0.90		1042.6
Exterior	1158.4	1.70	1969.3								
Base Total:	**1158.4**		**1969.3**	**As-Built Total:**				**1158.4**			**1042.6**
DOOR TYPES	Area X	BSPM =	Points	Type				Area X	SPM =		Points
Adjacent	0.0	0.00	0.0	Exterior Wood				20.0	6.10		122.0
Exterior	140.0	6.10	854.0	Exterior Wood				120.0	6.10		732.0
Base Total:	**140.0**		**854.0**	**As-Built Total:**				**140.0**			**854.0**
CEILING TYPES	Area X	BSPM =	Points	Type			R-Value	Area X	SPM X SCM =		Points
Under Attic	1668.0	1.73	2885.6	Under Attic			30.0	2085.0	1.73 X 1.00		3607.1
Base Total:	**1668.0**		**2885.6**	**As-Built Total:**				**2085.0**			**3607.1**
FLOOR TYPES	Area X	BSPM =	Points	Type			R-Value	Area X	SPM =		Points
Slab	176.7(p)	-37.0	-6536.7	Slab-On-Grade Edge Insulation			0.0	176.7(p	-41.20		-7278.7
Raised	0.0	0.00	0.0								
Base Total:			**-6536.7**	**As-Built Total:**				**176.7**			**-7278.7**
INFILTRATION	Area X	BSPM =	Points					Area X	SPM =		Points
	2887.1	10.21	29477.5					2887.1	10.21		29477.5

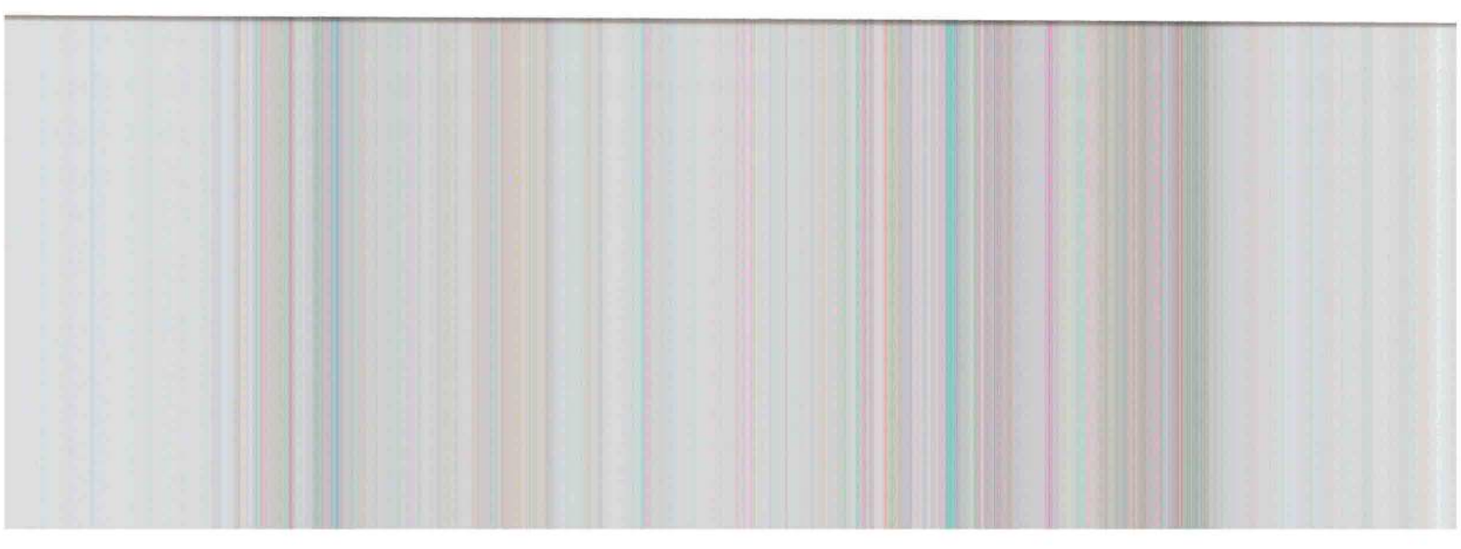


SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , ,	PERMIT #:

BASE				AS-BUILT						
Summer Base Points:			**39064.2**	**Summer As-Built Points:**						**38066.6**
Total Summer Points	X System Multiplier	=	Cooling Points	Total Component	X Cap Ratio	X Duct Multiplier (DM x DSM x AHU)	X System Multiplier	X Credit Multiplier	=	Cooling Points
39064.2	**0.4266**		**16664.8**	38066.6 **38066.6**	1.000 **1.00**	(1.000 x 1.147 x 1.00) **1.147**	0.310 **0.310**	1.000 **1.000**		13547.2 **13547.2**

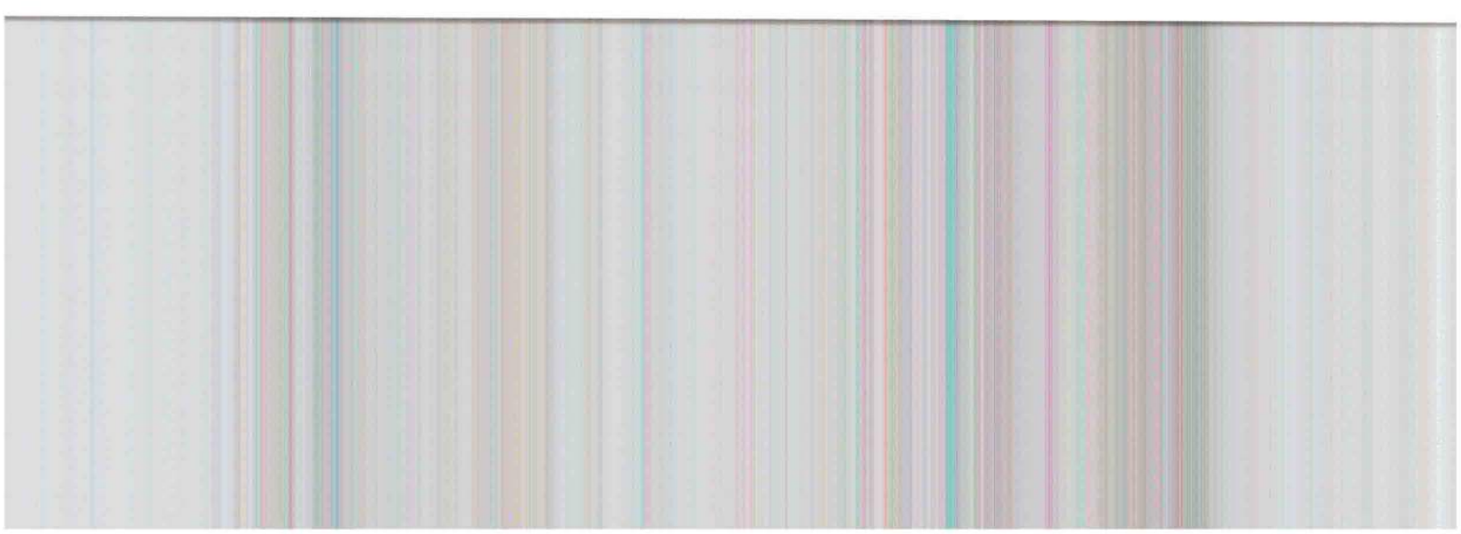


WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , , PERMIT #:

BASE				AS-BUILT								
GLASS TYPES .18 X Conditioned Floor Area	X BWPM	= Points		Type/SC	Overhang Ornt	Len	Hgt	Area X	WPM X	WOF	= Points	
.18	2887.1	12.74	6620.7	Double, Clear	W	0.0	0.0	57.8	20.73	1.00	1198.1	
				Double, Clear	W	0.0	0.0	26.0	20.73	1.00	538.9	
				Double, Clear	N	0.0	0.0	45.0	24.58	1.00	1106.0	
				Double, Clear	N	0.0	0.0	13.0	24.58	1.00	319.5	
				Double, Clear	S	0.0	0.0	45.0	13.30	1.00	598.3	
				Double, Clear	E	0.0	0.0	40.0	18.79	1.00	751.7	
				Double, Clear	E	0.0	0.0	20.0	18.79	1.00	375.9	
				Double, Clear	E	0.0	0.0	44.8	18.79	1.00	841.9	
				As-Built Total:				**291.6**			**5730.4**	
WALL TYPES	Area X	BWPM =	Points	Type		R-Value		Area X	WPM =		Points	
Adjacent	0.0	0.00	0.0	Frame, Wood, Exterior		19.0		1158.4	2.20		2548.5	
Exterior	1158.4	3.70	4286.1									
Base Total:	**1158.4**		**4286.1**	**As-Built Total:**				**1158.4**			**2548.5**	
DOOR TYPES	Area X	BWPM =	Points	Type				Area X	WPM =		Points	
Adjacent	0.0	0.00	0.0	Exterior Wood				20.0	12.30		246.0	
Exterior	140.0	12.30	1722.0	Exterior Wood				120.0	12.30		1476.0	
Base Total:	**140.0**		**1722.0**	**As-Built Total:**				**140.0**			**1722.0**	
CEILING TYPES	Area X	BWPM =	Points	Type		R-Value		Area X	WPM X	WCM =	Points	
Under Attic	1668.0	2.05	3419.4	Under Attic		30.0		2085.0	2.05 X	1.00	4274.3	
Base Total:	**1668.0**		**3419.4**	**As-Built Total:**				**2085.0**			**4274.3**	
FLOOR TYPES	Area X	BWPM =	Points	Type		R-Value		Area X	WPM =		Points	
Slab	176.7(p)	8.9	1572.3	Slab-On-Grade Edge Insulation		0.0		176.7(p	18.80		3321.3	
Raised	0.0	0.00	0.0									
Base Total:			**1572.3**	**As-Built Total:**				**176.7**			**3321.3**	
INFILTRATION	Area X	BWPM =	Points					Area X	WPM =		Points	
	2887.1	-0.59	-1703.4					2887.1	-0.59		-1703.4	



WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , ,	PERMIT #:

BASE			AS-BUILT					
Winter Base Points:		**15917.2**	**Winter As-Built Points:**					**15893.0**
Total Winter Points	X System Multiplier	= Heating Points	Total Component	X Cap Ratio	X Duct Multiplier (DM x DSM x AHU)	X System Multiplier	X Credit Multiplier	= Heating Points
15917.2	**0.6274**	**9986.4**	15893.0 **15893.0**	1.000 **1.00**	(1.000 x 1.169 x 1.00) **1.169**	0.487 **0.487**	1.000 **1.000**	9050.6 **9050.6**

WATER HEATING & CODE COMPLIANCE STATUS

Residential Whole Building Performance Method A - Details

ADDRESS: , , , PERMIT #:

BASE				AS-BUILT							
WATER HEATING											
Number of Bedrooms	X Multiplier	= Total		Tank Volume	EF	Number of Bedrooms	X Tank Ratio	X Multiplier	X Credit Multiplier	= Total	
4	2746.00	10984.0		40.0	0.97	4	1.00	2491.22	1.00	9964.9	
				As-Built Total:						**9964.9**	

CODE COMPLIANCE STATUS

BASE				AS-BUILT			
Cooling Points	+ Heating Points	+ Hot Water Points	= Total Points	Cooling Points	+ Heating Points	+ Hot Water Points	= Total Points
16665	**9986**	**10984**	**37635**	**13547**	**9051**	**9965**	**32563**

PASS

Code Compliance Checklist

Residential Whole Building Performance Method A - Details

ADDRESS: , , , PERMIT #:

6A-21 INFILTRATION REDUCTION COMPLIANCE CHECKLIST

COMPONENTS	SECTION	REQUIREMENTS FOR EACH PRACTICE	CHECK
Exterior Windows & Doors	606.1.ABC.1.1	Maximum:.3 cfm/sq.ft. window area; .5 cfm/sq.ft. door area.	
Exterior & Adjacent Walls	606.1.ABC.1.2.1	Caulk, gasket, weatherstrip or seal between: windows/doors & frames, surrounding wall; foundation & wall sole or sill plate; joints between exterior wall panels at corners; utility penetrations; between wall panels & top/bottom plates; between walls and floor. EXCEPTION: Frame walls where a continuous infiltration barrier is installed that extends from, and is sealed to, the foundation to the top plate.	
Floors	606.1.ABC.1.2.2	Penetrations/openings >1/8" sealed unless backed by truss or joint members. EXCEPTION: Frame floors where a continuous infiltration barrier is installed that is sealed to the perimeter, penetrations and seams.	
Ceilings	606.1.ABC.1.2.3	Between walls & ceilings; penetrations of ceiling plane of top floor; around shafts, chases, soffits, chimneys, cabinets sealed to continuous air barrier; gaps in gyp board & top plate; attic access. EXCEPTION: Frame ceilings where a continuous infiltration barrier is installed that is sealed at the perimeter, at penetrations and seams.	
Recessed Lighting Fixtures	606.1.ABC.1.2.4	Type IC rated with no penetrations, sealed; or Type IC or non-IC rated, installed inside a sealed box with 1/2" clearance & 3" from insulation; or Type IC rated with < 2.0 cfm from conditioned space, tested.	
Multi-story Houses	606.1.ABC.1.2.5	Air barrier on perimeter of floor cavity between floors.	
Additional Infiltration reqts	606.1.ABC.1.3	Exhaust fans vented to outdoors, dampers; combustion space heaters comply with NFPA, have combustion air.	

6A-22 OTHER PRESCRIPTIVE MEASURES (must be met or exceeded by all residences.)

COMPONENTS	SECTION	REQUIREMENTS	CHECK
Water Heaters	612.1	Comply with efficiency requirements in Table 6-12. Switch or clearly marked circuit breaker (electric) or cutoff (gas) must be provided. External or built-in heat trap required.	
Swimming Pools & Spas	612.1	Spas & heated pools must have covers (except solar heated). Non-commercial pools must have a pump timer. Gas spa & pool heaters must have a minimum thermal efficiency of 78%.	
Shower heads	612.1	Water flow must be restricted to no more than 2.5 gallons per minute at 80 PSIG.	
Air Distribution Systems	610.1	All ducts, fittings, mechanical equipment and plenum chambers shall be mechanically attached, sealed, insulated, and installed in accordance with the criteria of Section 610. Ducts in unconditioned attics: R-6 min. insulation.	
HVAC Controls	607.1	Separate readily accessible manual or automatic thermostat for each system.	
Insulation	604.1, 602.1	Ceilings-Min. R-19. Common walls-Frame R-11 or CBS R-3 both sides. Common ceiling & floors R-11.	

GTC DESIGN GROUP

GTC Design Group, LLC
P.O. Box 187
Live Oak, FL 32064
(Phone) 386.362.3678
(Fax) 386.362.6133
cwilliams@gtcdesigngroup.com

November 16, 2005

Joe Haltiwanger
City of Lake City
150 N. Alachua Street
Lake City, Florida 32055

SUBJECT: Emma Havairas Residence #23792

Mr. Haltiwanger:

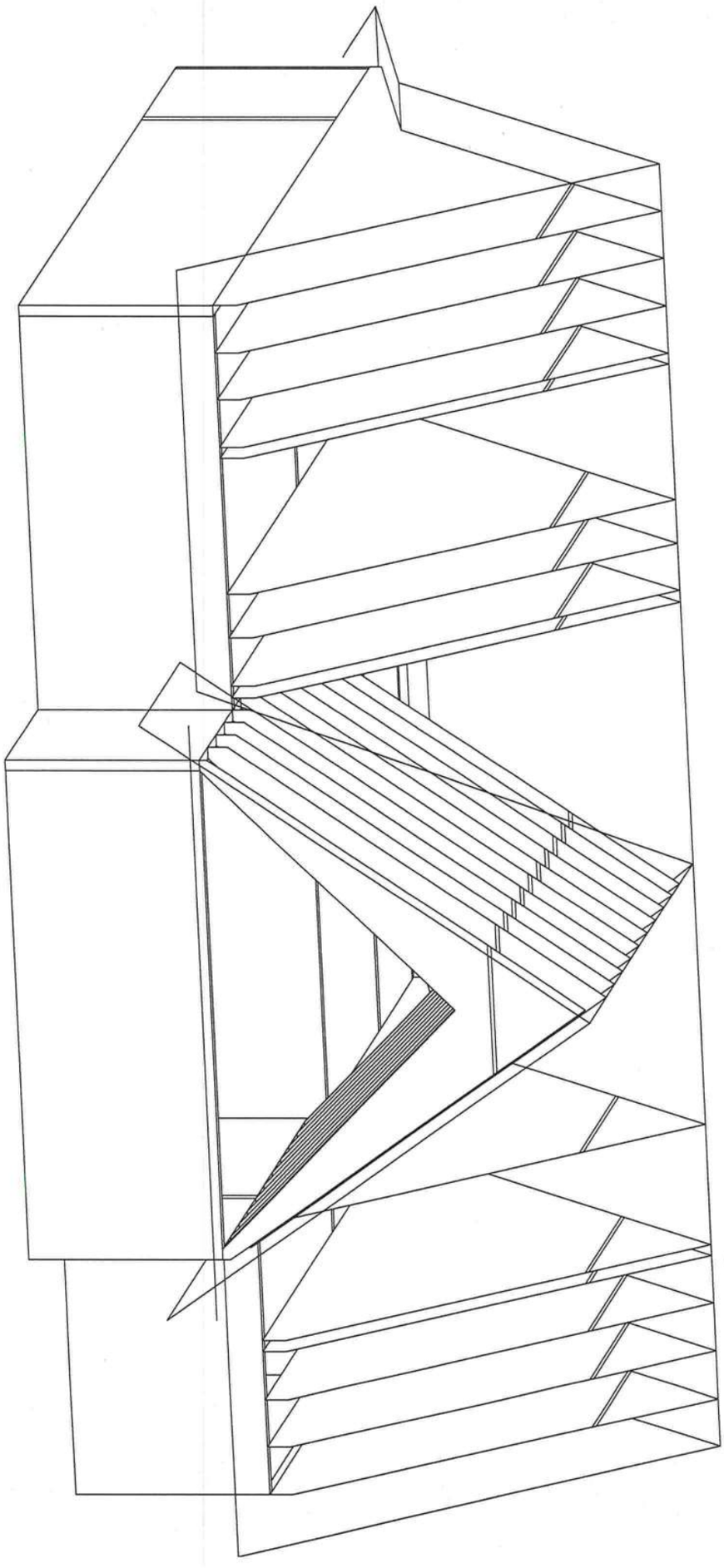
For the footing, the traverse rebar is not required. The only requirement is the three (3) #5 continuous rebar.

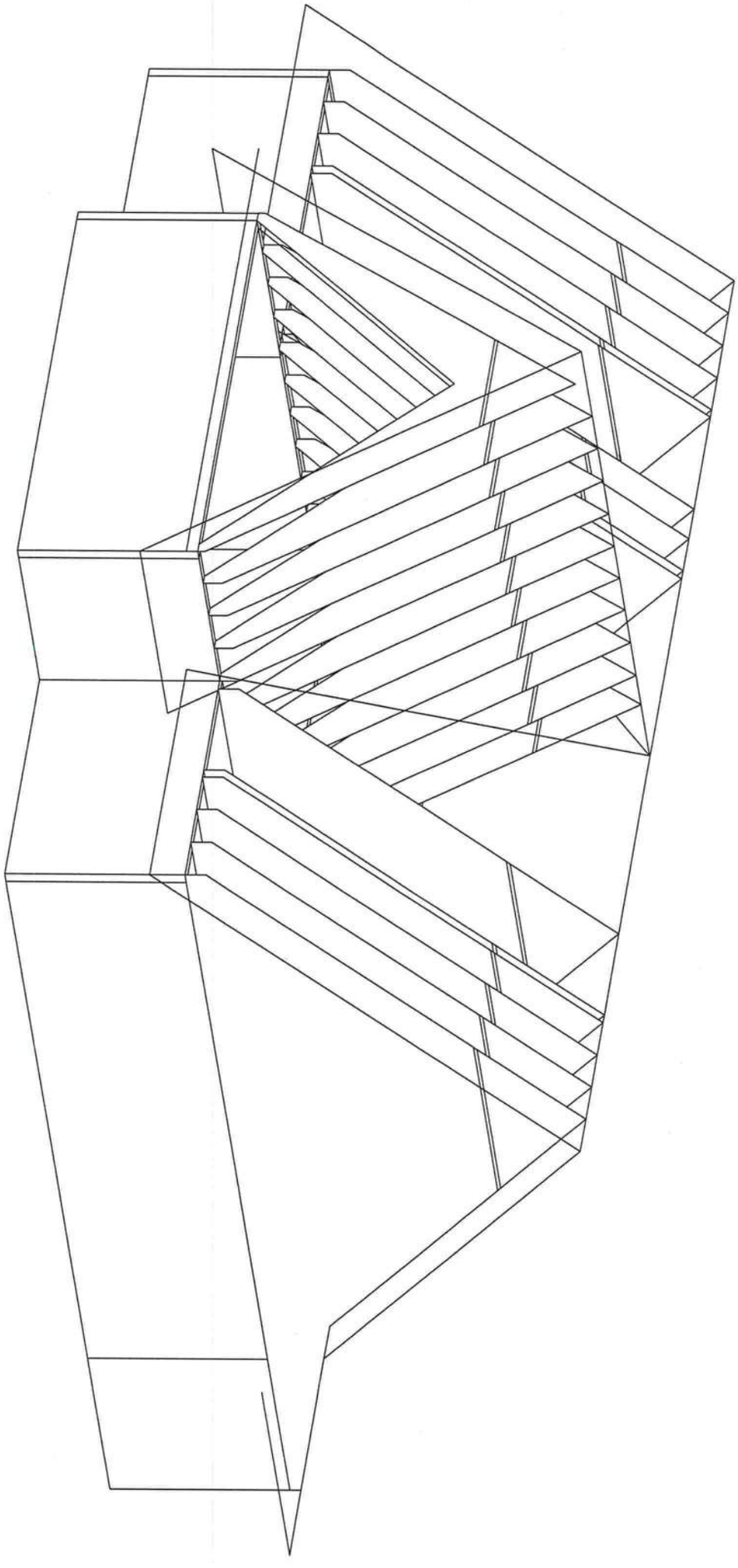
If you have any questions or require additional information, please contact me at your convenience.

