DATE 06/26/2008

Columbia County Building Permit

This Permit Must Be Prominently Posted on Premises During Construction

PERMIT
000027120

APPLICANT MIKE TODD PHONE 755-4387

ADDRESS 129 NE COLBURN AVE LAKE CITY FL 32055

OWNER TODD HOYLE PHONE 623-6776

ADDRESS 126 SW STORY PLACE LAKE CITY FL 32024

CONTRACTOR MIKE TODD PHONE 755-4387

LOCATION OF PROPERTY 90W, TL ON 247S, TL ON KIRBY AVE, TL ON STORY PL.,
1ST HOUSE ON RIGHT

TYPE DEVELOPMENT ADDITION TO SFD ESTIMATED COST OF CONSTRUCTION 28000.00

HEATED FLOOR AREA 560.00 TOTAL AREA 560.00 HEIGHT ____ STORIES 1

FOUNDATION CONC WALLS FRAMED ROOF PITCH 5/12 FLOOR SLAB

LAND USE & ZONING RSF-2 MAX. HEIGHT ____

Minimum Set Back Requirments: STREET-FRONT 25.00 REAR 15.00 SIDE 10.00

NO. EX.D.U. 1 FLOOD ZONE X PP DEVELOPMENT PERMIT NO. ____

PARCEL ID 11-4S-16-02905-425 SUBDIVISION CREST POINTE

LOT 25 BLOCK ____ PHASE ____ UNIT 0 TOTAL ACRES ____

Culvert Permit No.	Culvert Waiver	Contractor's License Number	Applicant/Owner/Contractor
		CGC006209	

Driveway Connection	Septic Tank Number	LU & Zoning checked by	Approved for Issuance	New Resident
EXISTING	08-381	BK	JH	N

COMMENTS: IMPACT FEE EXEMPT ADDITION TO EXISTING RESIDENCE,

Check # or Cash 13003

FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

Temporary Power ____ date/app. by Foundation ____ date/app. by Monolithic ____ date/app. by

Under slab rough-in plumbing ____ date/app. by Slab ____ date/app. by Sheathing/Nailing ____ date/app. by

Framing ____ date/app. by Rough-in plumbing above slab and below wood floor ____ date/app. by

Electrical rough-in ____ date/app. by Heat & Air Duct ____ date/app. by Peri. beam (Lintel) ____ date/app. by

Permanent power ____ date/app. by C.O. Final ____ date/app. by Culvert ____ date/app. by

M/H tie downs, blocking, electricity and plumbing ____ date/app. by Pool ____ date/app. by

Reconnection ____ date/app. by Pump pole ____ date/app. by Utility Pole ____ date/app. by

M/H Pole ____ date/app. by Travel Trailer ____ date/app. by Re-roof ____ date/app. by

BUILDING PERMIT FEE $ 140.00 CERTIFICATION FEE $ 2.80 SURCHARGE FEE $ 2.80

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

FLOOD DEVELOPMENT FEE $ ____ FLOOD ZONE FEE $ 25.00 CULVERT FEE $ ____ **TOTAL FEE** 220.60

INSPECTORS OFFICE ____ CLERKS OFFICE CH

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

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

EVERY PERMIT ISSUED SHALL BECOME INVALID UNLESS THE WORK AUTHORIZED BY SUCH PERMIT IS COMMENCED WITHIN 180 DAYS AFTER ITS ISSUANCE, OR IF THE WORK AUTHORIZED BY SUCH PERMIT IS SUSPENDED OR ABANDONED FOR A PERIOD OF 180 DAYS AFTER THE TIME THE WORK IS COMMENCED. A VALID PERMIT RECIEVES AN APPROVED INSPECTION EVERY 180 DAYS. WORK SHALL BE CONSIDERED TO BE IN ACTIVE PROGESS WHEN THE PERMIT HAS RECIEVED AN APPROVED INSPECTION WITHIN 180 DAYS.

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

Columbia County Building Permit Application

CK# 13003

For Office Use Only Application # 0805-28 Date Received 5/15 By JW Permit # 27120

Application Approved by - Zoning Official BLK Date 18.06.08 Plans Examiner OKYTH Date 6-18-08

Flood Zone X Pkt Development Permit N/A Zoning RSF-2 Land Use Plan Map Category Res Low Den.

Comments Impact Fee Exempt Addition to existing Residence

☐ NOC ☑ EH ☐ Deed or PA ☐ Site Plan ☐ State Road Info ☐ Parent Parcel # ☐ Development Permit

Name Authorized Person Signing Permit Mike Todd Phone 386 7554387 Fax 386 755 1220

Address 129 NE Colburn Avenue Lake City FL 32055

Owners Name Todd Hoyle Phone 3866231676

911 Address 126 SW Story Place Lake City FL 32024

Contractors Name Mike Todd Phone 386 755 4387

Address 129 NE Colburn Avenue Lake City FL 32055

Fee Simple Owner Name & Address n/a

Bonding Co. Name & Address n/a

Architect/Engineer Name & Address n/a

Mortgage Lenders Name & Address n/a

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

Property ID Number 11-4S-16-02905-425 HX Estimated Cost of Construction $30,000

Subdivision Name Crest Pointe Lot 25 Block — Unit — Phase —

Driving Directions Hwy 90 West to Branford Hwy - TR Left to Kirby Ave - TR Left to Story Place - Turn Left - House on right

Type of Construction Addition SFD Number of Existing Dwellings on Property 1

Total Acreage .72 Lot Size _____ Do you need a - Culvert Permit or Culvert Waiver or (Have an Existing Drive

Actual Distance of Structure from Property Lines - Front 32.78' Side 28.3' Side 26.87± Rear 92.23

Total Building Height 14'6" Number of Stories 1 (61.05') Heated Floor Area 560 SF Roof Pitch 5/12

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

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

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

Owner Builder or Authorized Person by Notarized Letter

Contractor Signature

Contractors License Number CGC060209

Competency Card Number

NOTARY STAMP/SEAL

STATE OF FLORIDA
COUNTY OF COLUMBIA

NOTARY PUBLIC STATE OF FLORIDA
TERESA N. PIERCE
MY COMMISSION # DD474390
EXPIRES Sept. 21, 2009
(407) 398-0153 Notary Service.com

Sworn to (or affirmed) and subscribed before me this 14th day of May 2008.

Personally known ✓ or Produced Identification _____

Teresa Pierce

Notary Signature

(Revised Sept. 2006)

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCMENT MAY RESULT IN YOU PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

FLORIDA'S CONSTRUCTION LIEN LAW: Protect Yourself and Your Investment
According to Florida Law, those who work on your property or provide materials, and are not paid-in-full, have a right to enforce their claim for payment against your property. This claim is known as a construction lien. If your contractor fails to pay subcontractors or material suppliers or neglects to make other legally required payments, the people who are owed money may look to your property for payment, even if you have paid your contractor in full. This means if a lien is filed against your property, it could be sold against your will to pay for labor, materials or other services which your contractor may have failed to pay.

NOTICE OF RESPONSIBILITY TO BUILDING PERMITEE:
YOU ARE HEREBY NOTIFIED as the recipient of a building permit from Columbia County, Florida, you will be held responsible to the County for any damage to sidewalks and/or road curbs and gutters, concrete features and structures, together with damage to drainage facilities, removal of sod, major changes to lot grades that result in ponding of water, or other damage to roadway and other public infrastructure facilities caused by you or your contractor, subcontractors, agents or representatives in the construction and/or improvement of the building and lot for which this permit is issued. No certificate of occupancy will be issued until all corrective work to these public infrastructures and facilities has been corrected.

OWNERS CERTIFICATION: 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. I further understand the above written responsibilities in Columbia County for obtaining this Building Permit.

H. Todd Hoyle
Owners Signature

CONTRACTORS AFFIDAVIT: By my signature I understand and agree that I have informed and provided this written statement to the owner of all the above written responsibilities in Columbia County for obtaining this Building Permit.

Contractor's Signature (Permitee)

Contractor's License Number CGC066209
Columbia County
Competency Card Number _____

Affirmed under penalty of perjury to by the Contractor and subscribed before me this 16 **day of** May **20**08.

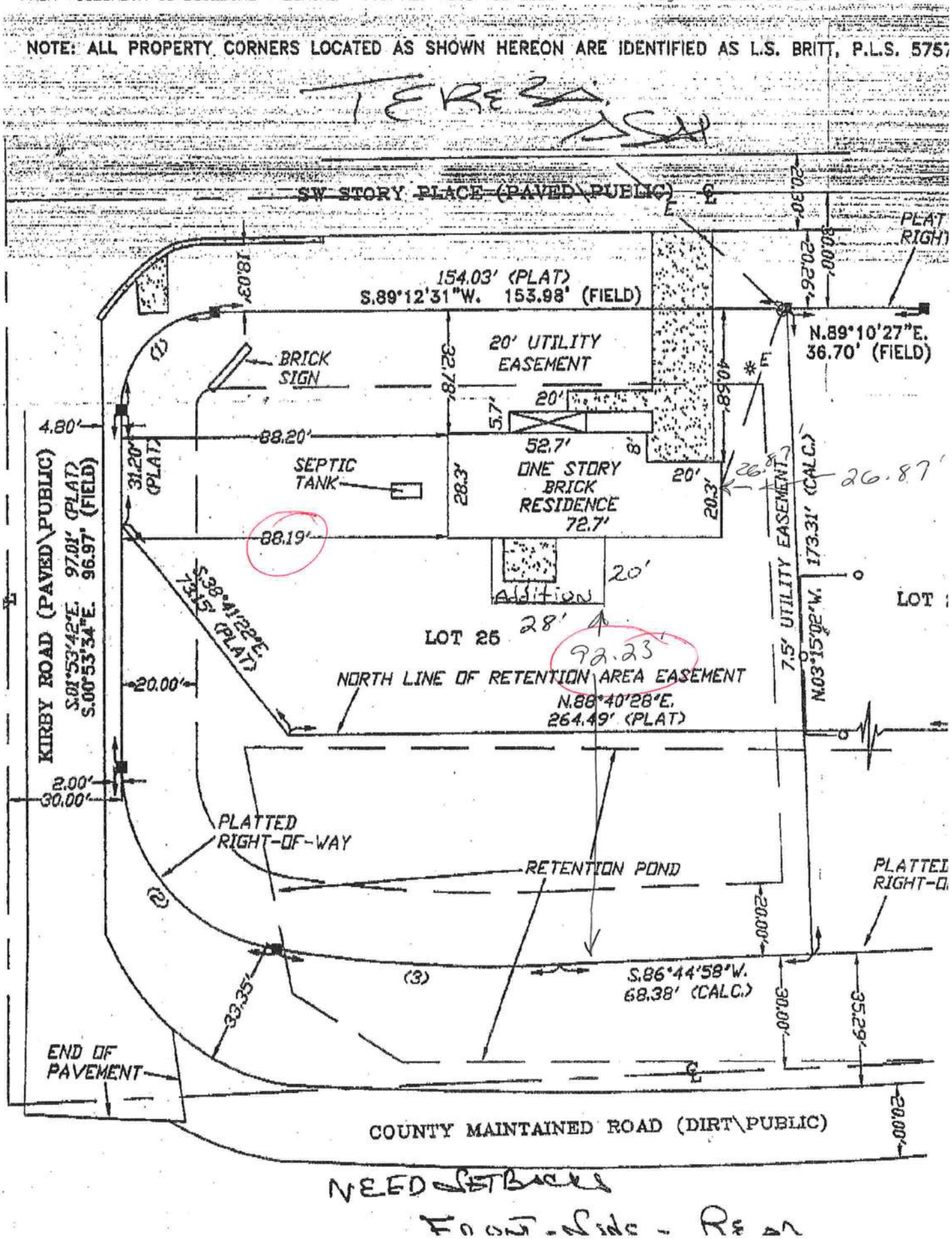
Personally known ✓ **or Produced Identification** _____

Teresa Pierce
State of Florida Notary Signature (For the Contractor)

SEAL:

NOTARY PUBLIC STATE OF FLORIDA
(407) 398-0153
TERESA N. PIERCE
MY COMMISSION # DD474390
EXPIRES: Sept. 21, 2009
Florida Notary Service.com

Revised 11-30-07



NEED SETBACKS

Front - Side - Rear

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

FORM 600B-01 — **Residential Component Prescriptive Method B** — **NORTH 1 2 3**

Compliance with Method B Chapter 6 of the Florida Energy Efficiency Code may be demonstrated by the use of Form 600B for single and multifamily residences of 3 stories or less in height, and additions to existing residential buildings. To comply, a building must meet or exceed all of the energy efficiency prescriptives in any one of the prescriptive component packages and comply with the prescriptive measures listed in Table 6B-1 of this form. An alternative method is provided for additions of 600 square feet or less by use of Form 600C. If a building does not comply with this method, it may still comply under other sections in Chapter 6 of the Code.

PROJECT NAME: Doyle	**BUILDER:** Mike Todd		
AND ADDRESS: 126 SW Story PL Lake City	**PERMITTING OFFICE:** Columbia Co.	**CLIMATE ZONE:** 1 ☐ 2 ☐ 3 ☑	
OWNER: Mr. & Mrs. Todd Doyle	**PERMIT NO.:**	**JURISDICTION NO.:** 221000	

GENERAL DIRECTIONS

1. New construction including additions which incorporates any of the following features cannot comply using this method: steel stud walls, single assembly roof/ceiling construction, or skylights or other non-vertical roof glass.
2. Choose one of the component packages "A" through "E" fromTable 6B-1 by which you intend to comply with the Code. Circle the column of the package you have chosen.
3. Fill in all the applicable spaces of the "To Be Installed" column on Table 6B-1 with the information requested. All "To Be Installed" values must be equal to or more efficient than the required levels.
4. Complete page 1 based on the "To Be Installed" column information.
5. Read "Minimum Requirements for All Packages", Table 6B-2 and check each box to indicate your intent to comply with all applicable items.
6. Read, sign and date the "Prepared By" certification statement at the bottom of page 1. The owner or owner's agent must also sign and date the form.

	Please Print	CK
1. Compliance package chosen (A-F)	A	
2. New construction or addition	Addition	
3. Single family detached or Multifamily attached	Sgl. Fam.	
4. If Multifamily—No. of units covered by this submission		
5. Is this a worst case? (yes / no)	No	
6. Conditioned floor area (sq. ft.)	560	
7. Predominant eave overhang (ft.)	2'	
	Single Pane / Double Pane	
8. Glass type and area :		
a. Clear glass	____ sq. ft. / 75 sq. ft.	
b. Tint, film or solar screen	____ sq. ft. / ____ sq. ft.	
9. Percentage of glass to floor area	13 %	
10. Floor type, area or perimeter, and insulation:		
a. Slab on grade (R-value)	R= 0 / ____ lin. ft.	
b. Wood, raised (R-value)	R= ____ / ____ sq. ft.	
c. Wood, common (R-value)	R= ____ / ____ sq. ft.	
d. Concrete, raised (R-value)	R= ____ / ____ sq. ft.	
e. Concrete, common (R-value)	R= ____ / ____ sq. ft.	
11. Wall type, area and insulation:		
a. Exterior: 1. Masonry (Insulation R-value)	11a-1 R= ____ / ____ sq. ft.	
2. Wood frame (Insulation R-value)	11a-2 R= 13 / 409 sq. ft.	
b. Adjacent: 1. Masonry (Insulation R-value)	11b-1 R= ____ / ____ sq. ft.	
2. Wood frame (Insulation R-value)	11b-2 R= ____ / ____ sq. ft.	
12. Ceiling type, area and insulation:		
a. Under attic (Insulation R-value)	12a. R= 30 / 560 sq. ft.	
b. Single assembly (Insulation R-value)	12b. R= ____ / ____ sq. ft.	
13. Air Distribution System: Duct insulation, location Test report (attach if required)	13. R= ____	
14. Cooling system	14a. Type: Central	
(Types: central, room unit, package terminal A.C., gas, none)	14b. SEER/EER: 12.0	
	14c. Capacity: 3	
15. Heating system:	15a. Type: Heat Pump	
(Types: heat pump, elec. strip, nat. gas, L.P. gas, gas h.p., room or PTAC, none)	15b. HSPF/COP/AFUE:	
	15c. Capacity: 36	
16. Hot water system:	16a. Type: Elect	
(Types: elec., nat. gas, L.P. gas, solar, heat rec., ded. heat pump, other, none)	16b. EF: .88	

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

PREPARED BY: _____ DATE: 5/8/08

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

OWNER AGENT: Mike Todd DATE: 5/8/08

Review of 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 in accordance with Section 553.908, F.S.

BUILDING OFFICIAL: _____

DATE: _____

STATE OF FLORIDA
DEPARTMENT OF HEALTH

APPLICATION FOR ONSITE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permit Application Number 08-0381E

PART II - SITE PLAN

Scale: Each block represents 5 feet and 1 inch = 50 feet.