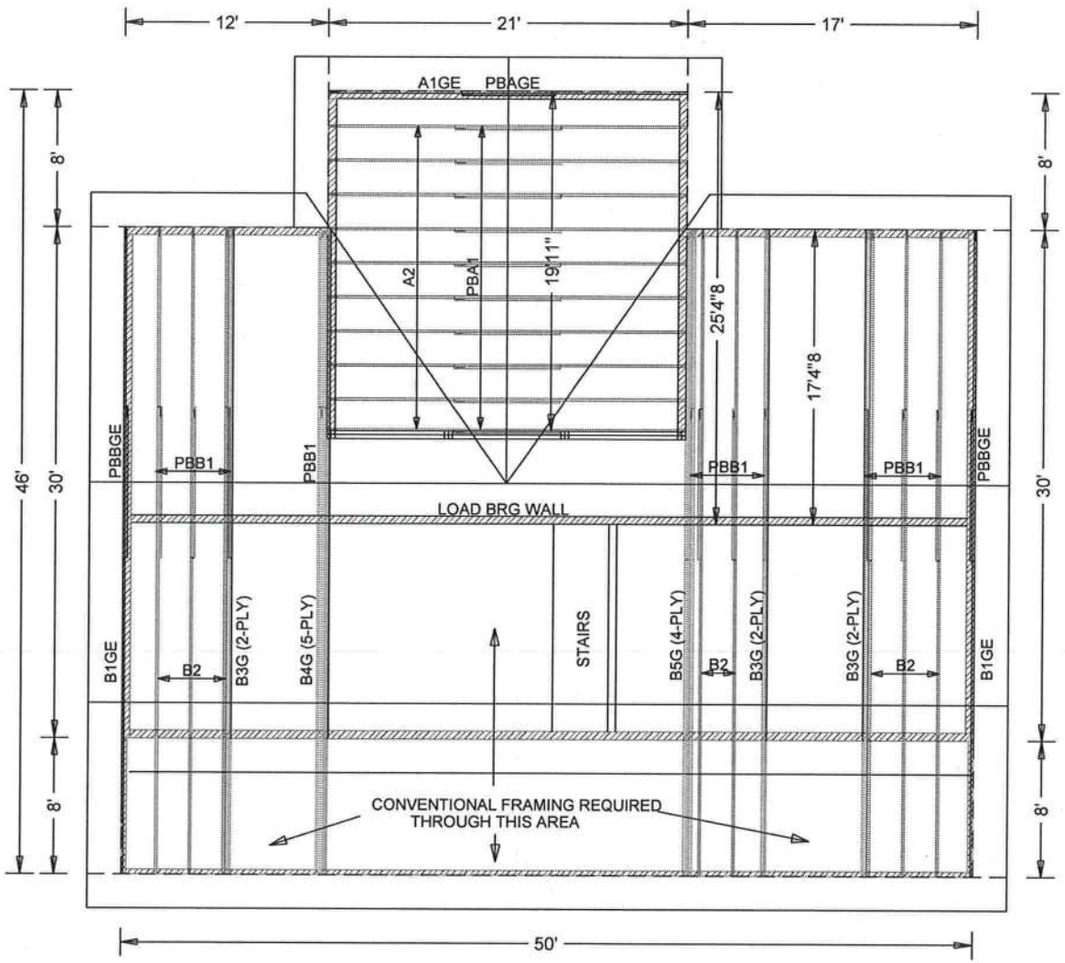
Thank you,

Gary J. Gill
Project Manager

GG/ks







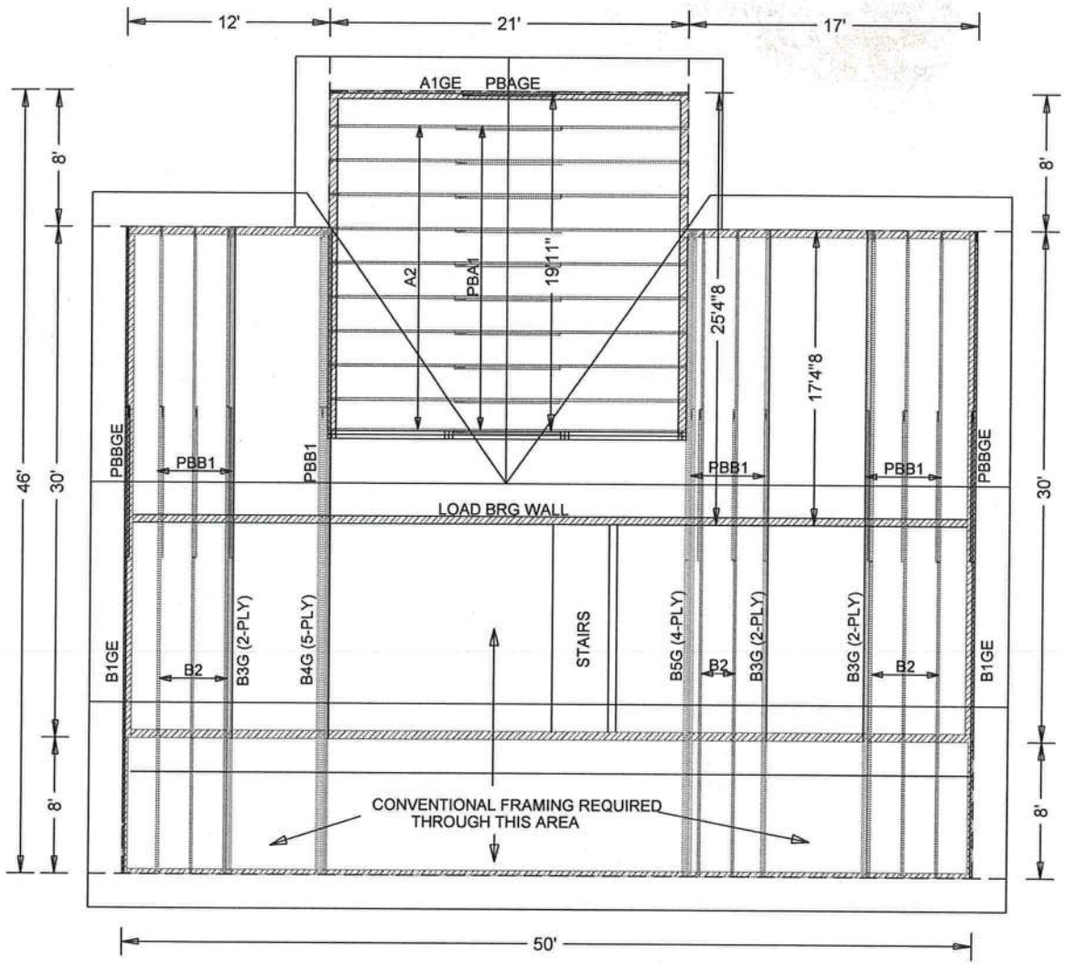
W.B. Howland Truss Co.
P.O. Box 700
Live Oak, FL 32064
(386) 362-1235
(386) 362-7124 (fax)

ROOF PITCH:	3/12, 12/12, 17.25/12
CLG PITCH:	12/12
OVERHANG:	SCABBED ON IN FIELD
LOADING:	40 PSF T.L./SHINGLE
WIND LOAD:	110 MPH
EXT WALLS:	2x6 FRAMING
DATE:	9-23-05

Job Name: Haviaris Residence
Customer: MO PERKINS
Designer: Chris McCall

JOB NO:
2809

PAGE NO:
1 OF 1



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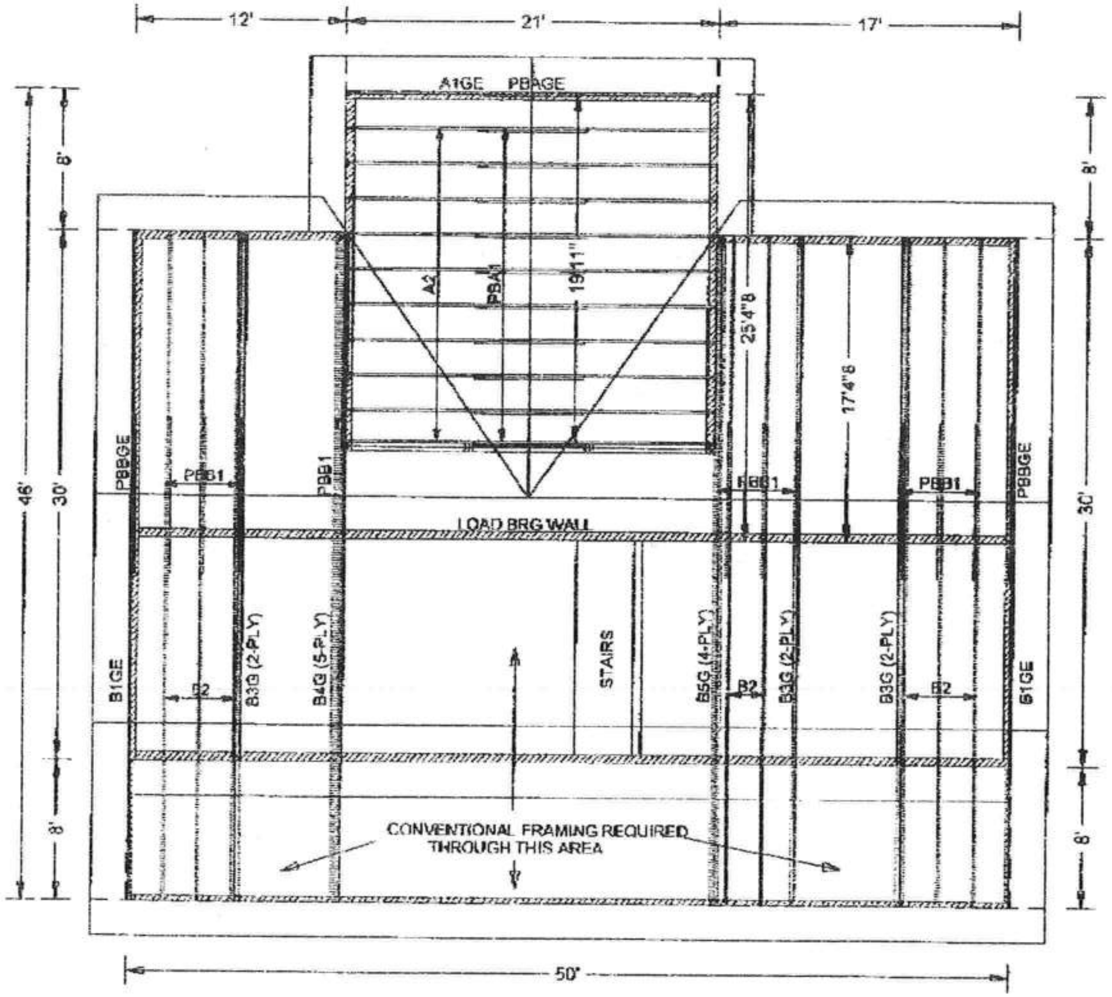
EXT WALLS:	2x6 FRAMING
DATE:	9-23-05

Job Name: Haviaris Residence
Customer: MO PERKINS
Designer: Chris McCall

JOB NO:
2809

PAGE NO:
1 OF 1

app# 050962
att: Joe



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OVERHANG: SCABBED ON IN FIELD
LOADING: 40 PSF T.L./SHINGLE
WIND LOAD: 110 MPH
EXT WALLS: 2x6 FRAMING
DATE: 9-23-05

Job Name: Haviaris Residence
Customer: MO PERKINS
Designer: Chris McCall

JOB NO:	2809
PAGE NO:	1 OF 1

CERTIFICATE OF 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 36-6S-15-00914-000 Building permit No. 000023792

Use Classification SFD/UTILITY Fire: 11.84

Permit Holder MAURICE E. PERKINS Waste: 24.50

Owner of Building EMMA HAVIARAS Total: 36.34

Location: 467 SW CALIFORNIA TERR. FT. WHITE, FL

Date: 08/21/2006

Harry Dicks

Building Inspector

POST IN A CONSPICUOUS PLACE
(Business Places Only)

From: The Columbia County Building Department
Plans Review
135 NE Hernando Av.
P. O Box 1529
Lake City Florida, 32056-1529

Reference to: Build permit application Number: **0509- 62 Maurice Perkous**
Owner Emma Haviaras lot 42 Unit 14 Three Rivers Estates

On the date of September 21, 2005 application 0509-62 and plans for construction of a single family dwelling were reviewed and the following information or alteration to the plans will be required to continue processing this application. If you should have any question please contact the above address, or contact phone number (386) 758-1163 or fax any information to (386) 754-7088.

Please include application number 0509-62 when making reference to this application.

10-13 1. If a potable water well does not exist please provide a letter from the potable well water contractor giving the following information: size of pump motor, size of pressure tank and cycle stop valve if used.

10-12 2. Please provide information in the form Manual J, sizing equipment HVAC equipment.

3. Please submit a Florida Energy Efficiency Code for Building Construction form 600b-04.

4. Please provide a copy of the release, of the waste water disposal system from the Columbia County Environmental Department.

10-12 5. The application number 0509-62 as submitted states the condition floor area of the dwelling to be 2500 sq. ft. the structural plans for the dwelling show the condition floor area to be 2,887 Sq. Ft. Please correct this discrepancy on application number 0509-62.

6. Please submit the approval of products by The Florida Building Commission for use in the exterior shear wall and roof system: (1); Exterior Doors; (2) Roofing Products; (3) Skylights; (4) Windows.

10-12 7. Show on the elevation plans the total height of the structure from the established grade to the roof ridge point.

10-12 8. Show on the elevation plans the height above the roof ridge the chimney will extend and the distance from the nearest roof line of the chimney .

10-12 9. The egress one window of the second floor bedroom will be required to comply with section R310.1 of the FBC Emergency escape and rescue required. R310.1.1: Minimum opening area. All emergency escape and rescue openings shall have a minimum net clear opening of 5.7 square feet (0.530 m2).

Exception: Grade floor openings shall have a minimum net clear opening of 5 square feet (0.465 m2).

R310.1.2 Minimum opening height: The minimum net clear opening height shall be 24 inches (610 mm).

R310.1.3 Minimum opening width: The minimum net clear opening width shall be 20 inches (508 mm).

R310.1.4 Operational constraints: Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools.

10-12 10. Show the method of compliance with sections 2405.3 of the 2001 FBC wind loads requirements for fixed glass areas.

10-18 11. Please comply with sections 106.3.5 of the FBC. By providing a structural engineering truss layout and truss details signed and sealed by Fl. Pro. Eng. information on the 9 1/2" TJI floor joists to be used within the second floor joist framing plan also include the live and dead load supporting abilities for this floor system.

? 12. If the roof framing plan will use pre-engineered truss rather than the framing plan on page A-Six please submit a truss layout and truss details signed and sealed by Fl. Pro. Eng.

10-12 13. Show a detail of the guard's rail system that meets the following requirements.

Porches, balconies or raised floor surfaces located more than 30 inches (762 mm) above the floor or grade below shall have guards not less than 36 inches (914 mm) in height. Open sides of stairs with a total rise of more than 30 inches (762 mm) above the floor or grade below shall have guards not less than 34 inches (864 mm) in height measured vertically from the nosing of the treads.

Porches and decks which are enclosed with insect screening shall be provided with guards where the walking surface is located more than 30 inches (762 mm) above the floor or grade below.

R312.2 Guard opening limitations.

Required guards on open sides of stairways, raised floor areas, balconies and porches shall have intermediate rails or ornamental closures which do not allow passage of a sphere 4 inches (102mm) or more in diameter.

10-12 14. Show on the plans the method to be used for fireblocking and draft stopping requirements. In concealed spaces of stud walls and partitions, including furred spaces and parallel rows of studs or staggered studs; as follows: Vertically at the ceiling and all floor levels and horizontally at intervals not exceeding 10 feet (3048 mm).

15. Please provide the location of the electrical service panel and include the total amperage rating of the service panel.

Thank you,

Joe Haltiwanger
Plan Examiner
Columbia County Building Department

Residential Heat Loss and Heat Gain Calculation

In accordance with ACCA Manual J

Registered For: **GTC Design Group**
Live Oak, Florida 32064

For: SRLH – EMMA HAVIARAS
Columbia County, Florida

Design Conditions: Gainesville

Indoor:
Summer temperature: 75
Winter temperature: 70
Relative humidity:55

Outdoor:
Summer temperature: 93
Winter temperature: 31
Summer grains of moisture: 116
Daily temperature range: Medium

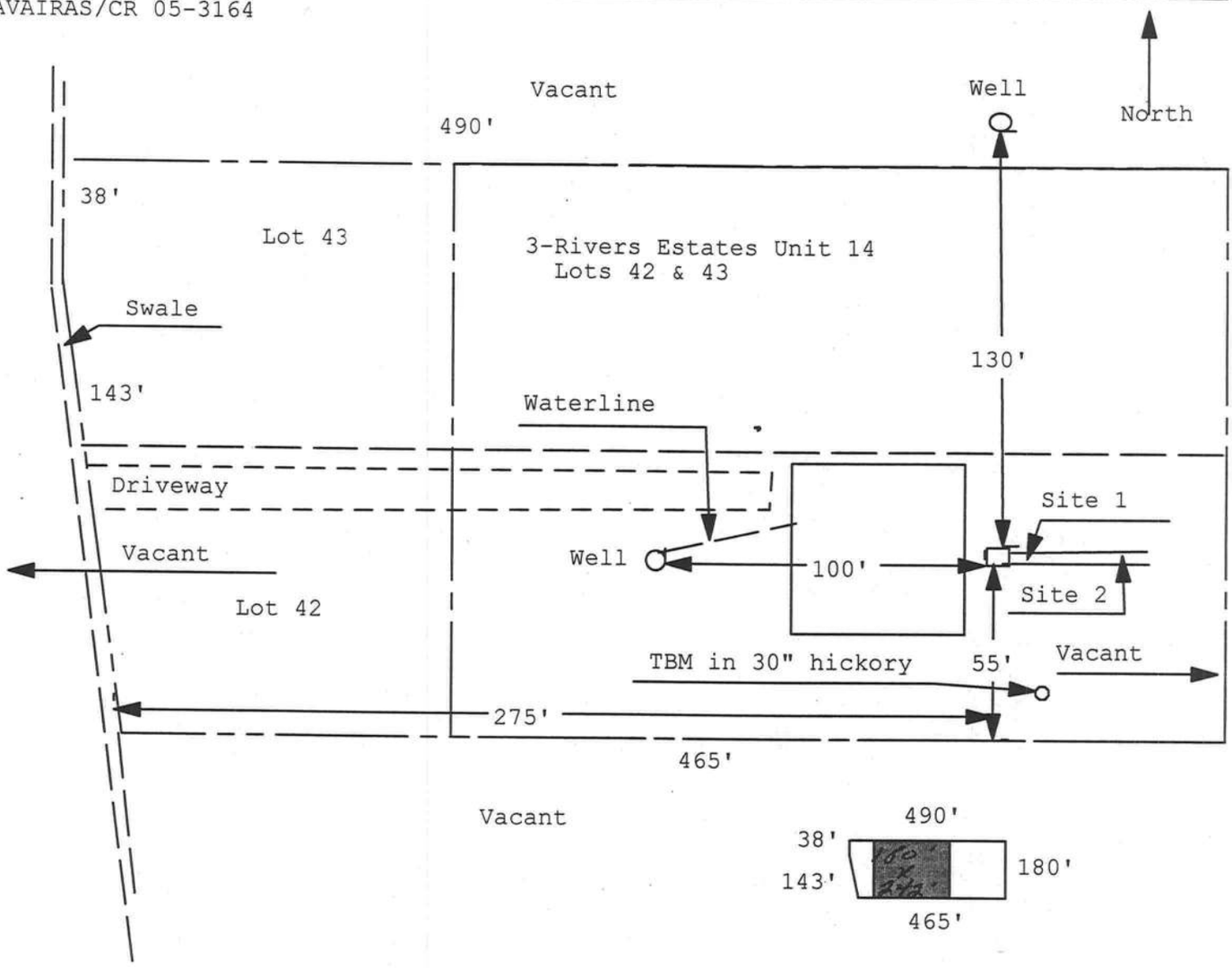
Building Component	Sensible Gain (BTUH)	Latent Gain (BTUH)	Total Heat Gain (BTUH)	Total Heat Loss (BTUH)
People	16,800	12,880	29,680	0
Windows	12,569	0	12,569	14,625
Ceilings	4,427	0	4,427	4,113
Infiltration	1,621	2,505	4,126	5,268
Walls	3,942	0	3,942	9,432
Glassdoors	3,712	0	3,712	2,917
Misc	1,500	0	1,500	0
Doors	1,020	0	1,020	1,840
Skylights	0	0	0	0
Fireplaces	0	0	0	3,512
Floors	0	0	0	23,919
Duct	0	0	0	0
Whole House	**45,591**	**15,385**	**60,976 (5 tons)**	**65,626**

Application for Onsite Sewage Disposal System Construction Permit. Part II Site Plan

Permit Application Number: 05-1097N

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH UNIT

HAVAIRAS/CR 05-3164



1 inch = 50 feet

Site Plan Submitted By Paul Lloyd **Date** 10/21/05

Plan Approved ✓ **Not Approved** ____ **Date** 10/26/05

By [signature] Columbia **CPHU**

Notes: ____

App. II
(05-09-62)

First American Title
Insurance Company
5481 NW St. James Drive
Port St. Lucie, Fl. 34983

NOTICE OF COMMENCEMENT

Inst:2005021882 Date:09/08/2005 Time:12:47
MK DC,P.DeWitt Cason,Columbia County B:1057 P:1652

STATE OF FLORIDA
COUNTY OF ~~SUWANNEE~~ Columbia

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.

1. Description of Property: Lot 42 and Lot 43 of Three Rivers Estates, Unit 14, according to the Plat thereof as recorded in Plat Book 4, Page(s) 118, of the Public Records of Columbia County, Florida.
2. General Description of Improvement: Single Family Dwelling
3. **Owner Information:**
   a. Name and Address: Emma Haviaras and John Haviaras
   6140 Brookstone Blvd. Columbus, GA 31904
   b. Interest in Property: Fee Simple
   c. Name and Address of Fee Simple Titleholder (if other than owner):
4. Contractor (name and address): North Central Florida Residential & Commercial Construction
   505 Lafayette Ave. Live Oak, FL 32064
5. **Surety:**
   a. Name and Address:
   b. Amount of Bond:
6. Lender (name and address): M&T Mortgage 2270
   2270 Erin Court Lancaster, PA 17601
7. Persons within the State of Florida designated by owner upon whom notices or other documents may be served as provided by Florida Statutes 713.13(1)(a)(7):
8. In addition to himself, owner designates:
   to receive a copy of the Leinor's Notice as provided in Florida Statutes 713.13(1)(b).
9. Expiration date of Notice of Commencement (the expiration date is 1 year from the date of recording unless a different date is specified):

STATE OF FLORIDA, COUNTY OF COLUMBIA
I HEREBY CERTIFY, that the above and foregoing is a true copy of the original filed in this office.
P. DeWITT CASON, CLERK OF COURTS
By: Mark Kerr Deputy Clerk
Date: Sept 8, 2005

CLERK CIRCUIT COURT COLUMBIA COUNTY, FLORIDA

Type Owner Name: Emma Haviaras

Type Owner Name: John P. Haviaras

Sworn to and subscribed before me this 13 day of July, 20 05.