See Attached

Notes: _____

Site Plan submitted by: _____ Signature _____ Title

Plan Approved X Not Approved _____ Date 5/19/08 5/20/8

By _____ County Health Department

APPROVED

Columbia CHD

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT

NOTE: ALL PROPERTY CORNERS LOCATED AS SHOWN HEREON ARE IDENTIFIED AS L.S. BRITT, P.L.S. 575

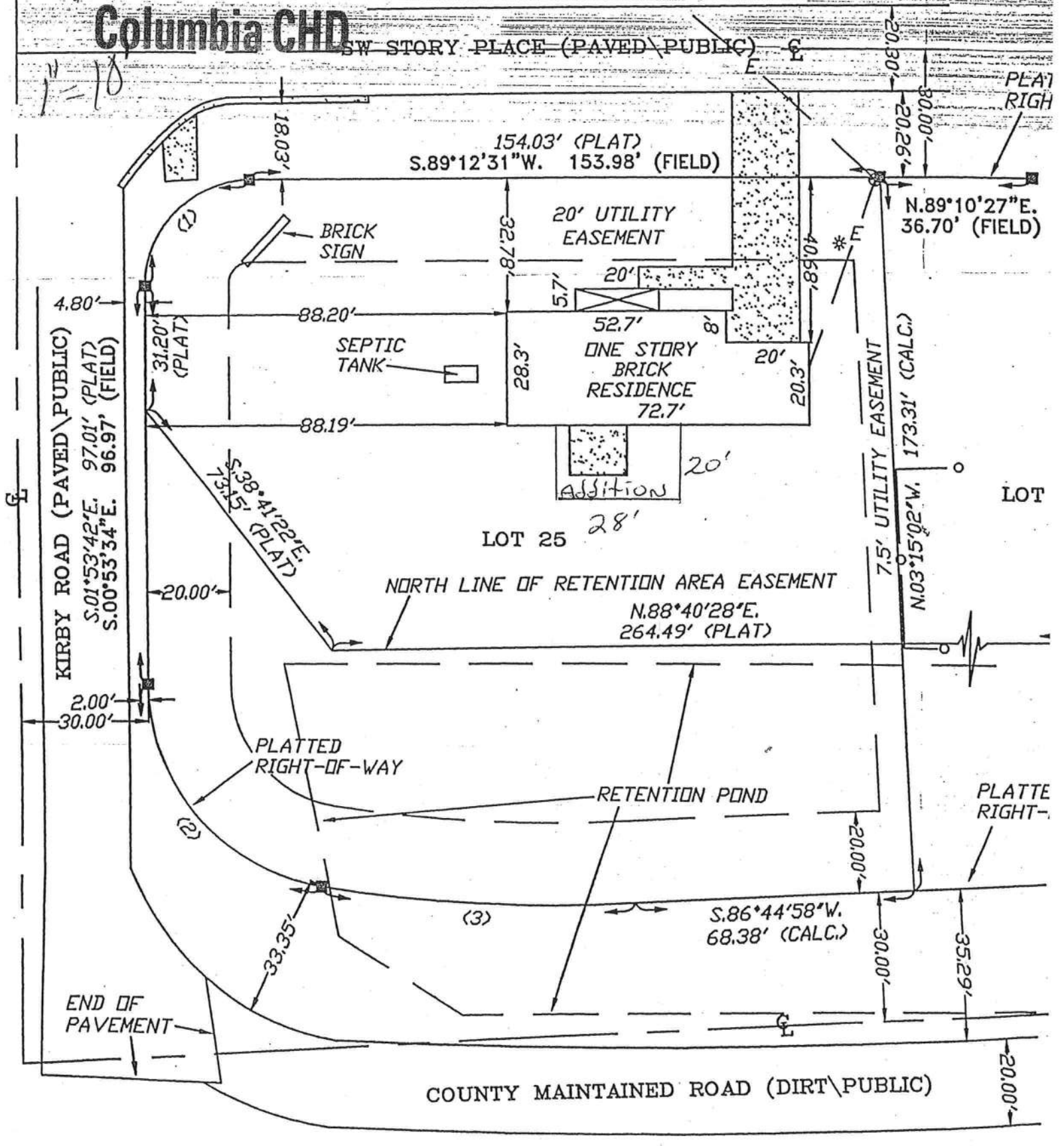
APPROVED

5/20/8

Columbia CHD

08-038k

1" = 10'



FLORIDA DEPARTMENT OF HEALTH

Charlie Crist
Governor

Dr. Ana M. Viamonte Ros
State Surgeon General

Applicant: HOYLE, TODD **Agent:** OWNER
Mailing Address: 129 NE COLBURN AVE **Date:** 5/20/8
LC 32055

RE: On-Site Sewage Treatment and Disposal System Construction Inspection and Final Approval.

Dear Sir / Madam:

On 5/20, an ~~inspection~~ REVIEW was conducted on your property for Permit # 08-0381-E. The ~~Construction /~~ Final Approval for this system was not issued because the following was / were noted. This / These item(s) will need to be resolved before this department can grant Final Approval.

[ ]	Private well not installed (75' setback).	[ ]	Mound/Filled system needs stabilization.
[X]	Bldg. not installed (5' setback).	[X]	Need Tank Certification.
[ ]	Bldg. does not match/missing floor plans.	[ ]	Tank manhole needs to be sealed.*
[X]	H2O line not hooked up (10' setback).*	[ ]	Need 911- Address.
[ ]	H2O line does not meet required setbacks.	[ ]	Sign Private Soil Evaluator form.
[ ]	System does not meet required setbacks.	[ ]	Resite ($50)/Amendment ($55) Fee required.
[ ]	Property lines not clearly marked.	[ ]	Resite/Updated site plan required.
[X]	Plumbing connection into tank.*	[ ]	Other.

* Must be left uncovered for inspection. Failure to comply may result in additional fee(s).

Remarks: ***PLEASE CALL WHEN EVERYTHING IS COMPLETED***

The items mentioned above need to be resolved as soon as possible before a final approval can be granted. If this department has to return to the site a $50.00 re-inspection fee ~~will [ ]~~ will not [X] be charged.

When completed or if there should be any questions, please contact the Environmental Health Section of the Columbia County Health Department at 386-758-1058.

Respectfully,

Paul O. Muller
Columbia County Health Department

cc: file

ITW Building Components Group, Inc.

1950 Marley Drive Haines City, FL 33844
Florida Engineering Certificate of Authorization Number: 0 278
Florida Certificate of Product Approval # FL1999
 Document ID:1THD8228Z0109083148

Truss Fabricator:	Anderson Truss Company
Job Identification:	8-131--Mike Todd Construction Hoyle -- , **
Truss Count:	10
Model Code:	Florida Building Code 2004 and 2006 Supplement
Truss Criteria:	ANSI/TPI-2002(STD)/FBC
Engineering Software:	Alpine Software,Version 7.36.
Structural Engineer of Record:	The identity of the structural EOR did not exist as of
Address:	the seal date per section 61G15-31.003(5a) of the FAC
Minimum Design Loads:	Roof - 40.0 PSF @ 1.25 Duration
	Floor - N/A
	Wind - 110 MPH ASCE 7-02 -Closed

Seal Date: 05/09/2008

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

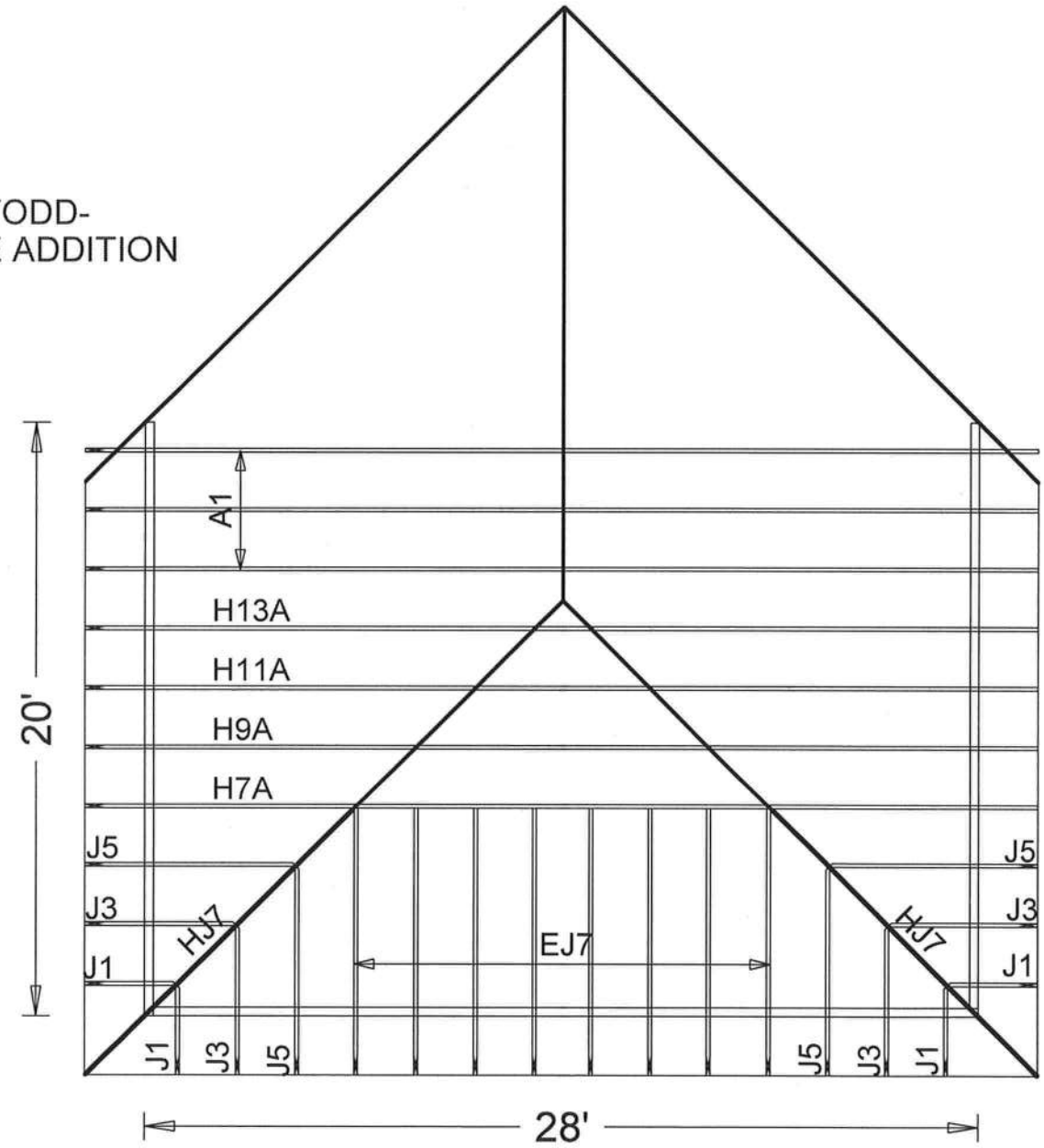
Notes:

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: HCUSR8228

Details: -

#	Ref	Description	Drawing#	Date
1	04062	--H7A	08130006	05/09/08
2	04063	--H9A	08130001	05/09/08
3	04064	--H11A	08130002	05/09/08
4	04065	--H13A	08130003	05/09/08
5	04066	--A1	08130004	05/09/08
6	04067	--J1	08130007	05/09/08
7	04068	--HJ7	08130008	05/09/08
8	04069	--J3	08130005	05/09/08
9	04070	--J5	08130009	05/09/08
10	04071	--EJ7	08130010	05/09/08

#8-131
MIKE TODD-
HOYLE ADDITION



JOB DESCRIPTION:: Mike Todd Construction
/: Hoyle

JOB NO:
8-131

PAGE NO:
1 OF 1

Top chord 2x4 SP #2 Dense :T2 2x6 SP #2:
Bot chord 2x6 SP #2
Webs 2x4 SP #3

Roof overhang supports 2.00 psf soffit load.

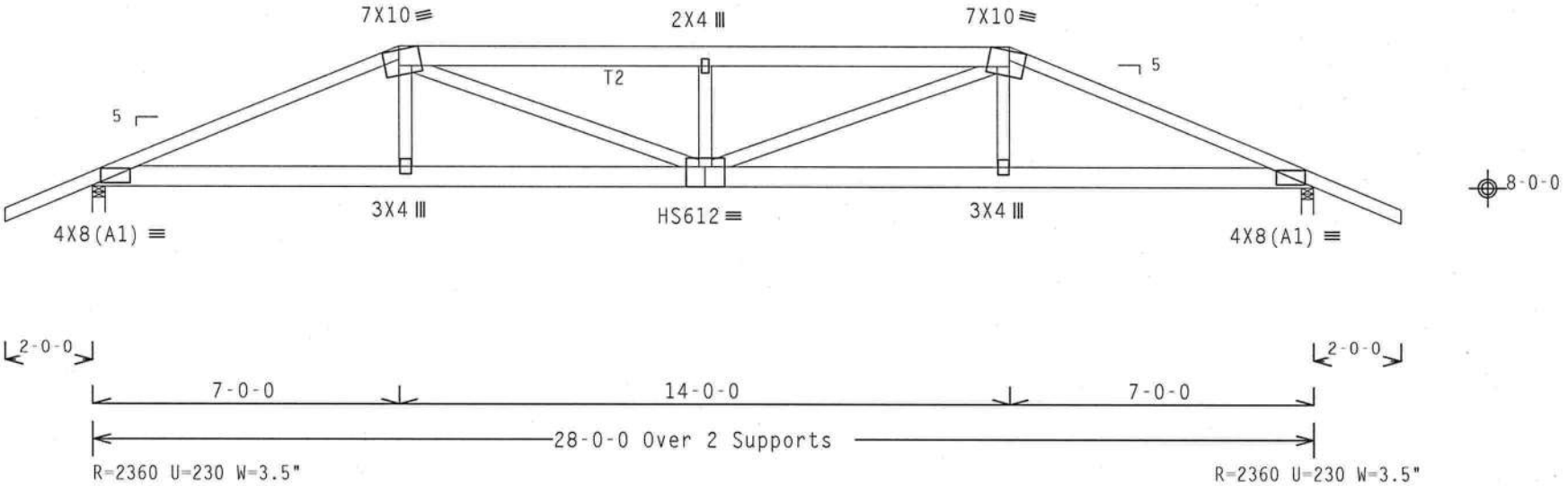
In lieu of structural panels use purlins to brace all flat TC @ 24" OC.

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. Iw=1.00 GCpi(+/-)=0.18

Wind reactions based on MWFRS pressures.

#1 hip supports 7-0-0 jacks with no webs.

Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.



Design Crit: TPI-2002(STD)/FBC

PLT TYP. 20 Gauge HS,Wave Cq/RT=1.00(1.25)/0(0) 7.36.0424.1 QTY:1 FL/-/4/-/-/R/- Scale =.25"/Ft.

ALPINE
ITW Building Components Group Inc.
Haines City, FL 33844
FL Certificate of Authorization # 0278

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND WTCA (WOOD TRUSS COUNCIL OF AMERICA, 6300 ENTERPRISE LANE, 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.

IMPORTANT FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITW BCG, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN; ANY FAILURE TO BUILD THE TRUSS IN COMFORMANCE 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. ITW BCG CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/SS/K) ASTM A653 GRADE 40/60 (W, K/H,SS) 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
May 09 08

TC LL	20.0 PSF	REF	R8228- 4062
TC DL	10.0 PSF	DATE	05/09/08
BC DL	10.0 PSF	DRW	HCUSR8228 08130006
BC LL	0.0 PSF	HC-ENG	JB/AP
TOT.LD.	40.0 PSF	SEQN-	86846
DUR.FAC.	1.25	FROM	AH
SPACING	24.0"	JREF-	1THD8228Z01

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

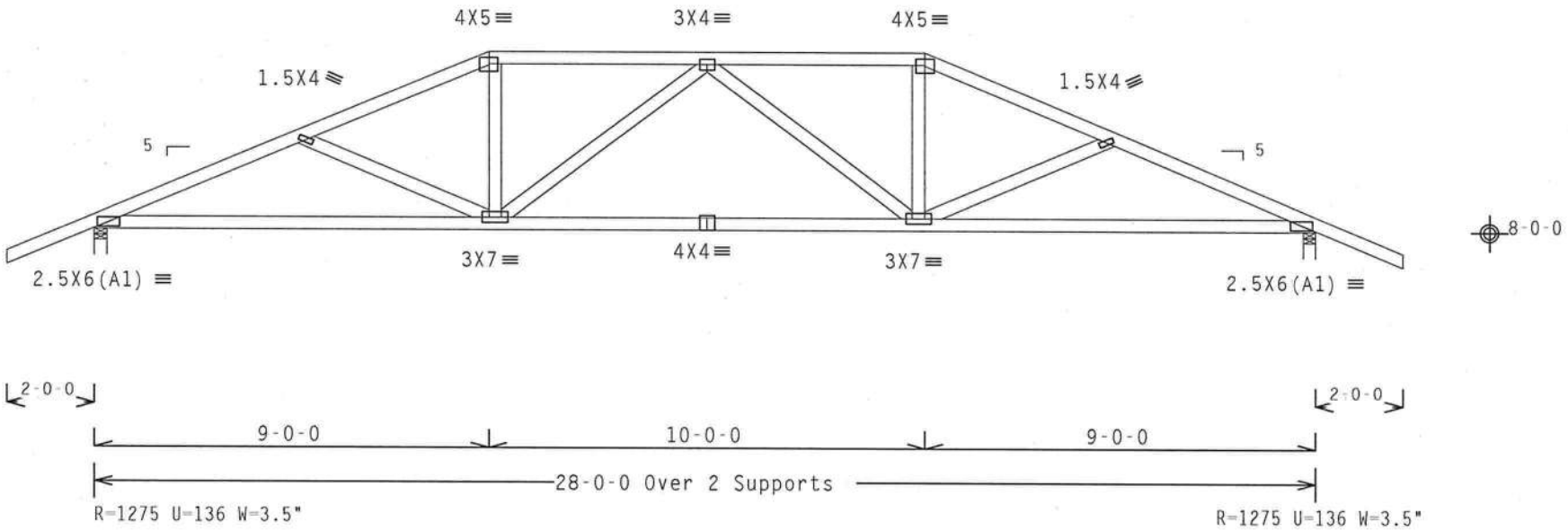
Roof overhang supports 2.00 psf soffit load.