Personally Known ✓
Produced ID
Did/Did Not Take an Oath

Type Notary's Name Edward Caussade
Notary Public, State of Florida
Commission Expiry & Number: DD252200
12-26-07

EDWARD CAUSSADE
MY COMMISSION # DD252200
EXPIRES: December 26, 2007
1-800-3-NOTARY FL Notary Discount Assoc. Co.

6/6

FORM 600A-2001 EnergyGauge® 3.4

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs

Residential Whole Building Performance Method A

Project Name:	**PF05-024 HAVIARAS RESIDENCE**	Builder:	
Address:		Permitting Office:	
City, State:	,	Permit Number:	
Owner:	**EMMA HAVIARAS**	Jurisdiction Number:	
Climate Zone:	**North**		

1. New construction or existing		New	
2. Single family or multi-family		Single family	
3. Number of units, if multi-family		1	
4. Number of Bedrooms		4	
5. Is this a worst case?		Yes	
6. Conditioned floor area (ft²)		2887.12 ft²	
7. Glass area & type	Single Pane	Double Pane	
a. Clear glass, default U-factor	0.0 ft²	291.6 ft²	
b. Default tint, default U-factor	0.0 ft²	0.0 ft²	
c. Labeled U-factor or SHGC	0.0 ft²	0.0 ft²	
8. Floor types			
a. Slab-On-Grade Edge Insulation		R=0.0, 176.7(p) ft	
b. N/A			
c. N/A			
9. Wall types			
a. Frame, Wood, Exterior		R=19.0, 1158.4 ft²	
b. N/A			
c. N/A			
d. N/A			
e. N/A			
10. Ceiling types			
a. Under Attic		R=30.0, 2085.0 ft²	
b. N/A			
c. N/A			
11. Ducts			
a. Sup: Con. Ret: Con. AH: Garage		Sup. R=6.0, 150.0 ft	
b. N/A			

12. Cooling systems		
a. Central Unit	Cap: 60.0 kBtu/hr	
	SEER: 11.00	
b. N/A		
c. N/A		
13. Heating systems		
a. Electric Heat Pump	Cap: 60.0 kBtu/hr	
	HSPF: 7.00	
b. N/A		
c. N/A		
14. Hot water systems		
a. Electric Resistance	Cap: 40.0 gallons	
	EF: 0.97	
b. N/A		
c. Conservation credits (HR-Heat recovery, Solar DHP-Dedicated heat pump)		
15. HVAC credits (CF-Ceiling fan, CV-Cross ventilation, HF-Whole house fan, PT-Programmable Thermostat, MZ-C-Multizone cooling, MZ-H-Multizone heating)		

Glass/Floor Area: 0.10

Total as-built points: 32563

Total base points: 37635

PASS

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code.

PREPARED BY: GARY GILL

DATE: 10/5/07

I hereby certify that this building, as designed, is in compliance with the Florida Energy Code.

OWNER/AGENT: _____

DATE: _____

Review of the plans and specifications covered by this calculation indicates compliance with the Florida Energy Code. Before construction is completed this building will be inspected for compliance with Section 553.908 Florida Statutes.

GREAT SEAL OF THE STATE OF FLORIDA — IN GOD WE TRUST

BUILDING OFFICIAL: _____

DATE: _____

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , , PERMIT #:

BASE				AS-BUILT								
GLASS TYPES .18 X Conditioned Floor Area	X BSPM	= Points		Type/SC	Overhang Ornt	Len	Hgt	Area X	SPM X	SOF	= Points	
.18	2887.1	20.04	10414.4	Double, Clear	W	0.0	0.0	57.8	38.52	1.00	2226.7	
				Double, Clear	W	0.0	0.0	26.0	38.52	1.00	1001.6	
				Double, Clear	N	0.0	0.0	45.0	19.20	1.00	864.0	
				Double, Clear	N	0.0	0.0	13.0	19.20	1.00	249.6	
				Double, Clear	S	0.0	0.0	45.0	35.87	1.00	1614.0	
				Double, Clear	E	0.0	0.0	40.0	42.06	1.00	1682.6	
				Double, Clear	E	0.0	0.0	20.0	42.06	1.00	841.3	
				Double, Clear	E	0.0	0.0	44.8	42.06	1.00	1884.5	
				As-Built Total:				**291.6**			**10364.2**	
WALL TYPES	Area X	BSPM =	Points	Type			R-Value	Area X	SPM =		Points	
Adjacent	0.0	0.00	0.0	Frame, Wood, Exterior			19.0	1158.4	0.90		1042.6	
Exterior	1158.4	1.70	1969.3									
Base Total:	**1158.4**		**1969.3**	**As-Built Total:**				**1158.4**			**1042.6**	
DOOR TYPES	Area X	BSPM =	Points	Type				Area X	SPM =		Points	
Adjacent	0.0	0.00	0.0	Exterior Wood				20.0	6.10		122.0	
Exterior	140.0	6.10	854.0	Exterior Wood				120.0	6.10		732.0	
Base Total:	**140.0**		**854.0**	**As-Built Total:**				**140.0**			**854.0**	
CEILING TYPES	Area X	BSPM =	Points	Type			R-Value	Area X	SPM X SCM =		Points	
Under Attic	1668.0	1.73	2885.6	Under Attic			30.0	2085.0	1.73 X 1.00		3607.1	
Base Total:	**1668.0**		**2885.6**	**As-Built Total:**				**2085.0**			**3607.1**	
FLOOR TYPES	Area X	BSPM =	Points	Type			R-Value	Area X	SPM =		Points	
Slab	176.7(p)	-37.0	-6536.7	Slab-On-Grade Edge Insulation			0.0	176.7(p	-41.20		-7278.7	
Raised	0.0	0.00	0.0									
Base Total:			**-6536.7**	**As-Built Total:**				**176.7**			**-7278.7**	
INFILTRATION	Area X	BSPM =	Points					Area X	SPM =		Points	
	2887.1	10.21	29477.5					2887.1	10.21		29477.5	

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , ,	PERMIT #:

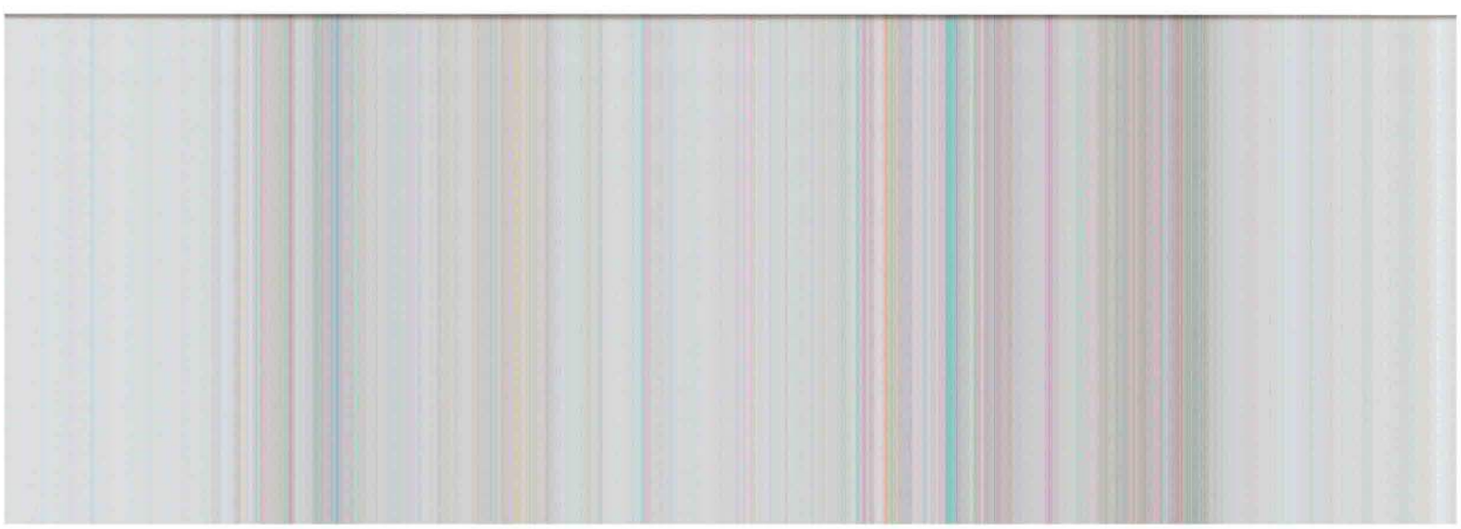
BASE				AS-BUILT						
Summer Base Points:			**39064.2**	**Summer As-Built Points:**						**38066.6**
Total Summer Points	X System Multiplier	=	Cooling Points	Total Component	X Cap Ratio	X Duct Multiplier (DM x DSM x AHU)	X System Multiplier	X Credit Multiplier	=	Cooling Points
39064.2	**0.4266**		**16664.8**	38066.6 **38066.6**	1.000 **1.00**	(1.000 x 1.147 x 1.00) **1.147**	0.310 **0.310**	1.000 **1.000**		13547.2 **13547.2**

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , , PERMIT #:

BASE				AS-BUILT								
GLASS TYPES .18 X Conditioned Floor Area	X BWPM	= Points		Type/SC	Overhang Ornt	Len	Hgt	Area X	WPM X	WOF	= Points	
.18	2887.1	12.74	6620.7	Double, Clear	W	0.0	0.0	57.8	20.73	1.00	1198.1	
				Double, Clear	W	0.0	0.0	26.0	20.73	1.00	538.9	
				Double, Clear	N	0.0	0.0	45.0	24.58	1.00	1106.0	
				Double, Clear	N	0.0	0.0	13.0	24.58	1.00	319.5	
				Double, Clear	S	0.0	0.0	45.0	13.30	1.00	598.3	
				Double, Clear	E	0.0	0.0	40.0	18.79	1.00	751.7	
				Double, Clear	E	0.0	0.0	20.0	18.79	1.00	375.9	
				Double, Clear	E	0.0	0.0	44.8	18.79	1.00	841.9	
				As-Built Total:				**291.6**			**5730.4**	
WALL TYPES	Area X	BWPM =	Points	Type			R-Value	Area X	WPM =		Points	
Adjacent	0.0	0.00	0.0	Frame, Wood, Exterior			19.0	1158.4	2.20		2548.5	
Exterior	1158.4	3.70	4286.1									
Base Total:	**1158.4**		**4286.1**	**As-Built Total:**				**1158.4**			**2548.5**	
DOOR TYPES	Area X	BWPM =	Points	Type				Area X	WPM =		Points	
Adjacent	0.0	0.00	0.0	Exterior Wood				20.0	12.30		246.0	
Exterior	140.0	12.30	1722.0	Exterior Wood				120.0	12.30		1476.0	
Base Total:	**140.0**		**1722.0**	**As-Built Total:**				**140.0**			**1722.0**	
CEILING TYPES	Area X	BWPM =	Points	Type			R-Value	Area X	WPM X WCM =		Points	
Under Attic	1668.0	2.05	3419.4	Under Attic			30.0	2085.0	2.05 X 1.00		4274.3	
Base Total:	**1668.0**		**3419.4**	**As-Built Total:**				**2085.0**			**4274.3**	
FLOOR TYPES	Area X	BWPM =	Points	Type			R-Value	Area X	WPM =		Points	
Slab	176.7(p)	8.9	1572.3	Slab-On-Grade Edge Insulation			0.0	176.7(p	18.80		3321.3	
Raised	0.0	0.00	0.0									
Base Total:			**1572.3**	**As-Built Total:**				**176.7**			**3321.3**	
INFILTRATION	Area X	BWPM =	Points					Area X	WPM =		Points	
	2887.1	-0.59	-1703.4					2887.1	-0.59		-1703.4	



WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , , PERMIT #:

BASE			AS-BUILT					
Winter Base Points:		**15917.2**	**Winter As-Built Points:**					**15893.0**
Total Winter Points	X System Multiplier	= Heating Points	Total Component	X Cap Ratio	X Duct Multiplier (DM x DSM x AHU)	X System Multiplier	X Credit Multiplier	= Heating Points
15917.2	**0.6274**	**9986.4**	15893.0 **15893.0**	1.000 **1.00**	(1.000 x 1.169 x 1.00) **1.169**	0.487 **0.487**	1.000 **1.000**	9050.6 **9050.6**

WATER HEATING & CODE COMPLIANCE STATUS

Residential Whole Building Performance Method A - Details

ADDRESS: , , , PERMIT #:

BASE				AS-BUILT							
WATER HEATING											
Number of Bedrooms	X	Multiplier	= Total	Tank Volume	EF	Number of Bedrooms	X Tank Ratio	X Multiplier	X Credit Multiplier	= Total	
4		2746.00	10984.0	40.0	0.97	4	1.00	2491.22	1.00	9964.9	
				As-Built Total:						**9964.9**	

CODE COMPLIANCE STATUS

BASE				AS-BUILT			
Cooling Points	+ Heating Points	+ Hot Water Points	= Total Points	Cooling Points	+ Heating Points	+ Hot Water Points	= Total Points
16665	**9986**	**10984**	**37635**	**13547**	**9051**	**9965**	**32563**

PASS

Code Compliance Checklist

Residential Whole Building Performance Method A - Details

ADDRESS: , , , PERMIT #:

6A-21 INFILTRATION REDUCTION COMPLIANCE CHECKLIST

COMPONENTS	SECTION	REQUIREMENTS FOR EACH PRACTICE	CHECK
Exterior Windows & Doors	606.1.ABC.1.1	Maximum:.3 cfm/sq.ft. window area; .5 cfm/sq.ft. door area.	
Exterior & Adjacent Walls	606.1.ABC.1.2.1	Caulk, gasket, weatherstrip or seal between: windows/doors & frames, surrounding wall; foundation & wall sole or sill plate; joints between exterior wall panels at corners; utility penetrations; between wall panels & top/bottom plates; between walls and floor. EXCEPTION: Frame walls where a continuous infiltration barrier is installed that extends from, and is sealed to, the foundation to the top plate.	
Floors	606.1.ABC.1.2.2	Penetrations/openings >1/8" sealed unless backed by truss or joint members. EXCEPTION: Frame floors where a continuous infiltration barrier is installed that is sealed to the perimeter, penetrations and seams.	
Ceilings	606.1.ABC.1.2.3	Between walls & ceilings; penetrations of ceiling plane of top floor; around shafts, chases, soffits, chimneys, cabinets sealed to continuous air barrier; gaps in gyp board & top plate; attic access. EXCEPTION: Frame ceilings where a continuous infiltration barrier is installed that is sealed at the perimeter, at penetrations and seams.	
Recessed Lighting Fixtures	606.1.ABC.1.2.4	Type IC rated with no penetrations, sealed; or Type IC or non-IC rated, installed inside a sealed box with 1/2" clearance & 3" from insulation; or Type IC rated with < 2.0 cfm from conditioned space, tested.	
Multi-story Houses	606.1.ABC.1.2.5	Air barrier on perimeter of floor cavity between floors.	
Additional Infiltration reqts	606.1.ABC.1.3	Exhaust fans vented to outdoors, dampers; combustion space heaters comply with NFPA, have combustion air.	

6A-22 OTHER PRESCRIPTIVE MEASURES (must be met or exceeded by all residences.)

COMPONENTS	SECTION	REQUIREMENTS	CHECK
Water Heaters	612.1	Comply with efficiency requirements in Table 6-12. Switch or clearly marked circuit breaker (electric) or cutoff (gas) must be provided. External or built-in heat trap required.	
Swimming Pools & Spas	612.1	Spas & heated pools must have covers (except solar heated). Non-commercial pools must have a pump timer. Gas spa & pool heaters must have a minimum thermal efficiency of 78%.	
Shower heads	612.1	Water flow must be restricted to no more than 2.5 gallons per minute at 80 PSIG.	
Air Distribution Systems	610.1	All ducts, fittings, mechanical equipment and plenum chambers shall be mechanically attached, sealed, insulated, and installed in accordance with the criteria of Section 610. Ducts in unconditioned attics: R-6 min. insulation.	
HVAC Controls	607.1	Separate readily accessible manual or automatic thermostat for each system.	
Insulation	604.1, 602.1	Ceilings-Min. R-19. Common walls-Frame R-11 or CBS R-3 both sides. Common ceiling & floors R-11.	

Alpine Engineered Products, Inc.

1950 Marley Drive Haines City, FL 33844
Florida Engineering Certificate of Authorization Number: 567
Florida Certificate of Product Approval # FL1999
 Document ID:1SRA215-Z1114130745

Truss Fabricator:	W.B. Howland
Job Identification:	2809-/Haviaris Residence /MO PERKINS -- Live Oak, FL
Truss Count:	11
Model Code:	Florida Building Code
Truss Criteria:	ANSI/TPI-2002(STD)/FBC
Engineering Software:	Alpine Software,Versions 7.12, 7.20.
Structural Engineer of Record:	
Address:	
Minimum Design Loads:	Roof - 32.0 PSF @ 1.25 Duration Floor - N/A Wind - 110 MPH ASCE 7-98 -Closed

Seal Date: 10/14/2005

-Truss Design Engineer-
James F. Collins Jr.
Florida License Number: 52212
1950 Marley Drive
Haines City, FL 33844

Notes:

1. Determination as to the suitability of these truss components for the structure is the responsibility of the building designer/engineer of record, as defined in ANSI/TPI 1
2. The drawing date shown on this index sheet must match the date shown on the individual truss component drawing.
3. As shown on attached drawings; the drawing number is preceded by: HCUSR215

Details: A11030EC-GBLLETIN

#	Ref	Description	Drawing#	Date
1	86062	A1GE	05287326	10/14/05
2	86063	A2	05287327	10/14/05
3	86064	B1GE	05287321	10/14/05
4	86065	B2	05287322	10/14/05
5	86066	B3G (2-PLY)	05287319	10/14/05
6	86067	B4G (5-PLY)	05287320	10/14/05
7	86068	B5G (4-PLY)	05287323	10/14/05
8	86069	PBA1	05287325	10/14/05
9	86070	PBAGE	05287324	10/14/05
10	86071	PBB1	05287329	10/14/05
11	86072	PBBGE	05287328	10/14/05

Alpine Engineered Products, Inc.

1950 Marley Drive Haines City, FL 33844
Florida Engineering Certificate of Authorization Number: 567
 Document ID:1SRA215-Z1114130745

Truss Fabricator:	W.B. Howland
Job Identification:	2809-/Haviaris Residence /MO PERKINS -- Live Oak, FL
Truss Count:	3
Model Code:	Florida Building Code
Truss Criteria:	ANSI/TPI-2002(STD)/FBC
Engineering Software:	Alpine Software,Versions 7.12, 7.20.
Structural Engineer of Record:	
Address:	
Minimum Design Loads:	Roof - 32.0 PSF @ 1.25 Duration Floor - N/A Wind - 110 MPH ASCE 7-98 -Closed

Notes:

1. Determination as to the suitability of these truss components for the structure is the responsibility of the building designer/engineer of record, as defined in ANSI/TPI 1
2. The drawing date shown on this index sheet must match the date shown on the individual truss component drawing.
3. As shown on attached drawings; the drawing number is preceded by: HCUSR215

Seal Date: 10/14/2005

-Truss Design Engineer-
James F. Collins Jr.
Florida License Number: 52212
1950 Marley Drive
Haines City, FL 33844

Revised Trusses

#	Ref	Description	Drawing#	Date
1	86063--A2		05287327	10/14/05
2	86071--PBB1		05287329	10/14/05
3	86072--PBBGE		05287328	10/14/05

(2809-/Navarris Residence /MO PERKINS -- Live Oak, FL - AIGE)

Top chord 2x6 SP #2 N
Bot chord 2x6 SP #2 N
Webs 2x4 SP #2 N

Gable end supports 8" max rake overhang.

In lieu of structural panels use purlins to brace all flat TC @ 24" OC.

Shim all supports to solid bearing.

THE BUILDING DESIGNER IS RESPONSIBLE FOR THE DESIGN OF THE ROOF AND CEILING DIAPHRAGMS, GABLE END SHEAR WALLS, AND SUPPORTING SHEAR WALLS. SHEAR WALLS MUST PROVIDE CONTINUOUS LATERAL RESTRAINT TO THE GABLE END. ALL CONNECTIONS TO BE DESIGNED BY THE BUILDING DESIGNER.

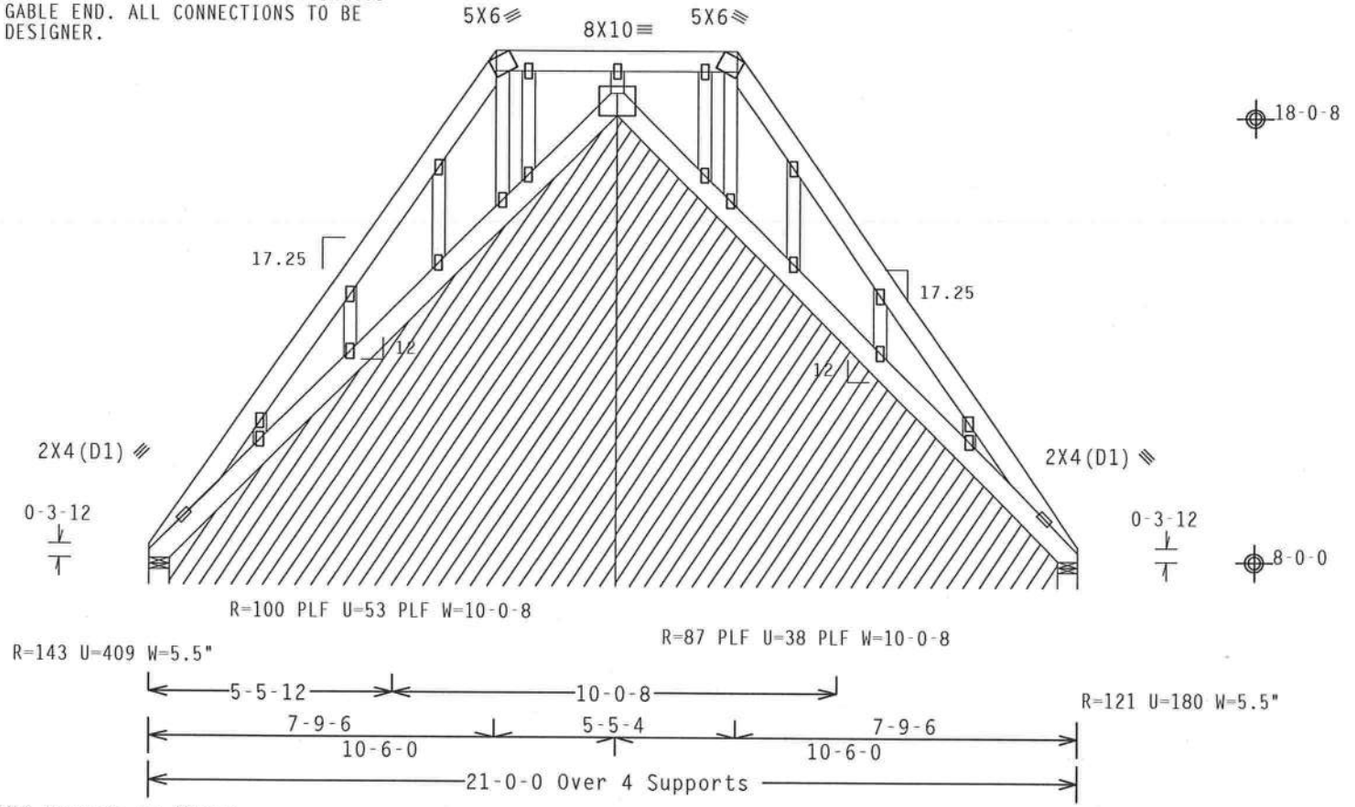
110 mph wind, 30.00 ft mean hgt, ASCE 7-98, CLOSED bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf.