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

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, not located within 4.50 ft from roof edge, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. Iw=1.00 GCpi(+/-)=0.18

Wind reactions based on MWFRS pressures.

Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.



Design Crit: TPI-2002(STD)/FBC
Cq/RT=1.00(1.25)/0(0) 7.36.0424.1

PLT TYP. Wave

QTY:1 FL/-/4/-/-/R/- Scale =.25"/Ft.

ALPINE
ITW Building Components Group Inc.
Haines City, FL 33844
FL Certificate of Authorization # 0 279

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND WTCA (WOOD TRUSS COUNCIL OF AMERICA, 6300 ENTERPRISE LANE, 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.

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JAMES F. COLLINS, JR. LICENSED No. 52212 STATE OF FLORIDA PROFESSIONAL ENGINEER
May 09, 08

TC LL	20.0 PSF	REF R8228- 4063
TC DL	10.0 PSF	DATE 05/09/08
BC DL	10.0 PSF	DRW HCUSR8228 08130001
BC LL	0.0 PSF	HC-ENG JB/AP *
TOT.LD.	40.0 PSF	SEQN- 86851
DUR.FAC.	1.25	FROM AH
SPACING	24.0"	JREF- 1THD8228Z01

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

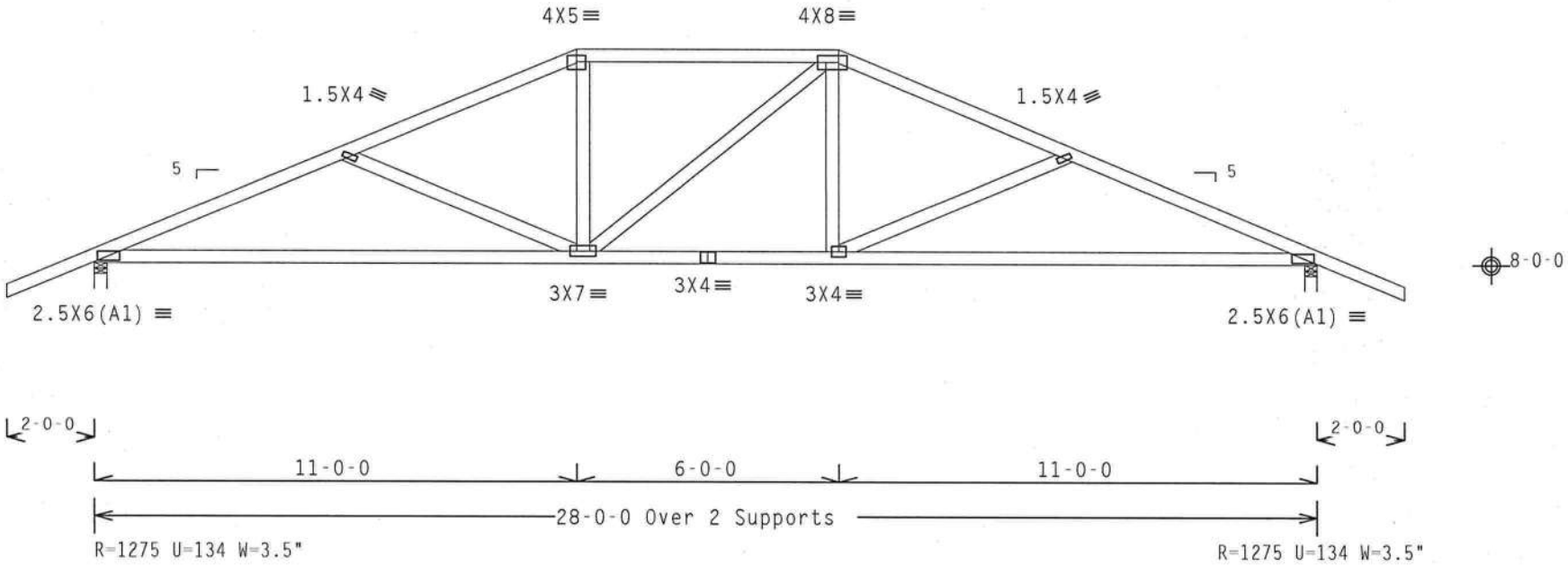
Roof overhang supports 2.00 psf soffit load.

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

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, not located within 4.50 ft from roof edge, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. Iw=1.00 GCpi(+/-)=0.18

Wind reactions based on MWFRS pressures.

Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.



Design Crit: TPI-2002(STD)/FBC
Cq/RT=1.00(1.25)/0(0) 7.36.0424.12

PLT TYP. Wave QTY:1 FL/-/4/-/-/R/- Scale =.25"/Ft.

ALPINE
ITW Building Components Group Inc.
Haines City, FL 33844
FL Certificate of Authorization # 0 278

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND WTCA (WOOD TRUSS COUNCIL OF AMERICA, 6300 ENTERPRISE LANE, 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.

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

TC LL	20.0 PSF	REF	R8228- 4064
TC DL	10.0 PSF	DATE	05/09/08
BC DL	10.0 PSF	DRW	HCUSR8228 08130002
BC LL	0.0 PSF	HC-ENG	JB/AP *
TOT.LD.	40.0 PSF	SEQN-	86856
DUR.FAC.	1.25	FROM	AH
SPACING	24.0"	JREF-	1THD8228Z01

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

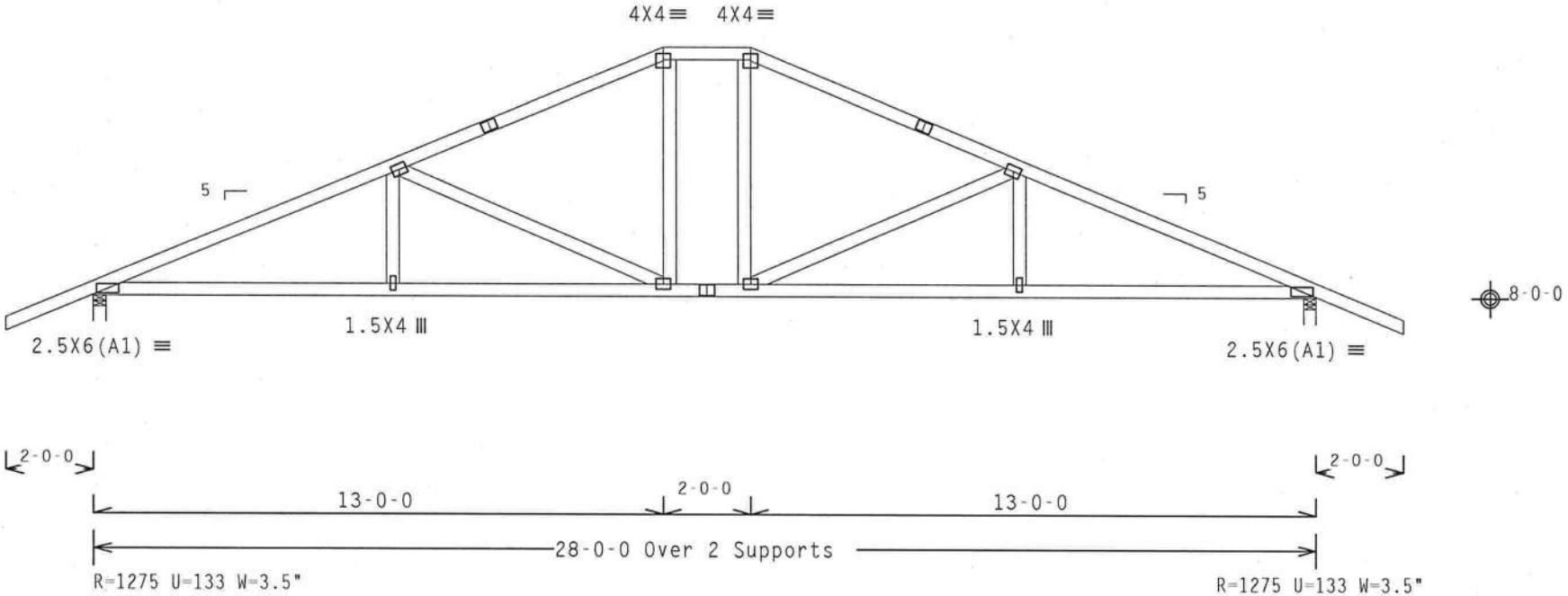
Roof overhang supports 2.00 psf soffit load.

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

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, not located within 4.50 ft from roof edge, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. Iw=1.00 GCpi(+/-)=0.18

Wind reactions based on MWFRS pressures.

Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.



Note: All Plates Are 3X4 Except As Shown.

Design Crit: TPI-2002(STD)/FBC

PLT TYP. Wave Cq/RT=1.00(1.25)/0(0) 7.36.0424.12 QTY:1 FL/-/4/-/-/R/- Scale =.25"/Ft.