See DWGS A11030EC1103 & GBLLETIN0405 for more requirements.

Deflection meets L/240 live and L/180 total load.

Plates sized for a minimum of 3.00 sq.in./piece.

The overall height of this truss excluding overhang is 11-6-0.



Note: All Plates Are 2X4 Except As Shown.

Design Crit: TPI-2002(STD)/FBC

PLT TYP. Wave

Cq/RT=1.00(1.25)/10(0) 7.12.0218

QTY:1 FL/-/5/-/-/R/- Scale =.25"/Ft.

ALPINE
Alpine Engineered Products, Inc.
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FL Certificate of Authorization # 567

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI 1-03 (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 583 D'ONOFRIO DR., SUITE 200, MADISON, WI 53719) AND WTCA (WOOD TRUSS COUNCIL OF AMERICA, 6300 ENTERPRISE LN, MADISON, WI 53719) FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED, TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

IMPORTANTFURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ALPINE ENGINEERED PRODUCTS, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN; ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH TPI; OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES. DESIGN CONFORMS WITH APPLICABLE PROVISIONS OF NDS (NATIONAL DESIGN SPEC. BY AF&PA) AND TPI. ALPINE CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/S/K) ASTM A653 GRADE 40/60 (W, K/H,S) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (1) SHALL BE PER ANNEX A3 OF TPI1-2002 SEC.3. A SEAL ON THIS DRAWING INDICATES ACCEPTANCE OF PROFESSIONAL ENGINEERING RESPONSIBILITY SOLELY FOR THE TRUSS COMPONENT DESIGN SHOWN. THE SUITABILITY AND USE OF THIS COMPONENT FOR ANY BUILDING IS THE RESPONSIBILITY OF THE BUILDING DESIGNER PER ANSI/TPI 1 SEC. 2.

JAMES F. COLLINS LICENSE No. 52212 STATE OF FLORIDA PROFESSIONAL ENGINEER
Oct 14 05

TC LL	20.0 PSF	REF	R215-- 86062
TC DL	10.0 PSF	DATE	10/14/05
BC DL	10.0 PSF	DRW	HCUSR215 05287326
BC LL	0.0 PSF	HC-ENG	SSB/WHK
TOT.LD.	40.0 PSF	SEQN-	83092
DUR.FAC.	1.25	FROM	CDM
SPACING	24.0"	JREF-	1SRA215_Z11

Top chord 2x6 SP #2 N
Bot chord 2x6 SP #2 N
Webs 2x4 SP #2 N

Calculated horizontal deflection is 0.46" due to live load and 0.73" due to dead load.

Deflection meets L/240 live and L/180 total load.

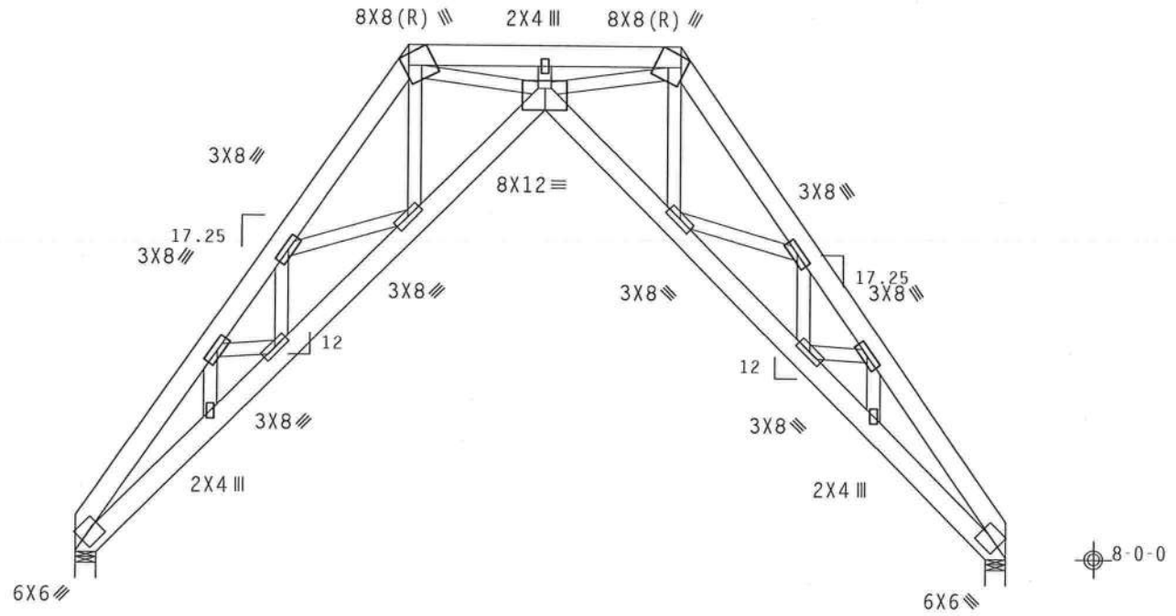
Plates sized for a minimum of 3.00 sq.in./piece.

The overall height of this truss excluding overhang is 11-6-0.

110 mph wind, 30.00 ft mean hgt, ASCE 7-98, CLOSED bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf.

In lieu of structural panels use purlins to brace all flat TC @ 24" OC.

WARNING: Furnish a copy of this DWG to the installation contractor. Special care must be taken during handling, shipping and installation of trusses. See "WARNING" note below.



Design Crit: TPI-2002(STD)/FBC
Cq/RT=1.00(1.25)/10(0) 7.12.0218 0

PLT TYP. Wave

QTY:10 FL/-/5/-/-/R/- Scale =.25"/Ft.

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Haines City, FL 33844
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JAMES E. COLLINS JR. LICENSE No. 52212 STATE OF FLORIDA PROFESSIONAL ENGINEER

Oct

TC LL	20.0 PSF	REF	R215-- 86063
TC DL	10.0 PSF	DATE	10/14/05
BC DL	10.0 PSF	DRW	HCUSR215 05287327
BC LL	0.0 PSF	HC-ENG	SSB/WHK
TOT.LD.	40.0 PSF	SEQN-	82932 REV
DUR.FAC.	1.25	FROM	CDM
SPACING	24.0"	JREF-	1SRA215_Z11

(2809-/Navarris Residence /MO PERKINS -- Live Oak, FL - BIGE)

Top chord 2x4 SP #2 N
Bot chord 2x4 SP #2 N
Webs 2x4 SP #2 N

See DWGS A11030EC1103 & GBLLETIN0405 for more requirements.

Deflection meets L/240 live and L/180 total load.

The overall height of this truss excluding overhang is 11-6-0.

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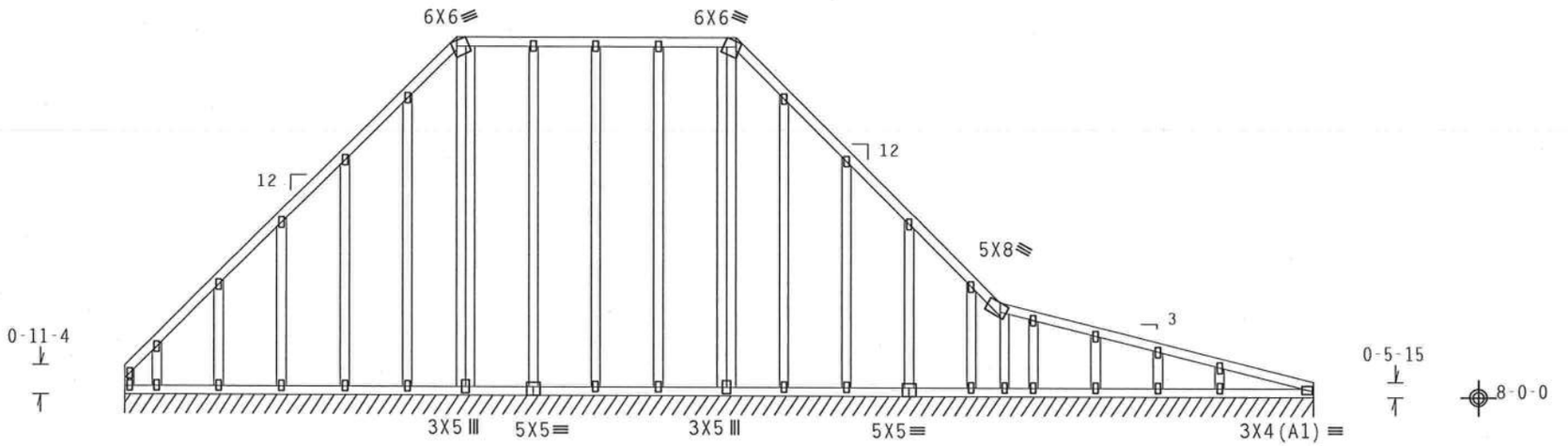
110 mph wind, 30.00 ft mean hgt, ASCE 7-98, CLOSED bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf.

In lieu of structural panels use purlins to brace all flat TC @ 24" OC.

Plates sized for a minimum of 3.00 sq.in./piece.



Note: All Plates Are 2X4 Except As Shown.

Design Crit: TPI-2002(STD)/FBC

PLT TYP. Wave

Cq/RT=1.00(1.25)/10(0) 7.12.0218.03 QTY:2 FL/-/5/-/-/R/- Scale =.1875"/Ft.

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JAMES F. COLLINS, JR. LICENSED No. 52212 STATE OF FLORIDA PROFESSIONAL ENGINEER

Oct 1

TC LL	20.0 PSF	REF	R215-- 86064
TC DL	10.0 PSF	DATE	10/14/05
BC DL	10.0 PSF	DRW	HCUSR215 05287321
BC LL	0.0 PSF	HC-ENG	SSB/WHK *
TOT.LD.	40.0 PSF	SEQN-	83085
DUR.FAC.	1.25	FROM	CDM
SPACING	24.0"	JREF-	1SRA215_Z11

(2809 /Navarre Residence /MR PERKINS -- Live Oak, FL - B2)

Top chord 2x8 SP SS :T2 2x8 SP #2 N: :T4 2x6 SP #2 N:
Bot chord 2x10 SP #2 N :B2, B4 2x10 SP SS:
:B3 2x4 SP #2 N:
Webs 2x4 SP #2 N

In lieu of structural panels use purlins to brace all flat TC @ 24" OC.

BC attic room floor loading: LL = 40.00 psf; DL = 10.00 psf; from 6-3-0 to 23-9-0.

Plates sized for a minimum of 3.00 sq.in./piece.

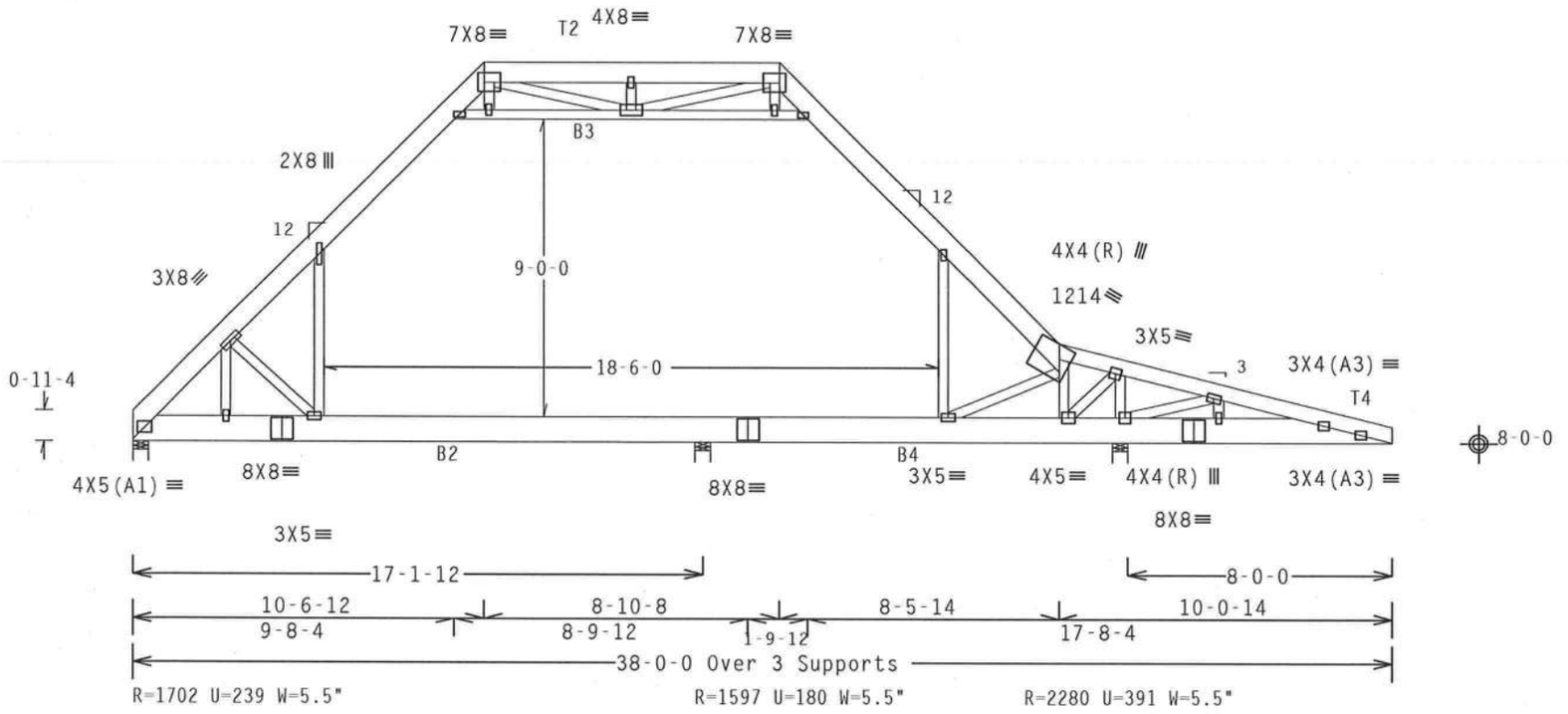
110 mph wind, 30.00 ft mean hgt, ASCE 7-98, CLOSED bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf.

Calculated horizontal deflection is 0.16" due to live load and 0.20" due to dead load.

Collar-tie braced with continuous lateral bracing at 24" OC. or rigid ceiling.

Deflection meets L/240 live and L/180 total load.

The overall height of this truss excluding overhang is 11-6-0.



Note: All Plates Are 2X4 Except As Shown.

Design Crit: TPI-2002(STD)/FBC

PLT TYP. Wave Cq/RT=1.00(1.25)/10(0) 7.12.0218 QTY:8 FL/-/5/-/-/R/- Scale =.1875"/Ft.

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JAMES F. COLLINS JR LICENSE No.52272 STATE OF FLORIDA PROFESSIONAL ENGINEER

Oct 14 05

TC LL	20.0 PSF	REF	R215-- 86065
TC DL	10.0 PSF	DATE	10/14/05
BC DL	10.0 PSF	DRW	HCUSR215 05287322
BC LL	0.0 PSF	HC-ENG	SSB/WHK
TOT.LD.	40.0 PSF	SEQN-	83038
DUR.FAC.	1.25	FROM	CDM
SPACING	24.0"	JREF-	1SRA215_Z11

(2809-)Navarris Residence /MD PERKINS -- Live Oak, FL - B3G (2-PLY))

Top chord 2x8 SP SS :T2 2x8 SP #2 N: :T4 2x6 SP #2 N:
Bot chord 2x10 SP #2 N :B2, B4 2x10 SP SS:
:B3 2x4 SP #2 N:
Webs 2x4 SP #2 N

110 mph wind, 30.00 ft mean hgt, ASCE 7-98, CLOSED bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf.

Calculated horizontal deflection is 0.17" due to live load and 0.20" due to dead load.

Collar-tie braced with continuous lateral bracing at 24" OC.

Deflection meets L/240 live and L/180 total load.

Plates sized for a minimum of 3.00 sq.in./piece.

2 COMPLETE TRUSSES REQUIRED

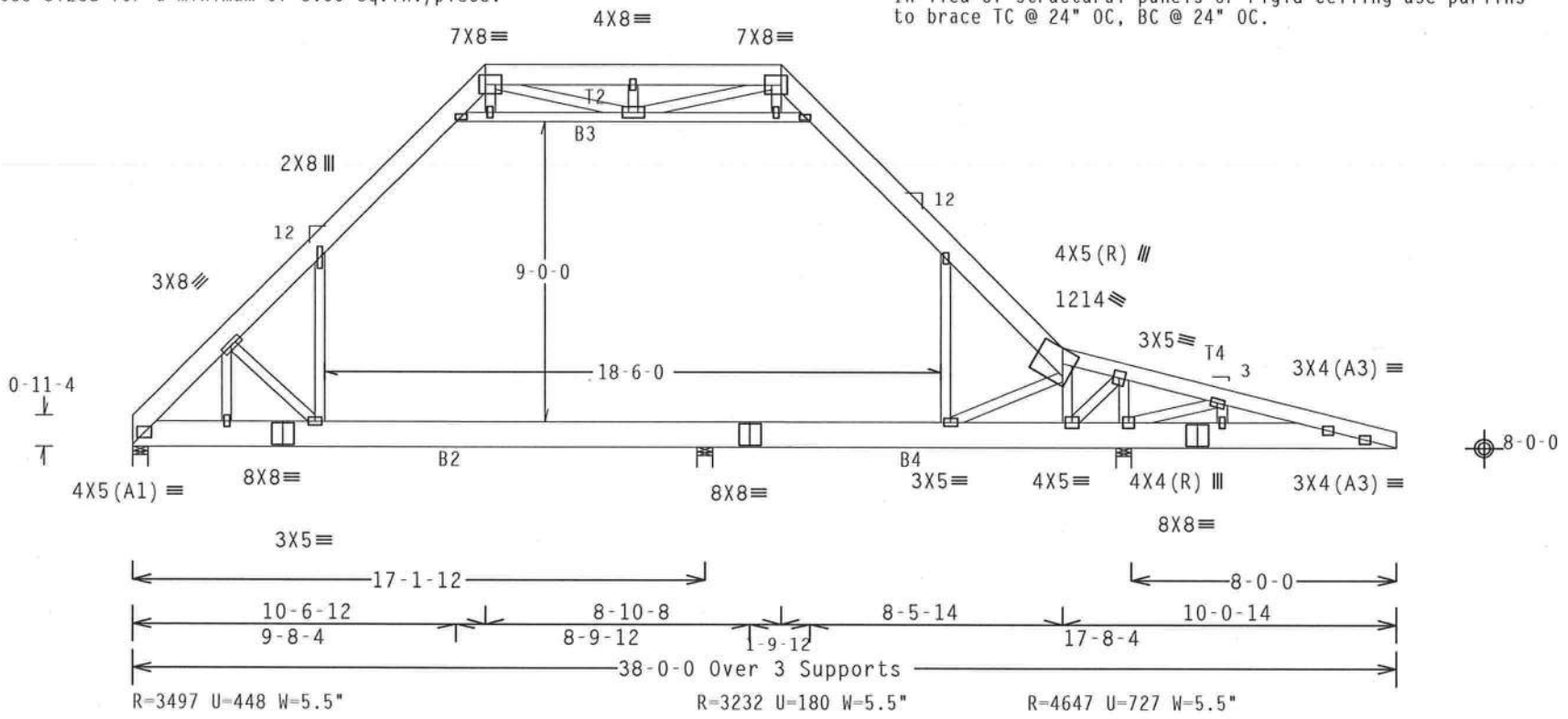
Nailing Schedule: (0.131"x3"_Gun_nails)
Top Chord: 1 Row @12.00" o.c.
Bot Chord: 1 Row @ 9.75" o.c.
Webs : 1 Row @ 4" o.c.
Use equal spacing between rows and stagger nails in each row to avoid splitting.

Trusses to be spaced at 48.0" OC maximum.

BC attic room floor loading: LL = 40.00 psf; DL = 10.00 psf; from 5-9-0 to 24-3-0.

The overall height of this truss excluding overhang is 11-6-0.

In lieu of structural panels or rigid ceiling use purlins to brace TC @ 24" OC, BC @ 24" OC.



Note: All Plates Are 2X4 Except As Shown.

Design Crit: TPI-2002(STD)/FBC

PLT TYP. Wave Cq/RT=1.00(1.25)/10(0) 7.12.0218 QTY:3 FL/-/5/-/-/R/- Scale =.1875"/Ft.

ALPINE
Alpine Engineered Products, Inc.
1950 Marley Drive
Haines City, FL 33844
FL Certificate of Authorization # 567

JAMES F. COLLINS, JR. LICENSE NO. 52212 STATE OF FLORIDA PROFESSIONAL ENGINEER

Oct

TC LL	20.0 PSF	REF	R215-- 86066
TC DL	10.0 PSF	DATE	10/14/05
BC DL	10.0 PSF	DRW	HCUSR215 05287319
BC LL	0.0 PSF	HC-ENG	SSB/WHK
TOT.LD.	40.0 PSF	SEQN-	83043
DUR.FAC.	1.25	FROM	CDM
SPACING	48.0"	JREF-	1SRA215_Z11

(2809-/Navarris Residence /MD PERKINS -- Live Oak, FL - B4G (5-PLY))

Top chord 2x8 SP SS :T2 2x8 SP #2 N: :T4 2x6 SP #2 N:
Bot chord 2x10 SP #2 N :B2, B4 2x10 SP SS:
:B3 2x4 SP #2 N:
Webs 2x4 SP #2 N

110 mph wind, 30.00 ft mean hgt, ASCE 7-98, CLOSED bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf.

Calculated horizontal deflection is 0.24" due to live load and 0.28" due to dead load.

Trusses to be spaced at 168.0" OC maximum.

BC attic room floor loading: LL = 40.00 psf; DL = 10.00 psf; from 5-9-0 to 24-3-0.

Plates sized for a minimum of 3.00 sq.in./piece.

5 COMPLETE TRUSSES REQUIRED

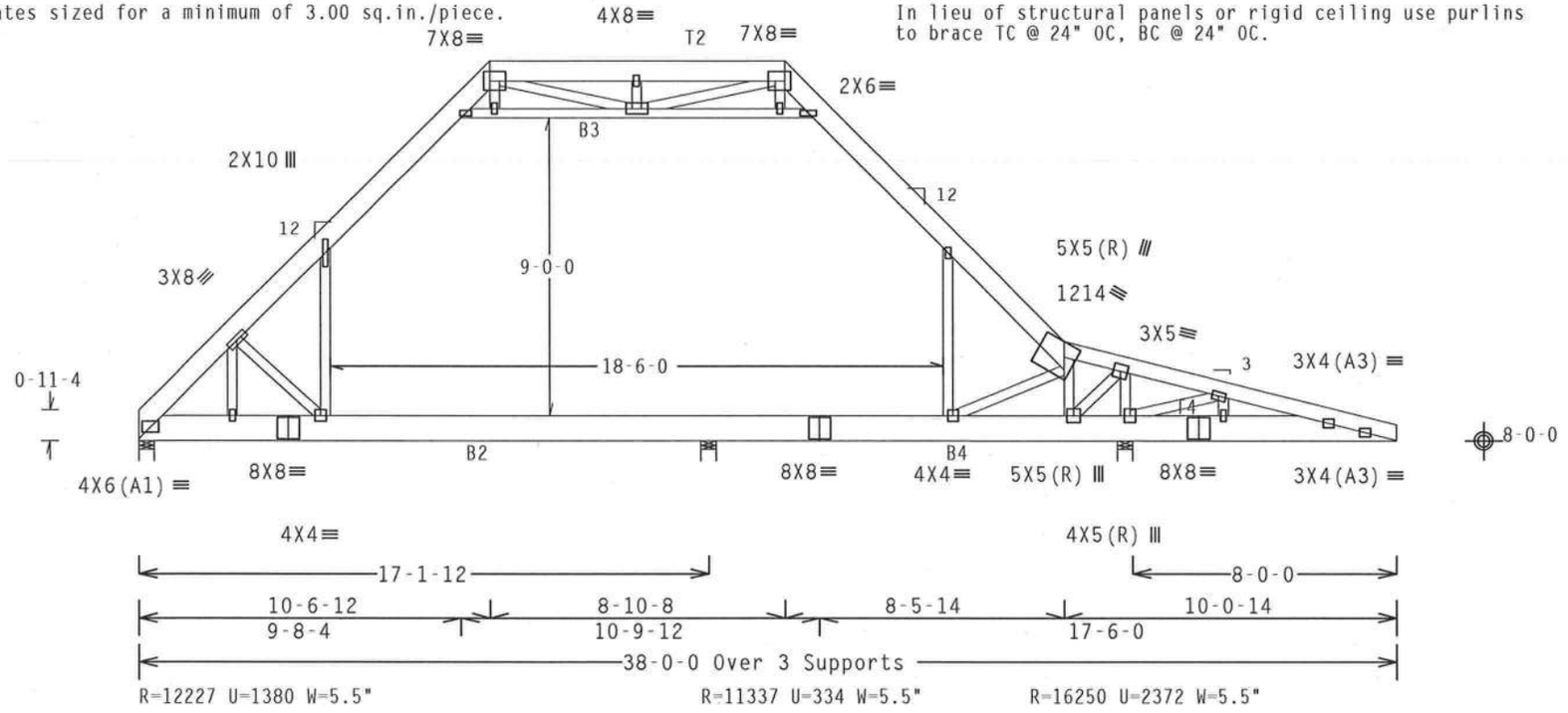
Nailing Schedule: (0.131"x3"_Gun_nails)
Top Chord: 2 Rows @ 6.00" o.c. (Each Row)
Bot Chord: 1 Row @ 1.75" o.c.
Webs : 1 Row @ 4" o.c.
Repeat nailing as each layer is applied. Use equal spacing between rows and stagger nails in each row to avoid splitting.
In addition apply (1) 1/2" bolt at each top chord joint location.

Collar-tie braced with continuous lateral bracing at 24" OC.

Deflection meets L/240 live and L/180 total load.

The overall height of this truss excluding overhang is 11-6-0.

In lieu of structural panels or rigid ceiling use purlins to brace TC @ 24" OC, BC @ 24" OC.



Note: All Plates Are 2X4 Except As Shown.

Design Crit: TPI-2002(STD)/FBC

PLT TYP. Wave Cq/RT=1.00(1.25)/10(0) 7.12.0218 QTY:1 FL/-/5/-/-/R/- Scale =.1875"/Ft.

ALPINE
Alpine Engineered Products, Inc.
1950 Marley Drive
Haines City, FL 33844
FL Certificate of Authorization # 567

JAMES F. COLLINS LICENSE No.52212 STATE OF FLORIDA PROFESSIONAL ENGINEER
Oct 14 05

TC LL	20.0 PSF
TC DL	10.0 PSF
BC DL	10.0 PSF
BC LL	0.0 PSF
TOT.LD.	40.0 PSF
DUR.FAC.	1.25
SPACING	168.0"

REF	R215-- 86067
DATE	10/14/05
DRW	HCUSR215 05287320
HC-ENG	SSB/WHK
SEQN-	83095
FROM	CDM
JREF-	1SRA215_Z11

(2809-/Haviaris Residence /MO PERKINS -- Live Oak, FL - B5G (4-PLY))

Top chord 2x8 SP SS :T2 2x8 SP #2 N: :T4 2x6 SP #2 N:
Bot chord 2x10 SP #2 N :B2, B4 2x10 SP SS:
:B3 2x4 SP #2 N:
Webs 2x4 SP #2 N

110 mph wind, 30.00 ft mean hgt, ASCE 7-98, CLOSED bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf.

Deflection meets L/240 live and L/180 total load.

The overall height of this truss excluding overhang is 11-6-0.

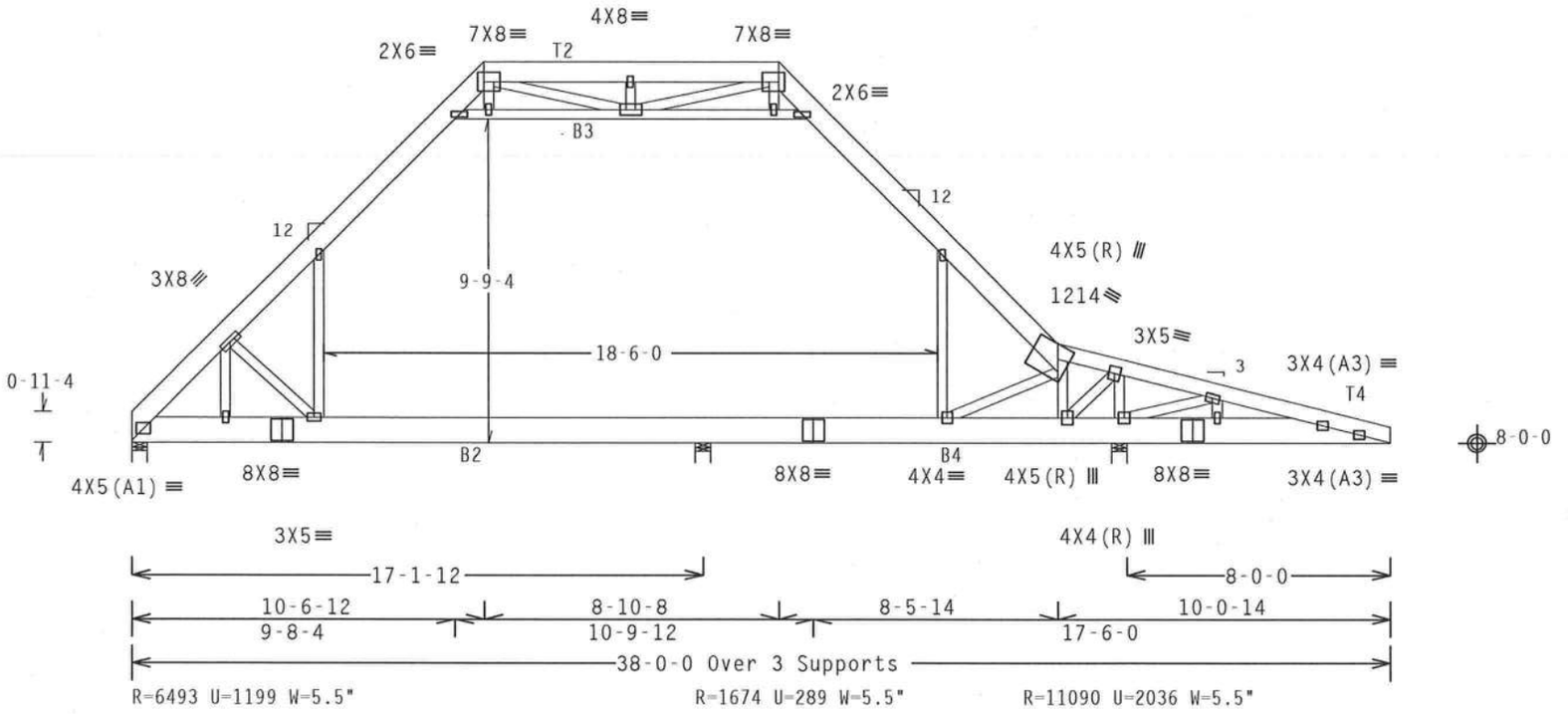
In lieu of structural panels or rigid ceiling use purlins to brace TC @ 24" OC, BC @ 24" OC.

4 COMPLETE TRUSSES REQUIRED

Nailing Schedule: (0.131"x3"_Gun_nails)
Top Chord: 1 Row @ 5.25" o.c.
Bot Chord: 1 Row @10.00" o.c.
Webs : 1 Row @ 4" o.c.
Repeat nailing as each layer is applied. Use equal spacing between rows and stagger nails in each row to avoid splitting.
In addition apply (1) 1/2" bolt at each top chord joint location.

Trusses to be spaced at 144.0" OC maximum.

Plates sized for a minimum of 3.00 sq.in./piece.



Note: All Plates Are 2X4 Except As Shown.

Design Crit: TPI-2002(STD)/FBC

PLT TYP. Wave Cq/RT=1.00(1.25)/10(0) 7.12.0218 QTY:1 FL/-/5/-/-/R/- Scale =.1875"/Ft.

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IMPORTANT FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ALPINE ENGINEERED PRODUCTS, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN; ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH TPI; OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES. DESIGN CONFORMS WITH APPLICABLE PROVISIONS OF NDS (NATIONAL DESIGN SPEC, BY AF&PA) AND TPI. ALPINE CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/S/K) ASTM A653 GRADE 40/60 (W, K/H,S) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (1) SHALL BE PER ANNEX A3 OF TPI1-2002 SEC.3. A SEAL ON THIS DRAWING INDICATES ACCEPTANCE OF PROFESSIONAL ENGINEERING RESPONSIBILITY SOLELY FOR THE TRUSS COMPONENT DESIGN SHOWN. THE SUITABILITY AND USE OF THIS COMPONENT FOR ANY BUILDING IS THE RESPONSIBILITY OF THE BUILDING DESIGNER PER ANSI/TPI 1 SEC. 2.

JAMES F. COLLINS, JR. LICENSE No. 52212 STATE OF FLORIDA PROFESSIONAL ENGINEER
Oct 14 '05

TC LL	20.0 PSF	REF	R215-- 86068
TC DL	10.0 PSF	DATE	10/14/05
BC DL	10.0 PSF	DRW	HCUSR215 05287323
BC LL	0.0 PSF	HC-ENG	SSB/WHK
TOT.LD.	40.0 PSF	SEQN-	83065
DUR.FAC.	1.25	FROM	CDM
SPACING	144.0"	JREF-	1SRA215_Z11

(2809-/Haviaris Residence /MO PERKINS -- Live Oak, FL - PBA1)

Top chord 2x4 SP #2 N
Bot chord 2x4 SP #2 N
Webs 2x4 SP #2 N

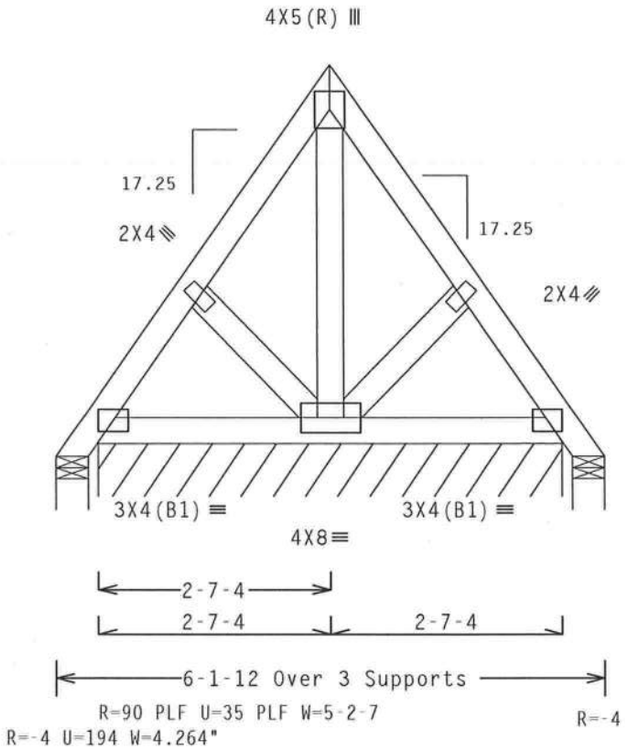
Deflection meets L/240 live and L/180 total load.

The overall height of this truss excluding overhang is 4-5-0.

REFER TO PIGBACKA1103 OR PIGBACKB1103 FOR PIGYBACK DETAILS.
TOP CHORD OF SUPPORTING TRUSS UNDER PIGGYBACK TO BE
BRACED @24"O.C, UNLESS OTHERWISE SPECIFIED.

110 mph wind, 30.00 ft mean hgt, ASCE 7-98, CLOSED bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=2.0 psf.

Plates sized for a minimum of 3.00 sq.in./piece.



19-7-12
19-6-0

Design Crit: TPI-2002(STD)/FBC
PLT TYP. Wave Cq/RT=1.00(1.25)/10(0) 7.12.0218 QTY:10 FL/-/5/-/-/R/- Scale =.5"/Ft.

ALPINE
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JAMES F. COLLINS LICENSE No. 52212 STATE OF FLORIDA PROFESSIONAL ENGINEER
Oct 14 '05

TC LL	20.0 PSF	REF	R215-- 86069
TC DL	10.0 PSF	DATE	10/14/05
BC DL	2.0 PSF	DRW	HCUSR215 05287325
BC LL	0.0 PSF		HC-ENG SSB/WHK
TOT.LD.	32.0 PSF	SEQN-	82937
DUR.FAC.	1.25	FROM	CDM
SPACING	24.0"	JREF-	1SRA215_Z11

(2809-/Haviaris Residence /MO PERKINS -- Live Oak, FL - PBAGE)

Top chord 2x4 SP #2 N
Bot chord 2x4 SP #2 N
Webs 2x4 SP #2 N

Gable end supports 8" max rake overhang.

In lieu of rigid ceiling use purlins to brace BC @ 24" OC.

Plates sized for a minimum of 3.00 sq.in./piece.

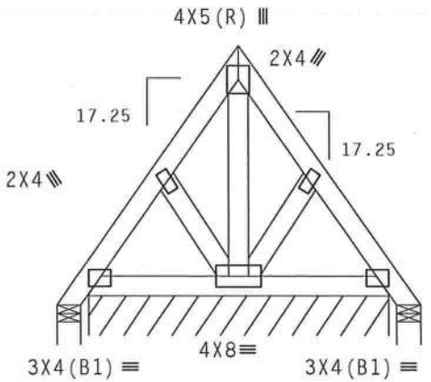
REFER TO PIGBACKA1103 OR PIGBACKB1103 FOR PIGYBACK DETAILS.
TOP CHORD OF SUPPORTING TRUSS UNDER PIGGYBACK TO BE
BRACED @24"O.C, UNLESS OTHERWISE SPECIFIED.

110 mph wind, 30.00 ft mean hgt, ASCE 7-98, CLOSED bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=2.0 psf.

See DWGS A11030EC1103 & GBLLETIN0405 for more requirements.

Deflection meets L/240 live and L/180 total load.

The overall height of this truss excluding overhang is 3-10-14.



R=95 PLF U=40 PLF W=4-5-15

R=-12 U=180 W=4.264"

19-7-12
19-6-0

R=-12 U=180 W=4.264"

Design Crit: TPI-2002(STD)/FBC
PLT TYP. Wave Cq/RT=1.00(1.25)/10(0) 7.12.0218.02 QTY:1 FL/-/5/-/-/R/- Scale =.375"/Ft.

ALPINE
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1950 Marley Drive
Haines City, FL 33844
FL Certificate of Authorization # 567

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JAMES F. COLLINS, JR. LICENSE - No. 52212 STATE OF FLORIDA PROFESSIONAL ENGINEER

TC LL	20.0 PSF
TC DL	10.0 PSF
BC DL	2.0 PSF
BC LL	0.0 PSF
TOT.LD.	32.0 PSF
DUR.FAC.	1.25
SPACING	24.0"

REF	R215-- 86070
DATE	10/14/05
DRW	HCUSR215 05287324
HC-ENG	SSB/WHK
SEQN-	83089
FROM	CDM
JREF-	1SRA215_Z11

(2809-/Haviaris Residence /MO PERKINS -- Live Oak, FL - PBB1)

Top chord 2x4 SP #2
Bot chord 2x4 SP #2
Webs 2x4 SP #3

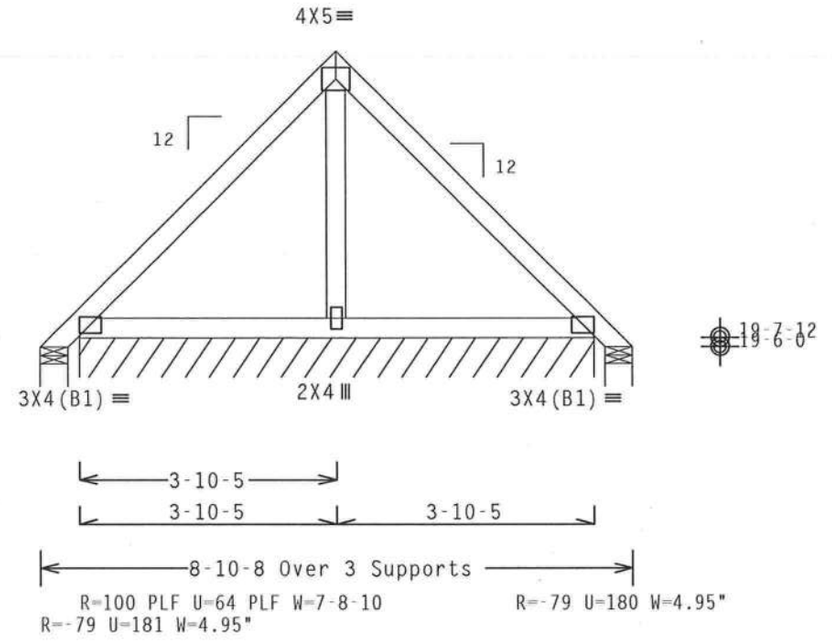
In lieu of rigid ceiling use purlins to brace BC @ 24" OC.

Plates sized for a minimum of 3.00 sq.in./piece.

REFER TO PIGBACKA1103 OR PIGBACKB1103 FOR PIGYBACK DETAILS.
TOP CHORD OF SUPPORTING TRUSS UNDER PIGGYBACK TO BE
BRACED @24"O.C, UNLESS OTHERWISE SPECIFIED.

110 mph wind, 21.72 ft mean hgt, ASCE 7-98, CLOSED bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=1.2 psf.

Deflection meets L/240 live and L/180 total load.



Design Crit: TPI-2002(STD)/FBC
PLT TYP. Wave Cq/RT=1.00(1.25)/10(0) 7.20.0918 QTY:12 FL/-/5/-/-/R/- Scale =.375"/Ft.

ALPINE
Alpine Engineered Products, Inc.
1950 Marley Drive
Haines City, FL 33844
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JAMES F. COLLINS LICENSE No. 52218 STATE OF FLORIDA PROFESSIONAL ENGINEER
Oct 14 05

TC LL	20.0 PSF	REF	R215-- 86071
TC DL	10.0 PSF	DATE	10/14/05
BC DL	2.0 PSF	DRW	HCUSR215 05287329
BC LL	0.0 PSF	HC-ENG	SSB/WHK
TOT.LD.	32.0 PSF	SEQN-	45760 REV
DUR.FAC.	1.25	FROM	CDM
SPACING	24.0"	JREF-	1SRA215_Z11

(2809-/Haviaris Residence /MO PERKINS -- Live Oak, FL - PBBGE)

Top chord 2x4 SP #2
Bot chord 2x4 SP #2
Webs 2x4 SP #3

Gable end supports 8" max rake overhang.

In lieu of rigid ceiling use purlins to brace BC @ 24" OC.

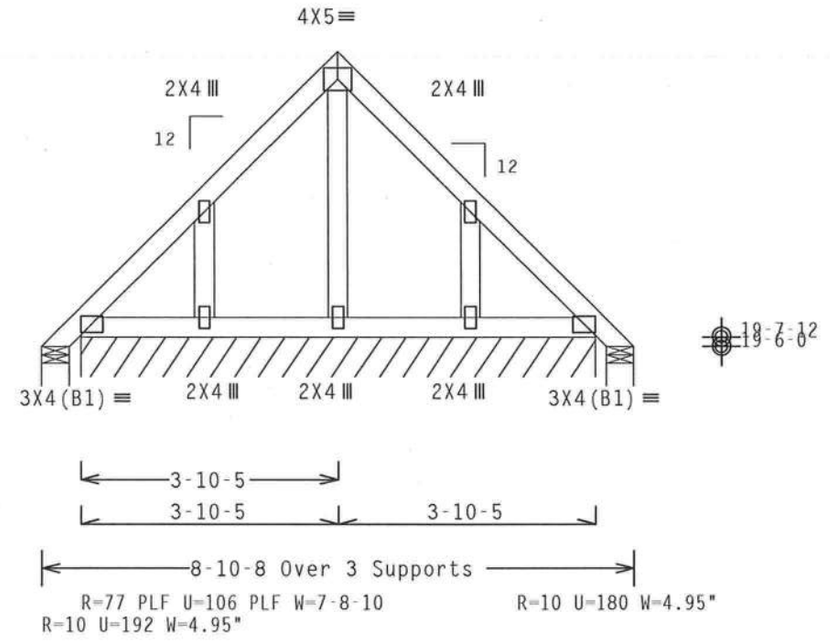
Plates sized for a minimum of 3.00 sq.in./piece.