ALPINE
ITW Building Components Group Inc.
Haines City, FL 33844
FL Certificate of Authorization # 0.278

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JAMES F. COLLINS, JR. LICENSE No. 52212 STATE OF FLORIDA PROFESSIONAL ENGINEER
May 0[illegible]

TC LL	20.0 PSF	REF R8228- 4065
TC DL	10.0 PSF	DATE 05/09/08
BC DL	10.0 PSF	DRW HCUSR8228 08130003
BC LL	0.0 PSF	HC-ENG JB/AP *
TOT.LD.	40.0 PSF	SEQN- 86866
DUR.FAC.	1.25	FROM AH
SPACING	24.0"	JREF- 1THD8228Z01

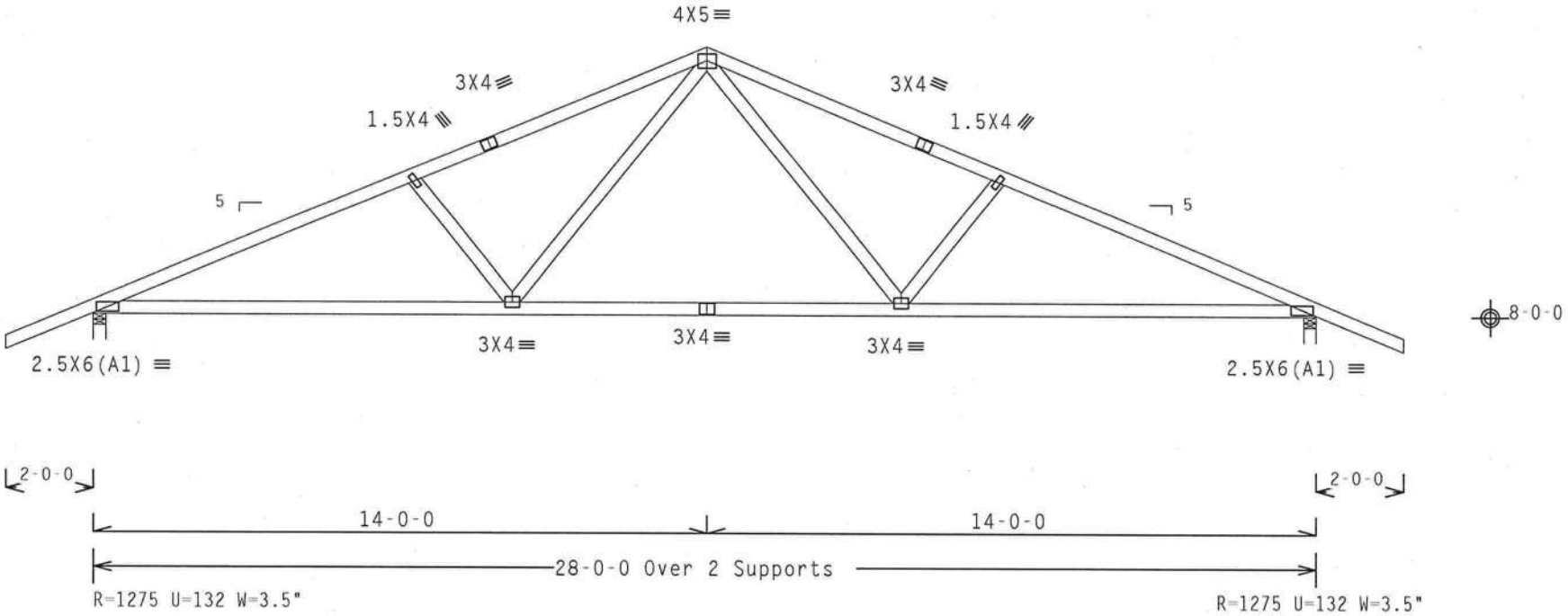
Top chord 2x4 SP #2 Dense
Bot chord 2x4 SP #2 Dense
Webs 2x4 SP #3

Roof overhang supports 2.00 psf soffit load.

Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, not located within 4.50 ft from roof edge, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. Iw=1.00 GCpi(+/-)=0.18

Wind reactions based on MWFRS pressures.



Design Crit: TPI-2002(STD)/FBC

PLT TYP. Wave

Cq/RT=1.00(1.25)/0(0) 7.36.0424 QTY:1 FL/-/4/-/-/R/- Scale =.25"/Ft.

ALPINE
ITW Building Components Group Inc.
Haines City, FL 33844
FL Certificate of Authorization # 0 278

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JAMES T. COLLINS JR. LICENSE No. 52212 STATE OF FLORIDA PROFESSIONAL ENGINEER
May 09 08

TC LL	20.0 PSF	REF R8228- 4066
TC DL	10.0 PSF	DATE 05/09/08
BC DL	10.0 PSF	DRW HCUSR8228 08130004
BC LL	0.0 PSF	HC-ENG JB/AP *
TOT.LD.	40.0 PSF	SEQN- 86871
DUR.FAC.	1.25	FROM AH
SPACING	24.0"	JREF- 1THD8228Z01

Top chord 2x4 SP #2 Dense
Bot chord 2x4 SP #2 Dense

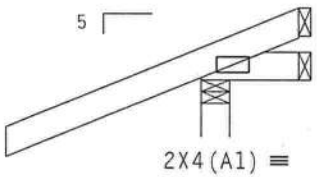
Roof overhang supports 2.00 psf soffit load.

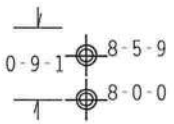
Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. Iw=1.00 GCpi(+/-)=0.18

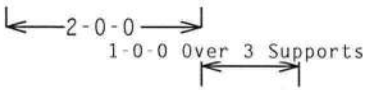
Wind reactions based on MWFRS pressures.

R=-106 Rw=43 U=66





R=-38 Rw=22 U=25



Design Crit: TPI-2002(STD)/FBC
Cq/RT=1.00(1.25)/0(0) 7.36.0424.12

PLT TYP. Wave QTY:1 FL/-/4/-/-/R/- Scale =.5"/Ft.

ALPINE
ITW Building Components Group Inc.
Haines City, FL 33844
FL Certificate of Authorization # 0 278

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May 0[illegible]

TC LL	20.0 PSF	REF R8228- 4067
TC DL	10.0 PSF	DATE 05/09/08
BC DL	10.0 PSF	DRW HCUSR8228 08130007
BC LL	0.0 PSF	HC-ENG JB/AP
TOT.LD.	40.0 PSF	SEQN- 86818
DUR.FAC.	1.25	FROM AH
SPACING	24.0"	JREF- 1THD8228Z01

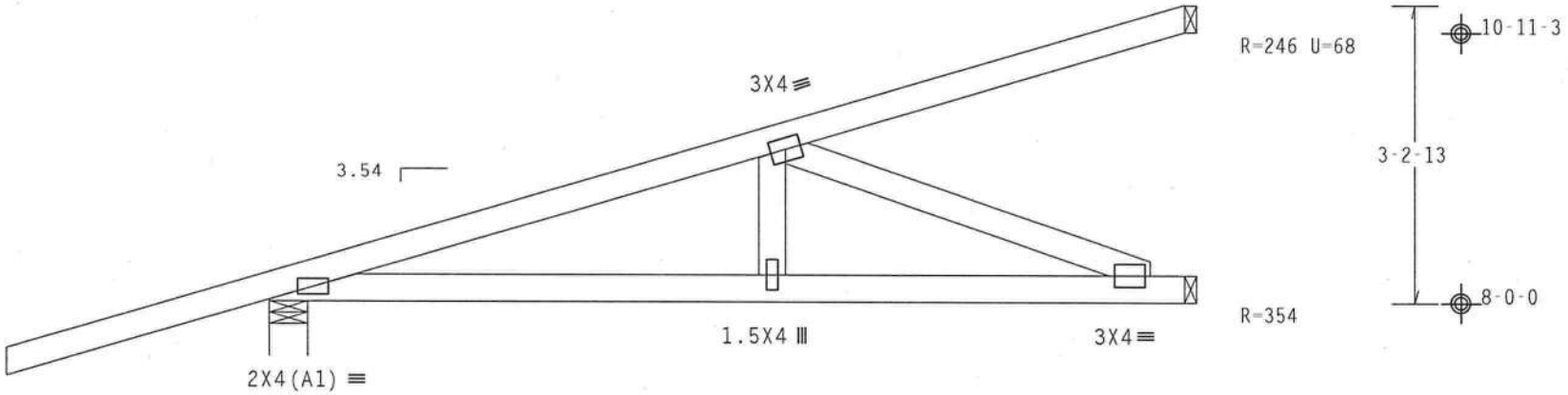
Top chord 2x4 SP #2 Dense
Bot chord 2x4 SP #2 Dense
Webs 2x4 SP #3

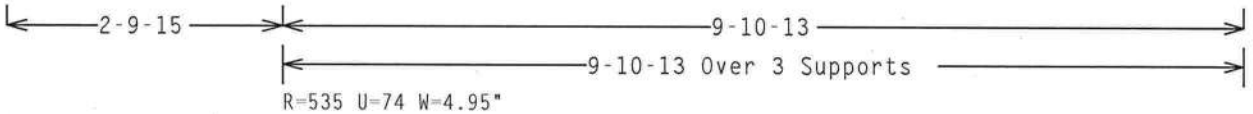
Hipjack supports 7-0-0 setback jacks with no webs.

Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. Iw=1.00 GCpi(+/-)=0.18

Wind reactions based on MWFRS pressures.





Design Crit: TPI-2002(STD)/FBC
PLT TYP. Wave Cq/RT=1.00(1.25)/0(0) 7.36.0424 QTY:1 FL/-/4/-/-/R/- Scale =.5"/Ft.

ALPINE
ITW Building Components Group Inc.
Haines City, FL 33844
FL Certificate of Authorization # 0 278

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May 09 08

TC LL	20.0 PSF	REF R8228- 4068
TC DL	10.0 PSF	DATE 05/09/08
BC DL	10.0 PSF	DRW HCUSR8228 08130008
BC LL	0.0 PSF	HC-ENG JB/AP
TOT.LD.	40.0 PSF	SEQN- 86841
DUR.FAC.	1.25	FROM AH
SPACING	24.0"	JREF- 1THD8228Z01

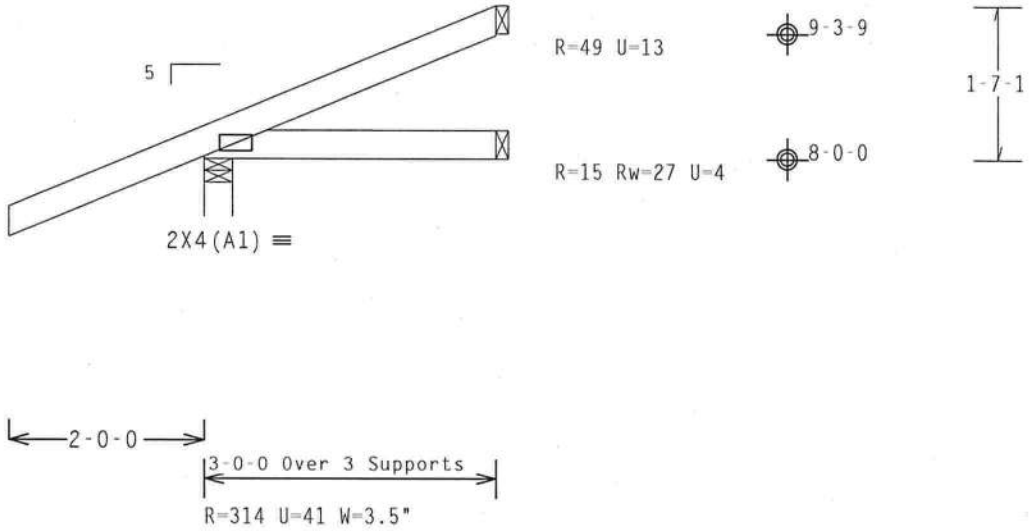
Top chord 2x4 SP #2 Dense
Bot chord 2x4 SP #2 Dense

Roof overhang supports 2.00 psf soffit load.

Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. Iw=1.00 GCpi(+/-)=0.18

Wind reactions based on MWFRS pressures.



Design Crit: TPI-2002(STD)/FBC
PLT TYP. Wave Cq/RT=1.00(1.25)/0(0) 7.36.0424.13 QTY:1 FL/-/4/-/-/R/- Scale =.5"/Ft.

ALPINE
ITW Building Components Group Inc.
Haines City, FL 33844
FL Certificate of Authorization # 0278

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JAMES F. COLKINS LICENSE NO. 52212 STATE OF FLORIDA PROFESSIONAL ENGINEER

May

TC LL	20.0 PSF	REF R8228- 4069
TC DL	10.0 PSF	DATE 05/09/08
BC DL	10.0 PSF	DRW HCUSR8228 08130005
BC LL	0.0 PSF	HC-ENG JB/AP *
TOT.LD.	40.0 PSF	SEQN- 86823
DUR.FAC.	1.25	FROM AH
SPACING	24.0"	JREF- 1THD8228Z01

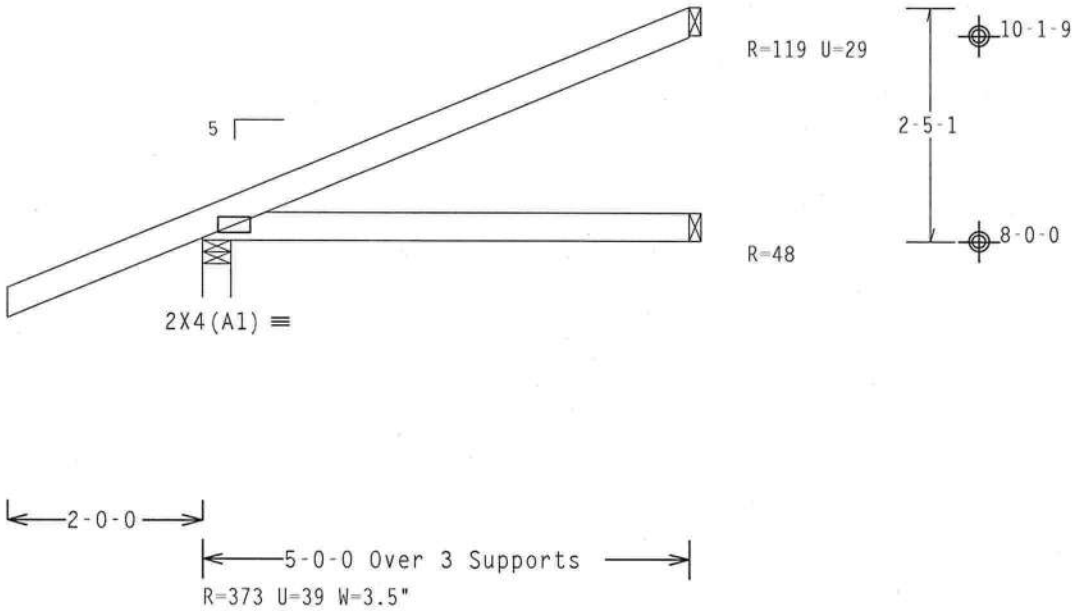
Top chord 2x4 SP #2 Dense
Bot chord 2x4 SP #2 Dense

Roof overhang supports 2.00 psf soffit load.

Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, not located within 4.50 ft from roof edge, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. Iw=1.00 GCpi(+/-)=0.18

Wind reactions based on MWFRS pressures.



Design Crit: TPI-2002(STD)/FBC
PLT TYP. Wave Cq/RT=1.00(1.25)/0(0) 7.36.0424.12 QTY:1 FL/-/4/-/-/R/- Scale =.5"/Ft.

ALPINE
ITW Building Components Group Inc.
Haines City, FL 33844
FL Certificate of Authorization # 0 278

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

May

TC LL	20.0 PSF	REF R8228- 4070
TC DL	10.0 PSF	DATE 05/09/08
BC DL	10.0 PSF	DRW HCUSR8228 08130009
BC LL	0.0 PSF	HC-ENG JB/AP
TOT.LD.	40.0 PSF	SEQN- 86827
DUR.FAC.	1.25	FROM AH
SPACING	24.0"	JREF- 1THD8228Z01

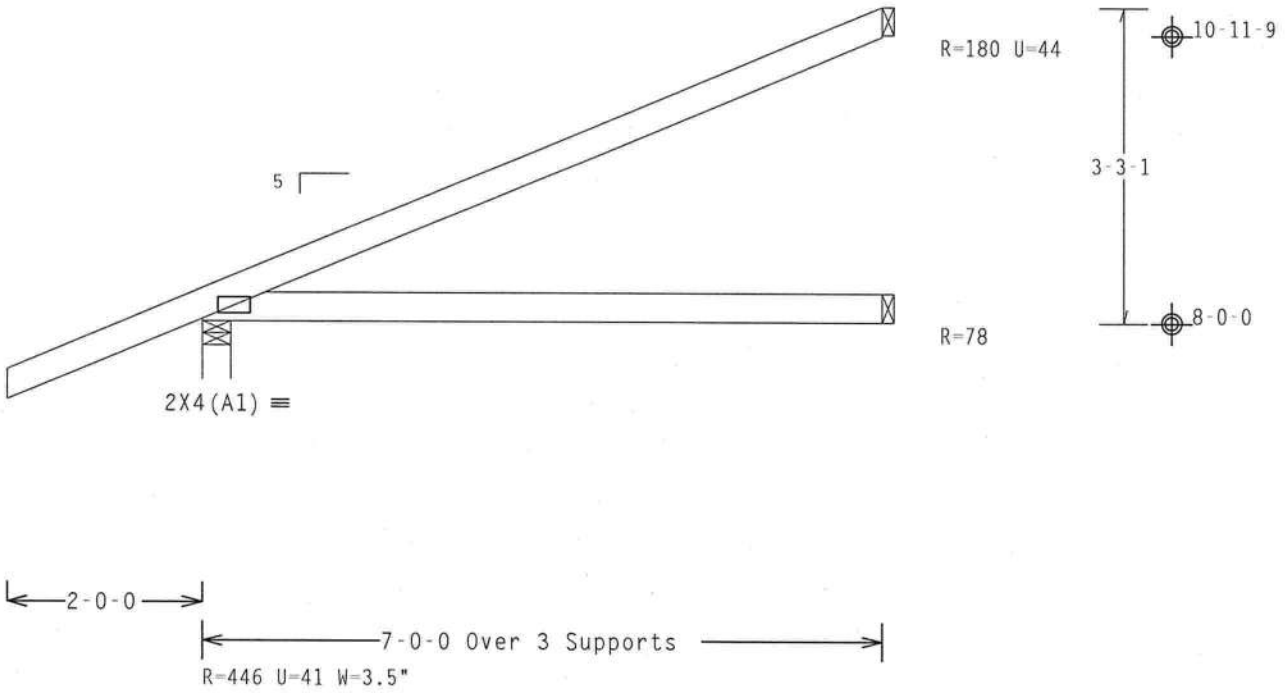
Top chord 2x4 SP #2 Dense
Bot chord 2x4 SP #2 Dense