REFER TO PIGBACKA1103 OR PIGBACKB1103 FOR PIGYBACK DETAILS.
TOP CHORD OF SUPPORTING TRUSS UNDER PIGGYBACK TO BE
BRACED @24"O.C, UNLESS OTHERWISE SPECIFIED.

110 mph wind, 21.72 ft mean hgt, ASCE 7-98, CLOSED bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=1.2 psf.

See DWGS A1103OEC1103 & GBLLETIN0405 for more requirements.

Deflection meets L/240 live and L/180 total load.



Design Crit: TPI-2002(STD)/FBC
PLT TYP. Wave Cq/RT=1.00(1.25)/10(0) 7.20.0918.30 QTY:2 FL/-/5/-/-/R/- Scale =.375"/Ft.

ALPINE
Alpine Engineered Products, Inc.
1950 Marley Drive
Haines City, FL 33844
FL Certificate of Authorization # 567

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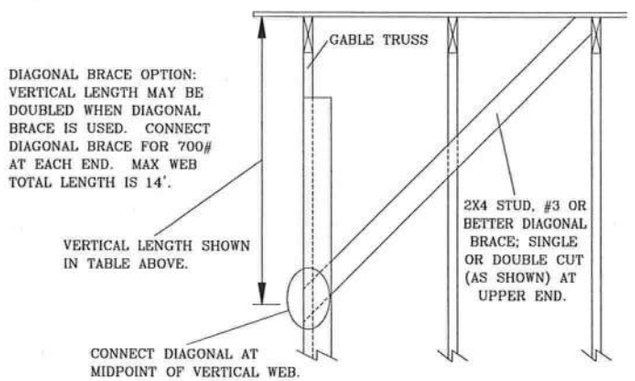
JAMES F. COLLINS, JR. LICENSE No. 52212 STATE OF FLORIDA PROFESSIONAL ENGINEER
Oct 14 05

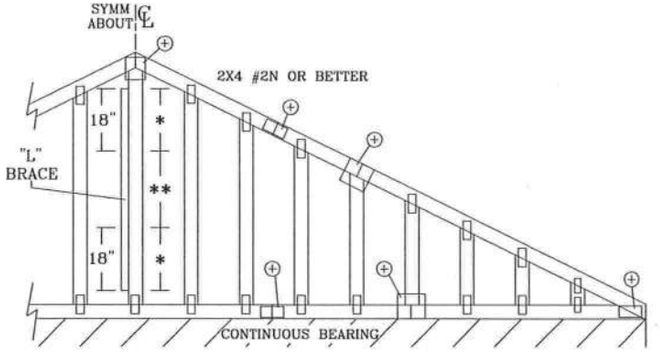
TC LL	20.0 PSF	REF R215-- 86072
TC DL	10.0 PSF	DATE 10/14/05
BC DL	2.0 PSF	DRW HCUSR215 05287328
BC LL	0.0 PSF	HC-ENG SSB/WHK
TOT.LD.	32.0 PSF	SEQN- 45758 REV
DUR.FAC.	1.25	FROM CDM
SPACING	24.0"	JREF- 1SRA215_Z11

ASCE 7-98: 110 MPH WIND SPEED, 30' MEAN HEIGHT, ENCLOSED, I = 1.00, EXPOSURE C

MAX GABLE VERTICAL LENGTH	2X4 GABLE VERTICAL SPACING	SPECIES	BRACE GRADE	NO BRACES	(1) 1X4 "L" BRACE * GROUP A	(1) 1X4 "L" BRACE * GROUP B	(1) 2X4 "L" BRACE * GROUP A	(1) 2X4 "L" BRACE * GROUP B	(2) 2X4 "L" BRACE ** GROUP A	(2) 2X4 "L" BRACE ** GROUP B	(1) 2X6 "L" BRACE * GROUP A	(1) 2X6 "L" BRACE * GROUP B	(2) 2X6 "L" BRACE ** GROUP A	(2) 2X6 "L" BRACE ** GROUP B
	24" O.C.	SPF HF	#1 / #2	3' 8"	6' 4"	6' 6"	7' 6"	7' 8"	8' 11"	9' 2"	11' 9"	12' 1"	14' 0"	14' 0"
			#3	3' 7"	5' 5"	5' 5"	7' 2"	7' 2"	8' 11"	8' 11"	11' 2"	11' 2"	14' 0"	14' 0"
			STUD	3' 7"	5' 5"	5' 5"	7' 1"	7' 1"	8' 11"	8' 11"	11' 1"	11' 1"	14' 0"	14' 0"
			STANDARD	3' 7"	4' 8"	4' 8"	6' 1"	6' 1"	8' 3"	8' 3"	9' 6"	9' 6"	12' 11"	12' 11"
		SP DFL	#1	4' 0"	6' 4"	6' 10"	7' 6"	8' 1"	8' 11"	9' 7"	11' 9"	12' 8"	14' 0"	14' 0"
			#2	3' 11"	6' 4"	6' 10"	7' 6"	8' 1"	8' 11"	9' 7"	11' 9"	12' 8"	14' 0"	14' 0"
			#3	3' 9"	5' 7"	5' 7"	7' 4"	7' 4"	8' 11"	9' 5"	11' 5"	11' 5"	14' 0"	14' 0"
			STUD	3' 9"	5' 6"	5' 6"	7' 3"	7' 3"	8' 11"	9' 5"	11' 4"	11' 4"	14' 0"	14' 0"
			STANDARD	3' 8"	4' 9"	4' 9"	6' 3"	6' 3"	8' 5"	8' 5"	9' 9"	9' 9"	13' 3"	14' 0"
	16" O.C.	SPF HF	#1 / #2	4' 2"	7' 3"	7' 5"	8' 7"	8' 10"	10' 3"	10' 6"	13' 5"	13' 10"	14' 0"	14' 0"
			#3	4' 1"	6' 8"	6' 8"	8' 7"	8' 7"	10' 3"	10' 3"	13' 5"	13' 5"	14' 0"	14' 0"
			STUD	4' 1"	8' 0"	8' 0"	8' 7"	8' 7"	10' 3"	10' 3"	13' 5"	13' 5"	14' 0"	14' 0"
			STANDARD	4' 1"	5' 8"	5' 8"	7' 6"	7' 6"	10' 1"	10' 1"	11' 8"	11' 8"	14' 0"	14' 0"
		SP DFL	#1	4' 7"	7' 3"	7' 9"	8' 7"	9' 3"	10' 3"	11' 0"	13' 5"	14' 0"	14' 0"	14' 0"
			#2	4' 6"	7' 3"	7' 9"	8' 7"	9' 3"	10' 3"	11' 0"	13' 5"	14' 0"	14' 0"	14' 0"
			#3	4' 4"	6' 10"	6' 10"	8' 7"	9' 0"	10' 3"	10' 9"	13' 5"	14' 0"	14' 0"	14' 0"
			STUD	4' 4"	6' 9"	6' 9"	8' 7"	8' 11"	10' 3"	10' 9"	13' 5"	14' 0"	14' 0"	14' 0"
			STANDARD	4' 2"	5' 10"	5' 10"	7' 8"	7' 8"	10' 3"	10' 4"	11' 11"	11' 11"	14' 0"	14' 0"
	12" O.C.	SPF HF	#1 / #2	4' 7"	8' 0"	8' 2"	9' 5"	9' 8"	11' 3"	11' 7"	14' 0"	14' 0"	14' 0"	14' 0"
			#3	4' 6"	7' 8"	7' 8"	9' 5"	9' 5"	11' 3"	11' 3"	14' 0"	14' 0"	14' 0"	14' 0"
			STUD	4' 6"	7' 8"	7' 8"	9' 5"	9' 5"	11' 3"	11' 3"	14' 0"	14' 0"	14' 0"	14' 0"
			STANDARD	4' 6"	6' 7"	6' 7"	8' 8"	8' 8"	11' 3"	11' 3"	13' 6"	13' 6"	14' 0"	14' 0"
		SP DFL	#1	5' 1"	8' 0"	8' 7"	9' 5"	10' 2"	11' 3"	12' 1"	14' 0"	14' 0"	14' 0"	14' 0"
			#2	4' 11"	8' 0"	8' 7"	9' 5"	10' 2"	11' 3"	12' 1"	14' 0"	14' 0"	14' 0"	14' 0"
			#3	4' 9"	7' 11"	7' 11"	9' 5"	9' 11"	11' 3"	11' 10"	14' 0"	14' 0"	14' 0"	14' 0"
			STUD	4' 9"	7' 9"	7' 9"	9' 5"	9' 11"	11' 3"	11' 10"	14' 0"	14' 0"	14' 0"	14' 0"
			STANDARD	4' 7"	6' 9"	6' 9"	8' 10"	8' 10"	11' 3"	11' 7"	13' 10"	13' 10"	14' 0"	14' 0"

DIAGONAL BRACE OPTION: VERTICAL LENGTH MAY BE DOUBLED WHEN DIAGONAL BRACE IS USED. CONNECT DIAGONAL BRACE FOR 700# AT EACH END. MAX WEB TOTAL LENGTH IS 14'.





REFER TO CHART ABOVE FOR MAX GABLE VERTICAL LENGTH.

BRACING GROUP SPECIES AND GRADES:

GROUP A:

SPRUCE-PINE-FIR		HEM-FIR	
#1 / #2	STANDARD	#2	STUD
#3	STUD	#3	STANDARD

DOUGLAS FIR-LARCH	SOUTHERN PINE
#3	#3
STUD	STUD
STANDARD	STANDARD

GROUP B:

HEM-FIR
#1 & BTR
#1

SOUTHERN PINE	DOUGLAS FIR-LARCH
#1	#1
#2	#2

GABLE TRUSS DETAIL NOTES:

LIVE LOAD DEFLECTION CRITERIA IS L/240.

PROVIDE UPLIFT CONNECTIONS FOR 100 PLF OVER CONTINUOUS BEARING (5 PSF TC DEAD LOAD).

GABLE END SUPPORTS LOAD FROM 4' 0" OUTLOOKERS WITH 2' 0" OVERHANG, OR 12" PLYWOOD OVERHANG.

ATTACH EACH "L" BRACE WITH 10d NAILS.
* FOR (1) "L" BRACE: SPACE NAILS AT 2" O.C. IN 18" END ZONES AND 4" O.C. BETWEEN ZONES.
** FOR (2) "L" BRACES: SPACE NAILS AT 3" O.C. IN 18" END ZONES AND 6" O.C. BETWEEN ZONES.

"L" BRACING MUST BE A MINIMUM OF 80% OF WEB MEMBER LENGTH.

GABLE VERTICAL PLATE SIZES

VERTICAL LENGTH	NO SPLICE
LESS THAN 4' 0"	1X4 OR 2X3
GREATER THAN 4' 0", BUT LESS THAN 11' 6"	2X4
GREATER THAN 11' 6"	2.5X4

+ REFER TO COMMON TRUSS DESIGN FOR PEAK, SPLICE, AND HEEL PLATES.

ALPINE

ALPINE ENGINEERED PRODUCTS, INC.
POMPANO BEACH, FLORIDA

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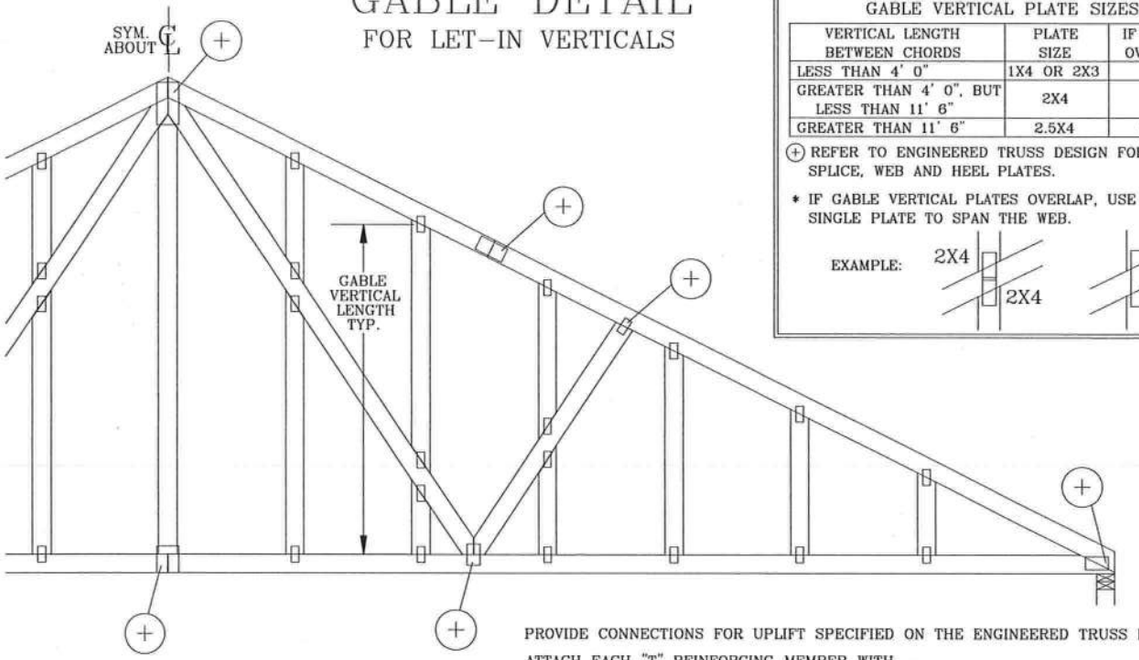
MAX. TOT. LD. 60 PSF

MAX. SPACING 24.0"

REF	ASCE7-98-GAB11030
DATE	11/26/03
DRWG	A11030EC1103
-ENG	

GABLE DETAIL
FOR LET-IN VERTICALS

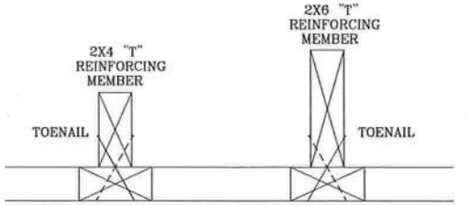


GABLE VERTICAL PLATE SIZES		
VERTICAL LENGTH BETWEEN CHORDS	PLATE SIZE	IF PLATES OVERLAP*
LESS THAN 4' 0"	1X4 OR 2X3	2X8
GREATER THAN 4' 0", BUT LESS THAN 11' 6"	2X4	2X8
GREATER THAN 11' 6"	2.5X4	2.5X8

⊕ REFER TO ENGINEERED TRUSS DESIGN FOR PEAK, SPLICE, WEB AND HEEL PLATES.

* IF GABLE VERTICAL PLATES OVERLAP, USE A SINGLE PLATE TO SPAN THE WEB.

EXAMPLE:



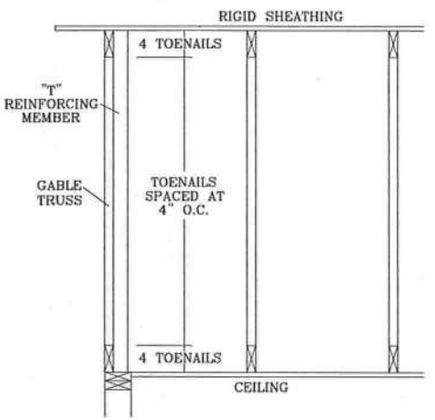
TO CONVERT FROM "L" TO "T" REINFORCING MEMBERS, MULTIPLY "T" FACTOR BY LENGTH (BASED ON GABLE VERTICAL SPECIES, GRADE AND SPACING) FOR (1) 2X4 "L" BRACE, GROUP A, OBTAINED FROM THE APPROPRIATE ALPINE GABLE DETAIL FOR ASCE OR SBCCI WIND LOAD.

MAXIMUM ALLOWABLE "T" REINFORCED GABLE VERTICAL LENGTH IS 14' FROM TOP TO BOTTOM CHORD.

WEB LENGTH INCREASE W/ "T" BRACE

WIND SPEED AND MRH	"T" REINF. MBR. SIZE	SBCCI	ASCE
110 MPH	2x4	10 %	10 %
15 FT	2x6	40 %	50 %
110 MPH	2x4	10 %	10 %
30 FT	2x6	50 %	50 %
100 MPH	2x4	10 %	10 %
15 FT	2x6	30 %	50 %
100 MPH	2x4	10 %	10 %
30 FT	2x6	40 %	40 %
90 MPH	2x4	20 %	10 %
15 FT	2x6	20 %	40 %
90 MPH	2x4	10 %	10 %
30 FT	2x6	30 %	50 %
80 MPH	2x4	10 %	20 %
15 FT	2x6	10 %	30 %
80 MPH	2x4	20 %	10 %
30 FT	2x6	20 %	40 %
70 MPH	2x4	0 %	20 %
15 FT	2x6	0 %	20 %
70 MPH	2x4	10 %	20 %
30 FT	2x6	10 %	30 %

EXAMPLE:
ASCE WIND SPEED = 100 MPH
MEAN ROOF HEIGHT = 30 FT
GABLE VERTICAL = 24" O.C. SP #3
"T" REINFORCING MEMBER SIZE = 2X4
"T" BRACE INCREASE (FROM ABOVE) = 10% = 1.10
(1) 2X4 "L" BRACE LENGTH = 6' 7"
MAXIMUM "T" REINFORCED GABLE VERTICAL LENGTH
1.10 x 6' 7" = 7' 3"



PROVIDE CONNECTIONS FOR UPLIFT SPECIFIED ON THE ENGINEERED TRUSS DESIGN.

ATTACH EACH "T" REINFORCING MEMBER WITH
HAND DRIVEN NAILS:
10d COMMON TOENAILS AT 4" O.C. PLUS (4) 16d COMMON TOENAILS IN TOP AND BOTTOM CHORD.
GUN DRIVEN NAILS - 0.131" X 3":
TOENAILS AT 4" O.C. PLUS (4) TOENAILS IN TOP AND BOTTOM CHORD.

THIS DETAIL TO BE USED WITH THE APPROPRIATE ALPINE GABLE DETAIL FOR ASCE OR SBCCI WIND LOAD.
ASCE 7-93 GABLE DETAIL DRAWINGS
A11015EN1103, A10015EN1103, A09015EN1103, A08015EN1103, A07015EN1103
A11030EN1103, A10030EN1103, A09030EN1103, A08030EN1103, A07030EN1103
ASCE 7-98 GABLE DETAIL DRAWINGS
A13015EC1103, A12015EC1103, A11015EC1103, A10015EC1103, A08515EC1103
A13030EC1103, A12030EC1103, A11030EC1103, A10030EC1103, A08530EC1103
SBCCI GABLE DETAIL DRAWINGS
S11015EN1103, S10015EN1103, S09015EN1103, S08015EN1103, S07015EN1103
S11030EN1103, S10030EN1103, S09030EN1103, S08030EN1103, S07030EN1103

SEE APPROPRIATE ALPINE GABLE DETAIL (ASCE OR SBCCI WIND LOAD) FOR MAXIMUM UNREINFORCED GABLE VERTICAL LENGTH.

THIS DRAWING REPLACES DRAWINGS GAB98117 876,719 & HC26294035

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ALPINE ENGINEERED PRODUCTS, INC.
POMPANO BEACH, FLORIDA

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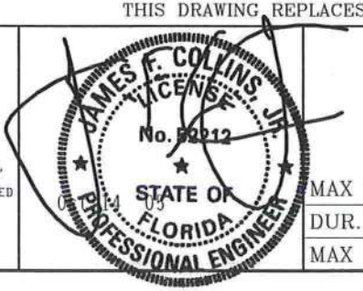


MAX TOT. LD.	60 PSF
DUR. FAC.	ANY
MAX SPACING	24.0"

REF	LET-IN VERT
DATE	01/16/04
DRWG	GBLLETIN1103
-ENG	DLJ/KAR

GTC DESIGN GROUP

PROJECT NAME: HAVIARAS RESIDENCE
PROJECT NUMBER: PF05-024

WIND LOAD AND STRUCTURAL CALCULATIONS FOR

Emma Haviaras

INDEX

3/1/05

GARY GILL, PE
GTC DESIGN GROUP, LLC
P.O. BOX 187
LIVE OAK, FL 32064
386-362-3678
386-362-6133 (FAX)
AUTH. # 9461

Project name: Haviaras Residence
Project: PF05-024
Client 0
Calculations: Gary Gill, PE
Date: 2/28/2005

Design Basis

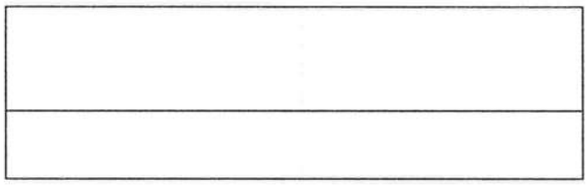
Design Loads

Wind Load	110	
Floor Live Load		
	Sleep Areas =	30 psf
	All Others =	40 psf
Floor Dead Load		10 psf
Wall Dead Load		10 psf
Roof Live Load		20 psf
Roof Dead Load		10 psf

Load Combinations

DL + LL(floor) + LL (roof)
DL + LL(floor) +WL
DL + WL
Wind load

Exposure B



Building Information

Shape	Rectangle
Length	50 ft
Width	30 ft
Type	0

References

2001 Florida Building Code
ASCE 7-98 Minimum Design Loads for Buildings and Other Structures
AITC Timber Construction Manual

Project Name Haviaras Residence Date 2/28/2005
Project Number PF05-024 Windloading
Client

LOAD SHEET DATA

RAFTERS

Element	Description	Spacing (ft)	Rafter Horz. Length (ft)	Pitch (:12)	Dead Load (psf)	Live Load (psf)	Wind Load (psf)	R1
Rafter 1	2x10	2	15	12	10	20	-19.5	
Rafter 2	2x10	2	21	17.25	10	20	-19.5	

WALL LOADS

Dead	10 psf
Wall height	8 psf

FLOOR JOIST

Element	Description	Spacing (ft)	Dead Load (psf)	Live Load (psf)
Floor Joist 1	TJI Truss	1.00	10	40

DATA SHEET

Wind	110 mph
Building Length	50 ft
Building Width	30 ft
Type	

PERFORATED SHEARWALLS (WOOD FRAMED WALLS)

1st Floor Height
2nd Floor height

Surface1	11.51	psf
Surface2	6.09	psf
Surface3	-3.9	psf
Surface4	-2.96	psf
Surface5	9.05	psf
Surface6	-1.72	psf

GTC DESIGN GROUP

Project name: Haviaras Residence
Project number: PF05-024
Date: 2/28/2005
Client: 0
Calc's by: GG

RAFTER LOADS

Element	Spacing (ft)	Length (ft)	Pitch (:12)	Loads							
				Dead (psf)	Live (psf)	w dead "D" (plf)	w live "L" (plf)	D+L	Wind (psf)	w wind "W" (plf)	0.6D+W
Rafter 1	2	15	12	10	20	28.28	40.00	68.28	-19.50	-22.27	-5.30
Rafter 2	2	21	17.25	10	20	35.02	40.00	75.02	-19.50	-22.27	-1.26
0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
0	0	0	0	0	0	0.00	0.00	0.00	0.00	0	0
0	0	0	0	0	0	0.00	0.00	0.00	0.00	0	0
0	0	0	0	0	0	0.00	0.00	0.00	0.00	0	0

Load factor based on slope

pitch (x/12) 12 ***pitch of 12 used as conservative
Load factor: 1.41

WALL LOADS

Dead (psf)	Wall Height (ft)	w dead "D" (plf)
8	8	64

***only used if wall is load bearing

FLOOR JOIST

Element	Spacing	Dead (psf)	Live (psf)	w dead "D" (plf)	w live "L" (plf)	D+L (plf)
Floor Joist 1	1	10	40	10.00	40.00	50.00

Horizontal Diaphragm

	East / West Walls		North / South Walls		
Horizontal load calculations			Horizontal load calculations		
Shear on walls	**8915.00**	lb	Shear on walls	4038.00	lb
E/W wall lengths	30	ft	Wall length normal to wind	50	ft

Design Shear Capacity

Wind in N/S Direction	Diaphragm Shear (plf)	Depth (ft)	Length of chord	Lateral load on diaphragm (lb/ft)	Chord force (lb)	Chord area (2-2x4) in^2	Tensile and Compress. Stress (psi)
Wall 1(outside)	**148.58**	30	50	#REF!	**#REF!**	10.5	#REF!
Wall 2 (outside)	**148.58**		50	#REF!	**#REF!**	10.5	#REF!
Wall 3 (interior)							
Wind in E/W Direction							
Wall 1(outside)	**80.76**	50	30	269.20	**605.70**	10.5	57.69
Wall 2 (outside)	**80.76**	50	30	269.20	**605.70**	10.5	57.69
Wall 3 (interior)							

Drag Stut I.D.	location	length	Strut Force	Stress (psi)
1	North			
2	North			
3	North			
4	North			

Wood Structural Panel Shear Capacity

Sheathing Material	Thickness	Nail Size	Edge Nail Spacing	Block	Shear Cap.
Structural Sheathing	15/32	8d	6	No	252
Structural Sheathing	15/32	8d	6	Yes	378
Structural Sheathing	15/32	Wind speed =	4	Yes	504

Shearwall Design - N/S Direction

Rigid Diaphragm Analysis

Wind load acting on building

General Data

Roof Pitch (x:12)		12	Roof Dia	16.97
Vertical Roof height		15.00	Length of Building	50
2nd Floor height	0		Width of Building	30
1st Floor height	8			

Wind Pressure per ASCE 7- Normal to surface Case A

Windward Roof - Surface 2	6.09	psf	Wall - Leeward	11.51 psf
Leeward Roof - Surface 3	-3.90	psf	Wall - Surface 4	-2.96 psf
			Total Wall	14.47 psf

Horizontal loads from wind perpendicular to ridge (N / S)

Roof Pressure (interior)

Windward Roof Horz.(psf)	4.31
Leeward Roof Horz.(psf)	-2.76
Total	7.06
Tributary area (roof)	750.00
Roof shear values	**5298.00**

Wall Pressure - 2nd Floor

Sum. of wind. & lee. (psf)	14.47
Tributary area to each Shearwall (sf)	0.00
Wall shear values to each shearwall	**0.00**

Wall Pressure - 1st Floor

Sum. of wind. & lee. (psf)	14.47
Tributary area to each Shearwall (sf)	250.00
Wall shear values to each shearwall	**3617.50**

Total shear to top of 2nd floor (lb) per wall (actual)	**0.00**
Total shear to top of 1st floor (lb) per wall (actual)	**8915.50**

	Shearwall column #		
2nd Floor shearwalls	1	2	3
Number of shearwall segments in each column	1	1	1
Shearwall #1 length	0	0	0
Shearwall #2 length	0		
Shearwall #3 length			
Lateral load on shear wall column (lbs)	**0.00**	**0.00**	**0.00**
Percent Full-Height Sheathing	0.00	0.00	0.00
Shear capacity adjustment	0	0	0
Shearwall rating (plf) w/ 1.4	0	0	0
Design Shear Capacity	**0.00**	**0.00**	**0.00**
Stress Ratio	#DIV/0!	#DIV/0!	#DIV/0!
uplift at shear ends	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**
shear and uplift between holddown, v and u	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**

1st Floor shearwall (ft)

Number of shearwall segments in each column	1	1	
Full wall length	30	30	
Shearwall #1 length	24	24	
Shearwall #2 length	0	0	
Wall height ratio (h/b)	0.33	0.33	
Rigidities of shearwalls	9.64	9.64	
Lateral load on shearwall column (lbs) based on rigidity	**4457.75**	**4457.75**	
Percent Full-Height Sheathing Shearwall #1	80.00%	80.00%	
Shear capacity adjustment	0.9	0.9	
Shearwall rating (plf) w/ 1.4 increase for wind	483	483	
Design Shear Capacity	**10432.80**	**10432.80**	
Stress Ratio	0.43	0.43	
uplift at shear ends	**1651.02**	**1651.02**	
shear and uplift between holddown, v and u	**206.38**	**206.38**	

Anchor Bolt Shear Capacity plf			
Bolt size / spacing	24"	36"	48"
1/2" dia	422.5	281.67	211.25
5/8" dia	660	440.00	330
3/4" dia	930	620.00	465

Shearwall Design - E/W Direction

Rigid Diaphragm Analysis

Wind load acting on building

General Data

Roof Pitch (x:12)		12	Roof Dia	16.97
Vertical Roof height		15.00	Length of Building	50
2nd Floor height	0		Width of Building	30
1st Floor height	8			

Wind Pressure per ASCE 7- Normal to surface Case B

Windward Wall - Surface 5	9.05	psf
Leeward Wall - Surface 6	-1.72	psf
Total Wall	10.77	

Horizontal loads from parallel to ridge (E/W)

Number of Shearwall columns = 2

Roof Pressure (interior)	
Windward Roof Horz.(psf)	9.05
Leeward Roof Horz.(psf)	-1.72
Total	10.77
Tributary area (roof) to each shearwall (sf)	225.00
Roof shear values to each shearwall	**2423.25**

Wall Pressure - 2nd Floor

Sum. of wind. & lee. (psf)	0
Tributary area to each Shearwall (sf)	0.00
Wall shear values to each shearwall	**0.00**

Wall Pressure - 1st Floor

Sum. of wind. & lee. (psf)	10.77
Tributary area to each Shearwall (sf)	150.00
Wall shear values to each shearwall	**1615.50**

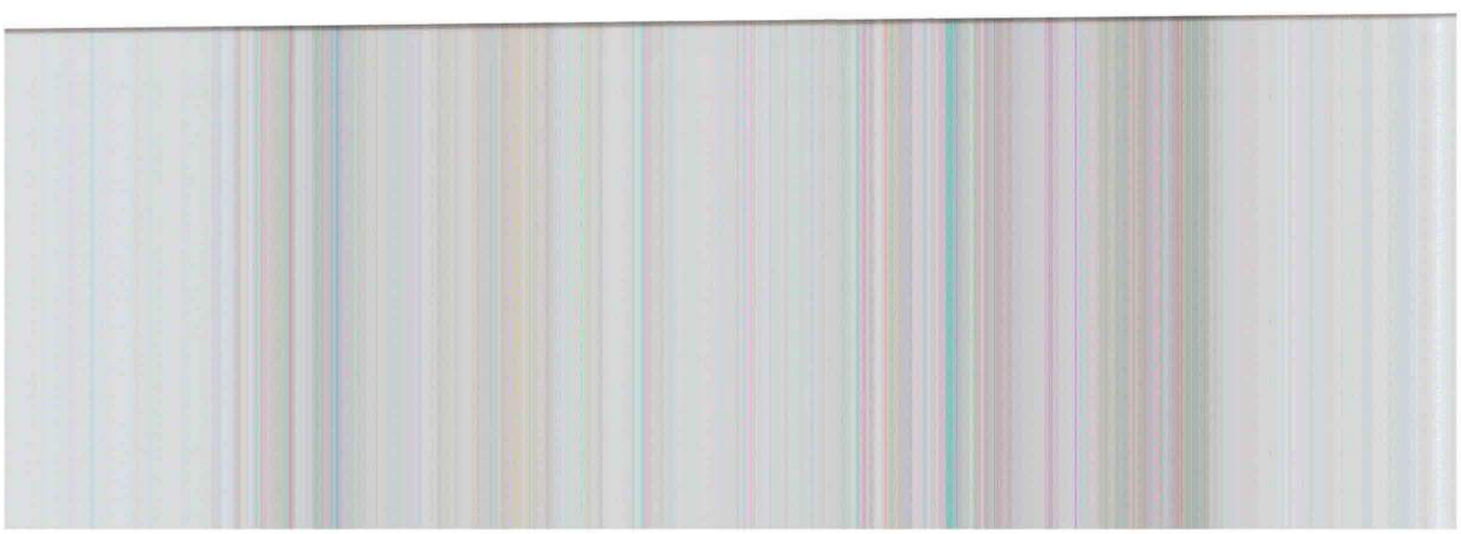
Total shear to top of 2nd floor (lb) per wall (actual)	**0.00**
Total shear to top of 1st floor (lb) per wall (actual)	**4038.75**

2nd Floor shearwalls	Shearwall column # A	B	
Number of shearwall segments in each column	1	1	
Shearwall #1 length	0	0	
Shearwall #2 length	0		
Shearwall #3 length			
Lateral load on shear wall column (lbs)	**0.00**	**0.00**	
Percent Full-Height Sheathing	0.00	0.00	
Shear capacity adjustment	0	0	
Shearwall rating (plf) w/ 1.4	0	0	
Design Shear Capacity	**0.00**	**0.00**	
Stress Ratio	#DIV/0!	#DIV/0!	
uplift at shear ends	**#DIV/0!**	**#DIV/0!**	
shear and uplift between holddown, v and u	**#DIV/0!**	**#DIV/0!**	

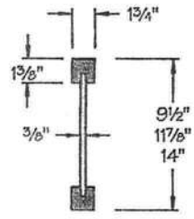
1st Floor shearwall (ft)

Number of shearwall segments in each column	1	1
Shearwall #1 length	31	46
Shearwall #2 length	0	0
Wall height ratio (h/b)	0.26	0.17
Rigidities of shearwalls	12.64	18.98
Lateral load on shearwall column (lbs) based on rigidity	**1614.42**	**2424.33**
Percent Full-Height Sheathing Shearwall #1	100.00	100.00
Shear capacity adjustment	0.75	0.85
Shearwall rating (plf) w/ 1.4 increase for wind	483	483
Design Shear Capacity	**11229.75**	**18885.30**
Stress Ratio	0.14	0.13
uplift at shear ends	**555.50**	**496.03**
shear and uplift between holddown, v and u	**69.44**	**62.00**

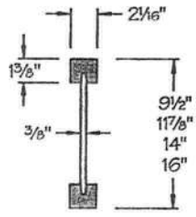
Anchor Bolt Shear Capacity plf			
Bolt size / spacing	24"	36"	48"
1/2" dia	422.5	281.67	211.25
5/8" dia	660	440.00	330
3/4" dia	930	620.00	465



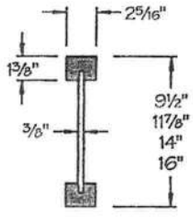
Not all products are available in all markets. Contact your Trus Joist representative for information.



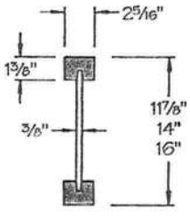
TJI® 110 joists



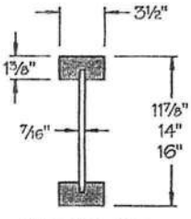
TJI® 210 joists



TJI® 230 joists



TJI® 360 joists



TJI® 560 joists

L/480 Live Load Deflection

Depth	TJI®	40 PSF Live Load / 10 PSF Dead Load				40 PSF Live Load / 20 PSF Dead Load			
		12" o.c.	16" o.c.	19.2" o.c.	24" o.c.	12" o.c.	16" o.c.	19.2" o.c.	24" o.c.
9½"	110	16'-5"	15'-0"	14'-2"	13'-2"	16'-5"	15'-0"	13'-11"	12'-5"
	210	17'-3"	15'-9"	14'-10"	13'-10"	17'-3"	15'-9"	14'-10"	13'-8"
	230	17'-8"	16'-2"	15'-3"	14'-2"	17'-8"	16'-2"	15'-3"	14'-2"
11⅞"	110	19'-6"	17'-10"	16'-10"	15'-5"(1)	19'-6"	17'-3"	15'-8"	14'-0"(1)
	210	20'-6"	18'-8"	17'-8"	16'-5"	20'-6"	18'-8"	17'-3"	15'-5"(1)
	230	21'-0"	19'-2"	18'-1"	16'-10"	21'-0"	19'-2"	18'-1"	16'-3"(1)
	360	22'-11"	20'-11"	19'-8"	18'-4"	22'-11"	20'-11"	19'-8"	17'-10"(1)
	560	26'-1"	23'-8"	22'-4"	20'-9"	26'-1"	23'-8"	22'-4"	20'-9"(1)
14"	110	22'-2"	20'-3"	18'-9"	16'-9"(1)	21'-8"	18'-9"	17'-1"(1)	14'-7"(1)
	210	23'-3"	21'-3"	20'-0"	18'-4"(1)	23'-3"	20'-7"	18'-9"(1)	16'-2"(1)
	230	23'-10"	21'-9"	20'-6"	19'-1"	23'-10"	21'-8"	19'-9"	17'-1"(1)
	360	26'-0"	23'-8"	22'-4"	20'-9"(1)	26'-0"	23'-8"	22'-4"(1)	17'-10"(1)
	560	29'-6"	26'-10"	25'-4"	23'-6"	***29'-6"***	***26'-10"***	25'-4"(1)	20'-11"(1)
16"	210	25'-9"	23'-6"	22'-0"(1)	19'-5"(1)	25'-5"	22'-0"(1)	20'-1"(1)	16'-2"(1)
	230	26'-5"	24'-1"	22'-9"	20'-7"(1)	***26'-5"***	23'-2"	21'-2"(1)	17'-1"(1)
	360	28'-9"	26'-3"	24'-8"(1)	21'-5"(1)	***28'-9"***	26'-3"(1)	22'-4"(1)	17'-10"(1)
	560	32'-8"	29'-8"	28'-0"	25'-2"(1)	***32'-8"***	***29'-8"***	26'-3"(1)	20'-11"(1)

L/360 Live Load Deflection (Minimum Criteria per Code)

Depth	TJI®	40 PSF Live Load / 10 PSF Dead Load				40 PSF Live Load / 20 PSF Dead Load			
		12" o.c.	16" o.c.	19.2" o.c.	24" o.c.	12" o.c.	16" o.c.	19.2" o.c.	24" o.c.
9½"	110	18'-2"	16'-7"	15'-3"	13'-8"	17'-8"	15'-3"	13'-11"	12'-5"
	210	19'-1"	17'-5"	16'-6"	15'-0"	19'-1"	16'-9"	15'-4"	13'-8"
	230	19'-7"	17'-11"	16'-11"	15'-9"	19'-7"	17'-8"	16'-1"	14'-5"
11⅞"	110	21'-7"	18'-11"	17'-3"	15'-5"(1)	19'-11"	17'-3"	15'-8"	14'-0"(1)
	210	22'-8"	20'-8"	18'-11"	16'-10"	21'-10"	18'-11"	17'-3"	15'-5"(1)
	230	23'-3"	21'-3"	19'-11"	17'-9"	***23'-0"***	19'-11"	18'-2"	16'-3"(1)
	360	25'-4"	23'-2"	21'-10"	20'-4"(1)	***25'-4"***	***23'-2"***	***21'-10"(1)***	17'-10"(1)
	560	28'-10"	26'-3"	24'-9"	23'-0"	***28'-10"***	***26'-3"***	***24'-9"***	20'-11"(1)
14"	110	23'-9"	20'-6"	18'-9"	16'-9"(1)	21'-8"	18'-9"	17'-1"(1)	14'-7"(1)
	210	25'-8"	22'-6"	20'-7"	18'-4"(1)	23'-9"	20'-7"	18'-9"(1)	16'-2"(1)
	230	26'-4"	23'-9"	21'-8"	19'-4"(1)	***25'-0"***	21'-8"	19'-9"	17'-1"(1)
	360	28'-9"	26'-3"	24'-9"(1)	21'-5"(1)	***28'-9"***	***26'-3"(1)***	22'-4"(1)	17'-10"(1)
	560	32'-8"	29'-9"	28'-0"	25'-2"(1)	***32'-8"***	***29'-9"***	***26'-3"(1)***	20'-11"(1)
16"	210	27'-10"	24'-1"	22'-0"(1)	19'-5"(1)	25'-5"	22'-0"(1)	20'-1"(1)	16'-2"(1)
	230	29'-2"	25'-5"	23'-2"	20'-7"(1)	***26'-9"***	23'-2"	21'-2"(1)	17'-1"(1)
	360	31'-10"	29'-0"	26'-10"(1)	21'-5"(1)	***31'-10"***	***26'-10"(1)***	22'-4"(1)	17'-10"(1)
	560	36'-1"	32'-11"	31'-0"(1)	25'-2"(1)	***36'-1"***	***31'-6"(1)***	26'-3"(1)	20'-11"(1)

Long term deflection under dead load, which includes the effect of creep, has not been considered. ***Bold Italic*** *spans reflect initial dead load deflection exceeding 0.33".*

(1) Web stiffeners are required at intermediate supports of continuous span joists when the intermediate bearing length is less than 5¼" and the span on either side of the intermediate bearing is greater than the following spans:

TJI®	40 PSF Live Load / 10 PSF Dead Load				40 PSF Live Load / 20 PSF Dead Load			
	12" o.c.	16" o.c.	19.2" o.c.	24" o.c.	12" o.c.	16" o.c.	19.2" o.c.	24" o.c.
110	N.A.	N.A.	N.A.	15'-4"	N.A.	N.A.	16'-0"	12'-9"
210	N.A.	N.A.	21'-4"	17'-0"	N.A.	21'-4"	17'-9"	14'-2"
230	N.A.	N.A.	N.A.	19'-2"	N.A.	N.A.	19'-11"	15'-11"
360	N.A.	N.A.	24'-5"	19'-6"	N.A.	24'-5"	20'-4"	16'-3"
560	N.A.	N.A.	29'-10"	23'-10"	N.A.	29'-10"	24'-10"	19'-10"

How to Use These Tables

1. Determine the appropriate live load deflection criteria.
2. Identify the live and dead load condition.
3. Select on-center spacing.
4. Scan down the column until you meet or exceed the span of your application.
5. Select TJI® joist and depth.

Live load deflection is not the only factor that affects how a floor will perform. To more accurately predict floor performance, use our TJ-Pro™ Rating system.

General Notes

- Tables are based on:
  - Uniform loads.
  - More restrictive of simple or continuous span.
  - Clear distance between supports (1¾" minimum end bearing).
- Assumed composite action with a single layer of 24" on-center span-rated, glue-nailed floor panels for deflection only. **Spans shall be reduced 6" when floor panels are nailed only.**
- Spans generated from Trus Joist software may exceed the spans shown in these tables because software reflects actual design conditions.
- For loading conditions not shown, refer to software or to load tables on page 15.

TYPICAL

WIND98 v3-02

Wind Load Design per ASCE 7-98

Description: Haviaras - 12:12
Analysis by: Gary Gill

User Input Data		
Structure Type	Building	
Basic Wind Speed (V)	110	mph
Structural Category	II	
Exposure	B	
Struc Nat Frequency (n1)	1	Hz
Slope of Roof (Theta)	45	Deg
Type of Roof	Gabled	
Kd (Directonality Factor)	0.85	
Eave Height (Eht)	9.00	ft
Ridge Height (RHt)	24.40	ft
Mean Roof Height (Ht)	16.70	ft
Width Perp. To Wind Dir (B)	50.00	ft
Width Paral. To Wind Dir (L)	30.00	ft
Damping Ratio (beta)	0.02	

Red values should be changed only through "Main Menu"

Calculated Parameters		
Importance Factor	1	
Hurricane Prone Region (V>100 mph)		
Table C6-4 Values		
Alpha =	7.000	
zg =	1200.000	
At =	0.143	
Bt =	0.840	
Am =	0.250	
Bm =	0.450	
Cc =	0.300	
l =	320.00	ft
Epsilon =	0.333	
Zmin =	30.00	ft

Calculated Parameters	
Type of Structure	
Height/Least Horizontal Dim	0.56
Flexible Structure	No

Gust Factor Category I: Rigid Structures - Simplified Method			
Gust1	For rigid structures (Nat Freq > 1 Hz) use 0.85	0.85	
Gust Factor Category II: Rigid Structures - Complete Analysis			
Zm	Zmin	30.00	ft
Izm	Cc * (33/z)^0.167	0.3048	
Lzm	l*(zm/33)^Epsilon	309.99	ft
Q	(1/(1+0.63*((Min(B,L)+Ht)/Lzm)^0.63))^0.5	0.9162	
Gust2	0.925*((1+1.7*Izm*3.4*Q)/(1+1.7*3.4*Izm))	0.8756	
Gust Factor Summary			
G	Since this is not a flexible structure the lessor of Gust1 or Gust2 are used	0.85	

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WIND98 v3-02

Wind Load Design per ASCE 7-98

6.5.12.2.1 Design Wind Pressure - Buildings of All Heights (Non-flexible)

Elev	Kz	Kzt	qz	Pressure (lb/ft^2)	
				Windward Wall*	
ft			lb/ft^2	+GCpi	-GCpi
24.4	0.66	1.00	17.39	9.02	14.63
20	0.62	1.00	16.43	8.36	13.98
16.7	0.59	1.00	15.60	7.80	13.42
15	0.57	1.00	15.13	7.48	13.10

Table 6-7 Internal Pressure Coefficients for Buildings, Gcpi

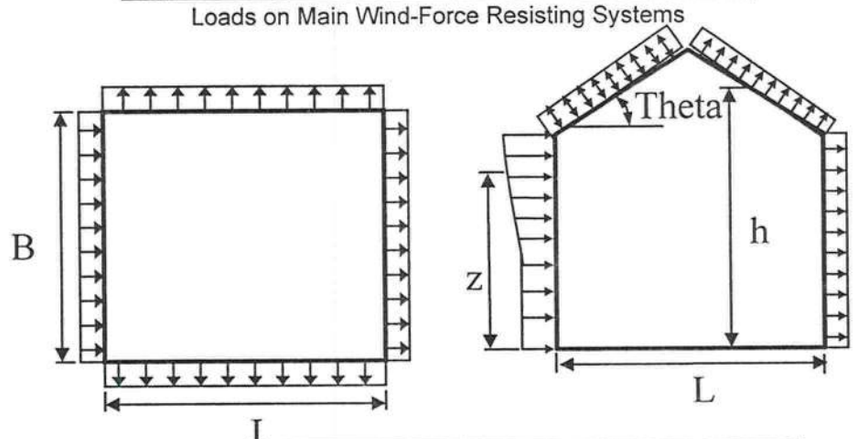
Condition	Gcpi	
	Max +	Max -
Open Buildings	0.00	0.00
Partially Enclosed Buildings	0.55	-0.55
Enclosed Buildings	0.18	-0.18
Enclosed Buildings	**0.18**	**-0.18**

WIND98 v3-02

Wind Load Design per ASCE 7-98

Figure 6-3 - External Pressure Coefficients, Cp

Loads on Main Wind-Force Resisting Systems



Variable	Formula	Value	Units
Kh	2.01*(Ht/zg)^(2/Alpha)	0.59	
Kht	Topographic factor (Fig 6-2)	1.00	
Qh	.00256*(V)^2*I*Kh*Kht*Kd	15.60	psf
Khcc	Comp & Clad: Table 6-5 Case 2	0.70	
Qhcc	.00256*V^2*I*Khcc*Kht*Kd	18.45	psf

Wall Pressure Coefficients, Cp	
Surface	**Cp**
Windward Wall (See Figure 6.5.12.2.1 for Pressures)	0.8

Roof Pressure Coefficients, Cp	
Roof Area (sq. ft.)	-
Reduction Factor	1.00

Calculations for Wind Normal to 50 ft Face *Additional Runs may be req'd for other wind directions*	**Cp**	**Pressure (psf)** **+GCpi**	 **-GCpi**
Leeward Walls (Wind Dir Normal to 50 ft wall)	-0.50	-9.44	-3.82
Side Walls	-0.70	-12.09	-6.48
Roof - Wind Normal to Ridge (Theta>=10) - for Wind Normal to 50 ft face			
Windward - Max Negative	0.00	0.00	0.00
Windward - Max Positive	0.39	2.35	7.96
Leeward Normal to Ridge	-0.60	-10.77	-5.15
Overhang Top (Windward)	0.00	0.00	0.00
Overhang Top (Leeward)	-0.60	-7.96	-7.96
Overhang Bottom (Applicable on Windward only)	0.80	10.29	10.29
Roof - Wind Parallel to Ridge (All Theta) - for Wind Normal to 50 ft face			
Dist from Windward Edge: 0 ft to 8.35 ft	-0.95	-15.35	-9.73
Dist from Windward Edge: 8.35 ft to 16.7 ft	-0.88	-14.44	-8.83

* Horizontal distance from windward edge

WIND98 v3-02

Wind Load Design per ASCE 7-98

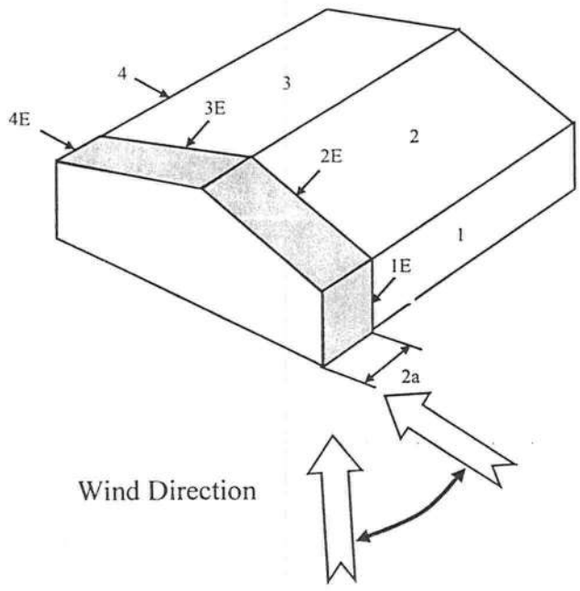
Figure 6-4 - External Pressure Coefficients, GCpf

Loads on Main Wind-Force Resisting Systems w/ Ht <= 60 ft

Kh =	2.01*(Ht/zg)^(2/Alpha)	=	0.59
Kht =	Topographic factor (Fig 6-2)	=	1.00
Qh =	0.00256*(V)^2*ImpFac*Kh*Kht*Kd	=	15.60

Case A						
Surface	GCpf	+GCpi	-GCpi	qh (psf)	Min P (psf)	Max P (psf)
1	0.56	0.18	-0.18	15.60	5.93	11.55
2	0.21	0.18	-0.18	15.60	0.47	6.09
3	-0.43	0.18	-0.18	15.60	-9.52	-3.90
4	-0.37	0.18	-0.18	15.60	-8.58	-2.96
5	0.00	0.18	-0.18	15.60	-2.81	2.81
6	0.00	0.18	-0.18	15.60	-2.81	2.81
1E	0.69	0.18	-0.18	15.60	7.96	13.58
2E	0.27	0.18	-0.18	15.60	1.40	7.02
3E	-0.53	0.18	-0.18	15.60	-11.08	-5.46
4E	-0.48	0.18	-0.18	15.60	-10.30	-4.68
5E	0.00	0.18	-0.18	15.60	-2.81	2.81
6E	0.00	0.18	-0.18	15.60	-2.81	2.81

* p = qh * (GCpf - GCpi)



WIND98 v3-02

Wind Load Design per ASCE 7-98

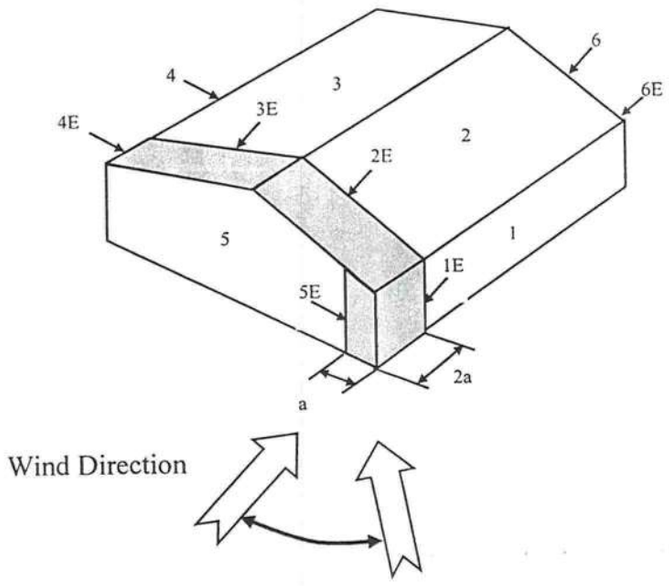
Figure 6-4 - External Pressure Coefficients, GCpf

Loads on Main Wind-Force Resisting Systems w/ Ht <= 60 ft

Kh =	2.01*(Ht/zg)^(2/Alpha)	=	0.59
Kht =	Topographic factor (Fig 6-2)	=	1.00
Qh =	0.00256*(V)^2*ImpFac*Kh*Kht*Kd	=	15.60

Case B						
Surface	GCpf	+GCpi	-GCpi	qh (psf)	Min P (psf)	Max P (psf)
1	-0.45	0.18	-0.18	15.60	-9.83	-4.21
2	-0.69	0.18	-0.18	15.60	-13.58	-7.96
3	-0.37	0.18	-0.18	15.60	-8.58	-2.96
4	-0.45	0.18	-0.18	15.60	-9.83	-4.21
5	0.40	0.18	-0.18	15.60	3.43	9.05
6	-0.29	0.18	-0.18	15.60	-7.33	-1.72
1E	-0.48	0.18	-0.18	15.60	-10.30	-4.68
2E	-1.07	0.18	-0.18	15.60	-19.50	-13.89
3E	-0.53	0.18	-0.18	15.60	-11.08	-5.46
4E	-0.48	0.18	-0.18	15.60	-10.30	-4.68
5E	0.61	0.18	-0.18	15.60	6.71	12.33
6E	-0.43	0.18	-0.18	15.60	-9.52	-3.90

* p = qh * (GCpf - GCpi)



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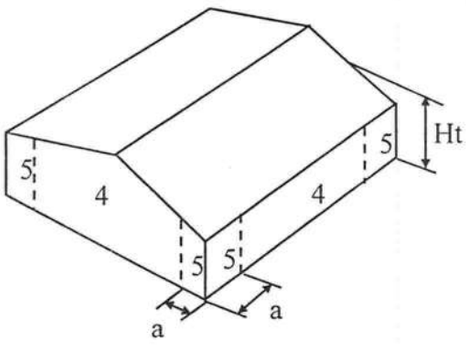
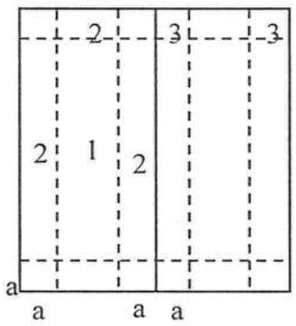
WIND98 v3-02

Wind Load Design per ASCE 7-98

Figure 6-5 - External Pressure Coefficients, GCp

Loads on Components and Cladding for Buildings w/ Ht <= 60 ft





Gabled Roof

10 < Theta <= 45

a = 3 ==> 3.00 ft

Component	Width (ft)	Span (ft)	Area (ft^2)	Zone	GCp		Wind Press (lb/ft^2)	
					Max	Min	Max	Min
ROOF	10	1	10.00	1	0.90	-1.00	19.92	-21.77
Walls	10	1	10.00	4	1.00	-1.10	21.77	-23.61
roof edge	10	1	10.00	2	0.90	-1.20	19.92	-25.46
Wall edge	10	1	10.00	5	1.00	-1.40	21.77	-29.15
Roof overhang	10	1	10.00	2H	0.90	-2.00	16.60	-36.89

Note: * Enter Zone 1 through 5, or 1H through 3H for overhangs.

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WIND98 v3-02

Wind Load Design per ASCE 7-98

Description: Haviaras - 17.25:12
Analysis by: Gary Gill

User Input Data		
Structure Type	Building	
Basic Wind Speed (V)	110	mph
Structural Category	II	
Exposure	B	
Struc Nat Frequency (n1)	1	Hz
Slope of Roof (Theta)	45	Deg
Type of Roof	Gabled	
Kd (Directonality Factor)	0.85	
Eave Height (Eht)	9.00	ft
Ridge Height (RHt)	24.40	ft
Mean Roof Height (Ht)	16.70	ft
Width Perp. To Wind Dir (B)	21.00	ft
Width Paral. To Wind Dir (L)	8.00	ft
Damping Ratio (beta)	0.02	

Red values should be changed only through "Main Menu"

Calculated Parameters	
Type of Structure	
Height/Least Horizontal Dim	2.09
Flexible Structure	No

Calculated Parameters		
Importance Factor	1	
Hurricane Prone Region (V>100 mph)		
Table C6-4 Values		
Alpha =	7.000	
zg =	1200.000	
At =	0.143	
Bt =	0.840	
Am =	0.250	
Bm =	0.450	
Cc =	0.300	
l =	320.00	ft
Epsilon =	0.333	
Zmin =	30.00	ft

Gust Factor Category I: Rigid Structures - Simplified Method			
Gust1	For rigid structures (Nat Freq > 1 Hz) use 0.85	0.85	
Gust Factor Category II: Rigid Structures - Complete Analysis			
Zm	Zmin	30.00	ft
Izm	Cc * (33/z)^0.167	0.3048	
Lzm	l*(zm/33)^Epsilon	309.99	ft
Q	(1/(1+0.63*((Min(B,L)+Ht)/Lzm)^0.63))^0.5	0.9416	
Gust2	0.925*((1+1.7*Izm*3.4*Q)/(1+1.7*3.4*Izm))	0.8905	
Gust Factor Summary			
G	Since this is not a flexible structure the lessor of Gust1 or Gust2 are used	0.85	

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6.5.12.2.1 Design Wind Pressure - Buildings of All Heights (Non-flexible)

Elev	Kz	Kzt	qz	Pressure (lb/ft^2)	
				Windward Wall*	
ft			lb/ft^2	+GCpi	-GCpi
24.4	0.66	1.00	17.39	9.02	14.63
20	0.62	1.00	16.43	8.36	13.98
16.7	0.59	1.00	15.60	7.80	13.42
15	0.57	1.00	15.13	7.48	13.10

Table 6-7 Internal Pressure Coefficients for Buildings, Gcpi

Condition	Gcpi	
	Max +	Max -
Open Buildings	0.00	0.00
Partially Enclosed Buildings	0.55	-0.55
Enclosed Buildings	0.18	-0.18
Enclosed Buildings	**0.18**	**-0.18**

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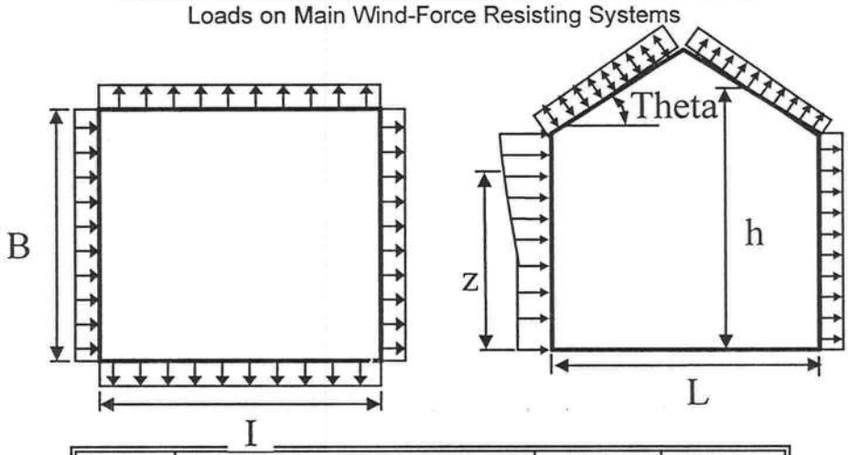
Figure 6-3 - External Pressure Coefficients, Cp

Loads on Main Wind-Force Resisting Systems



Variable	Formula	Value	Units
Kh	2.01*(Ht/zg)^(2/Alpha)	0.59	
Kht	Topographic factor (Fig 6-2)	1.00	
Qh	.00256*(V)^2*I*Kh*Kht*Kd	15.60	psf
Khcc	Comp & Clad: Table 6-5 Case 2	0.70	
Qhcc	.00256*V^2*I*Khcc*Kht*Kd	18.45	psf

Wall Pressure Coefficients, Cp	
Surface	**Cp**
Windward Wall (See Figure 6.5.12.2.1 for Pressures)	0.8

Roof Pressure Coefficients, Cp	
Roof Area (sq. ft.)	-
Reduction Factor	1.00

Calculations for Wind Normal to 21 ft Face *Additional Runs may be req'd for other wind directions*	**Cp**	**Pressure (psf)** **+GCpi**	 **-GCpi**
Leeward Walls (Wind Dir Normal to 21 ft wall)	-0.50	-9.44	-3.82
Side Walls	-0.70	-12.09	-6.48
Roof - Wind Normal to Ridge (Theta>=10) - for Wind Normal to 21 ft face			
Windward - Max Negative	0.00	0.00	0.00
Windward - Max Positive	0.30	1.17	6.79
Leeward Normal to Ridge	-0.60	-10.77	-5.15
Overhang Top (Windward)	0.00	0.00	0.00
Overhang Top (Leeward)	-0.60	-7.96	-7.96
Overhang Bottom (Applicable on Windward only)	0.80	10.29	10.29
Roof - Wind Parallel to Ridge (All Theta) - for Wind Normal to 21 ft face			
Dist from Windward Edge: 0 ft to 8.35 ft	-1.30	-20.05	-14.43
Dist from Windward Edge: 8.35 ft to 8 ft	-0.70	-12.09	-6.48

* Horizontal distance from windward edge

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Figure 6-4 - External Pressure Coefficients, GCpf

Loads on Main Wind-Force Resisting Systems w/ Ht <= 60 ft

Kh =	2.01*(Ht/zg)^(2/Alpha)	=	0.59
Kht =	Topographic factor (Fig 6-2)	=	1.00
Qh =	0.00256*(V)^2*ImpFac*Kh*Kht*Kd	=	15.60

Case A						
Surface	**GCpf**	**+GCpi**	**-GCpi**	**qh (psf)**	**Min P (psf)**	**Max P (psf)**
1	0.56	0.18	-0.18	15.60	5.93	11.55
2	0.21	0.18	-0.18	15.60	0.47	6.09
3	-0.43	0.18	-0.18	15.60	-9.52	-3.90
4	-0.37	0.18	-0.18	15.60	-8.58	-2.96
5	0.00	0.18	-0.18	15.60	-2.81	2.81
6	0.00	0.18	-0.18	15.60	-2.81	2.81
1E	0.69	0.18	-0.18	15.60	7.96	13.58
2E	0.27	0.18	-0.18	15.60	1.40	7.02
3E	-0.53	0.18	-0.18	15.60	-11.08	-5.46
4E	-0.48	0.18	-0.18	15.60	-10.30	-4.68
5E	0.00	0.18	-0.18	15.60	-2.81	2.81
6E	0.00	0.18	-0.18	15.60	-2.81	2.81

* p = qh * (GCpf - GCpi)

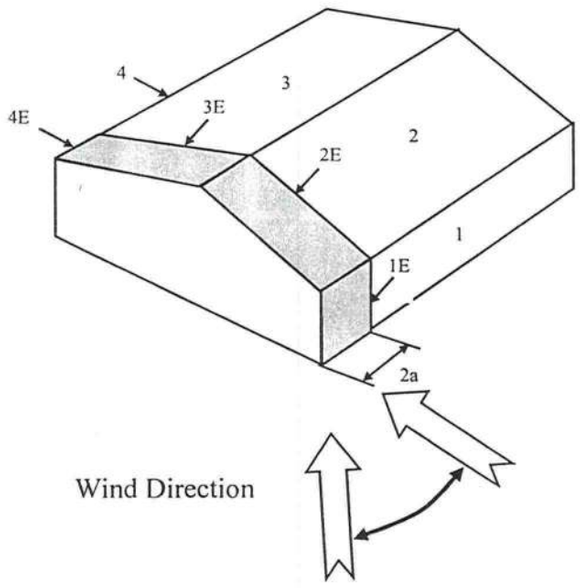

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Figure 6-4 - External Pressure Coefficients, GCpf

Loads on Main Wind-Force Resisting Systems w/ Ht <= 60 ft

Kh =	2.01*(Ht/zg)^(2/Alpha)	=	0.59
Kht =	Topographic factor (Fig 6-2)	=	1.00
Qh =	0.00256*(V)^2*ImpFac*Kh*Kht*Kd	=	15.60

Case B						
Surface	**GCpf**	**+GCpi**	**-GCpi**	**qh (psf)**	**Min P (psf)**	**Max P (psf)**
1	-0.45	0.18	-0.18	15.60	-9.83	-4.21
2	-0.69	0.18	-0.18	15.60	-13.58	-7.96
3	-0.37	0.18	-0.18	15.60	-8.58	-2.96
4	-0.45	0.18	-0.18	15.60	-9.83	-4.21
5	0.40	0.18	-0.18	15.60	3.43	9.05
6	-0.29	0.18	-0.18	15.60	-7.33	-1.72
1E	-0.48	0.18	-0.18	15.60	-10.30	-4.68
2E	-1.07	0.18	-0.18	15.60	-19.50	-13.89
3E	-0.53	0.18	-0.18	15.60	-11.08	-5.46
4E	-0.48	0.18	-0.18	15.60	-10.30	-4.68
5E	0.61	0.18	-0.18	15.60	6.71	12.33
6E	-0.43	0.18	-0.18	15.60	-9.52	-3.90

* p = qh * (GCpf - GCpi)

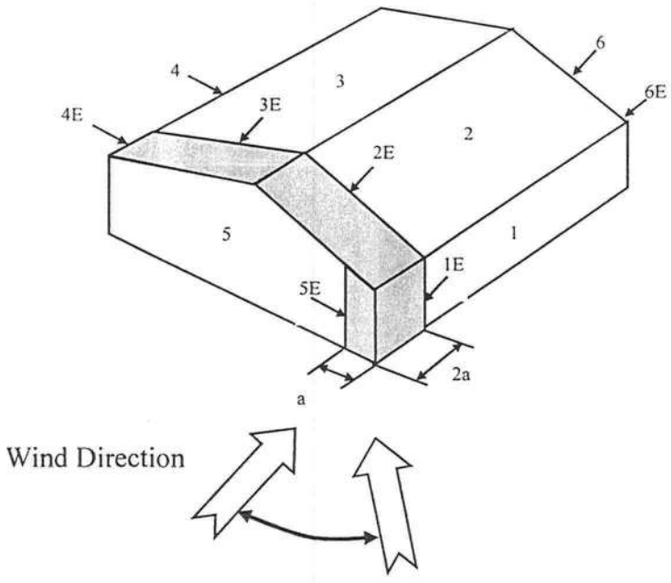

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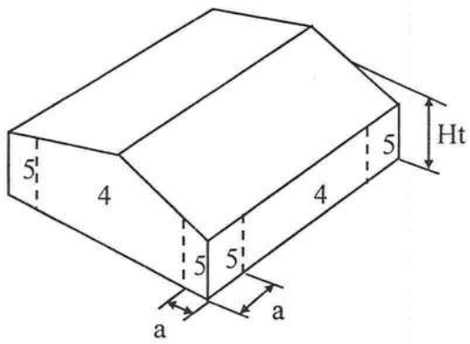
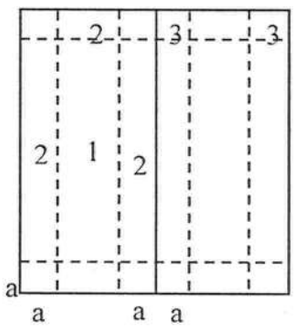
Figure 6-5 - External Pressure Coefficients, GCp

Loads on Components and Cladding for Buildings w/ Ht <= 60 ft





Gabled Roof

10 < Theta <= 45

a = 0.8 ==> 3.00 ft

Component	Width (ft)	Span (ft)	Area (ft^2)	Zone	GCp		Wind Press (lb/ft^2)	
					Max	Min	Max	Min
ROOF	10	1	10.00	1	0.90	-1.00	19.92	-21.77
Walls	10	1	10.00	4	1.00	-1.10	21.77	-23.61
roof edge	10	1	10.00	2	0.90	-1.20	19.92	-25.46
Wall edge	10	1	10.00	5	1.00	-1.40	21.77	-29.15
Roof overhang	10	1	10.00	2H	0.90	-2.00	16.60	-36.89

Note: * Enter Zone 1 through 5, or 1H through 3H for overhangs.

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