Roof overhang supports 2.00 psf soffit load.

Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, not located within 4.50 ft from roof edge, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. Iw=1.00 GCpi(+/-)=0.18

Wind reactions based on MWFRS pressures.



Design Crit: TPI-2002(STD)/FBC
Cq/RT=1.00(1.25)/0(0) 7.36.0424

PLT TYP. Wave

QTY:1 FL/-/4/-/-/R/- Scale =.5"/Ft.

ALPINE
ITW Building Components Group Inc.
Haines City, FL 33844
FL Certificate of Authorization # 0 278

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND WTCA (WOOD TRUSS COUNCIL OF AMERICA, 6300 ENTERPRISE LANE, 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. ITW BCG, 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. ITW BCG CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/SS/K) ASTM A653 GRADE 40/60 (W, K/H,SS) 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
May 09 08

TC LL	20.0 PSF	REF R8228- 4071
TC DL	10.0 PSF	DATE 05/09/08
BC DL	10.0 PSF	DRW HCUSR8228 08130010
BC LL	0.0 PSF	HC-ENG JB/AP
TOT.LD.	40.0 PSF	SEQN- 86834
DUR.FAC.	1.25	FROM AH
SPACING	24.0"	JREF- 1THD8228Z01

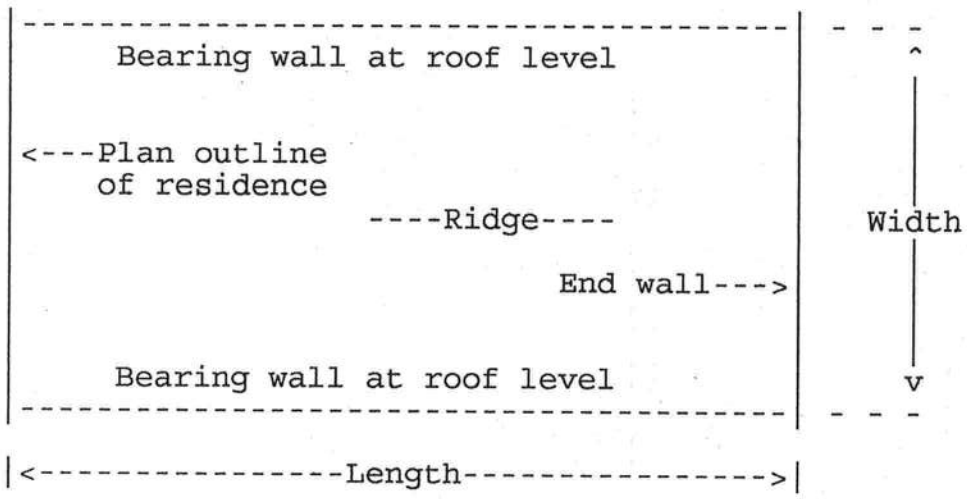
Data entry by: MT Date: 05 08 08

Project name: HOYLE
Location : COLUMBIA COUNTY

R E S I D E N T I A L W I N D D E S I G N A N D A N A L Y S I S
A product of EDA Software, Inc.
Based on the Standard Building Code, 1994 edition

**** GENERAL INPUT DATA ****

Permanent construction
Simple rectangular building



Length along bearing walls out to out of studs = 28 feet
Width along end walls out to out of studs = 20 feet
Roof overhang in long direction from outer face of stud = 2 feet generally
Roof overhang at short end wall from outer face of stud = 2 feet generally
Height of exterior wall to top of plate on long side = 8 feet constant
Roof cross slope = 5 /12

Wind velocity = 110 mph

**** DEGREE OF ENCLOSURE ****

Assume that this building is an 'Enclosed building' per Code 1606.2.3.

AR000 7005 10 June 2008

**** STRUCTURAL FRAMING INPUT DATA ****

*** Roof Structural Data ***

Member number 1
Jack truss--hip-ended roof
Span length out to out of supports = 28 feet
Roof cross slope = 5 /12
Truss spacing = 24 inches
Overhang = 2 feet

*** Wall Structural Data ***

Spacing of wall studs = 16 inches
Total number of plates = 3
Wall stud number 1 is 8 feet high out to out of plates

COEFFICIENTS AND PRESSURES
Main Wind Force Resisting Systems

Actual pressure = Velocity pressure x Use factor x Coefficient
Wind velocity is 110 mph
Mean roof height is 10.44444 feet
Velocity pressure is 24.7 psf
Use factor is 1.0
Roof cross slope is 5 on 12, which equals 22.61987 degrees to horizontal
End zone width is 6 feet

	Coefficient	Design Pressure (psf)
End zone		
Windward wall (1E)	.7	17.29
Windward roof (2E)	-1	-24.7
Leeward roof (3E)	-1	-24.7
Leeward wall (4E)	-.95	-23.47
Overhang	-1.5	-37.06
Interior zone		
Windward wall (1)	.4	9.88
Windward roof (2)	-.75	-18.53
Leeward roof (3)	-.75	-18.53
Leeward wall (4)	-.7	-17.3
Overhang	-1.5	-37.06

ROOF LOADING--Roof Number 1 (pounds per square foot)

Roof cross slope = 5 inches per foot

Fiberglass shingles 240 # per square and 1 layer of 30 # felt	= 2.7
No insulation	
7/16 in. roof sheathing	= 1.31
Total roof unit weight on slope	= 4.01
Cosine of roof cross slope	= .9230769
Roof unit weight on horizontal	= 4.344167
2 in. x 4 in. wood trusses at 24 in. spacing	= 2.193387
1 layer of 1/2 in. gypsum board ceiling--plain	= 2
Ceiling insulation R-30	= .5
Air-conditioning ductwork	= 1
Full lighting	= .3
Miscellaneous	= 0
Total	= 10.33755

Roof Unit Dead Load = 11 psf
Roof dead load supported generally by wall = 114.8755 plf

ROOF LOADING--Roof Number 2 (pounds per square foot)

Roof cross slope = 5 inches per foot

Fiberglass shingles 240 # per square and 1 layer of 30 # felt	= 2.7
No insulation	
7/16 in. roof sheathing	= 1.31
Total roof unit weight on slope	= 4.01
Cosine of roof cross slope	= .9230769
Roof unit weight on horizontal	= 4.344167
2 in. x 4 in. wood trusses at 24 in. spacing	= 2.193387
1 layer of 1/2 in. gypsum board ceiling--plain	= 2
Ceiling insulation R-30	= .5
Air-conditioning ductwork	= 1
Full lighting	= .3
Miscellaneous	= 0
Total	= 10.33755

Roof Unit Dead Load = 11 psf
Roof dead load supported generally by wall = 114.8755 plf

ROOF MEMBER DEAD LOAD REACTIONS AT BEARINGS
All values are in pounds

Roof member number 1 --Span 28 feet, Slope 5 /12, interior zone---- 312
Roof member number 2 --Span 28 feet, Slope 5 /12, end zone--------- 312

EXTERIOR WALL LOADING (pounds per linear foot)

Wood frame wall-- 8 ft. out to out plates

3--2 in. x 4 in. plates	= 2.865625
2 in. x 4 in. studs at 16 in. spacing	= 5.462598
R-13 Insulation	= 1.90625
Vinyl siding	= 4
1/2 in. Gypsum board--Total 1 layer---	= 16
Total	= 30.23447

Exterior Wall Unit Dead Load = 31 plf

ROOF LOADING--Roof Number 1 (pounds per square foot)

Roof cross slope = 5 inches per foot

Fiberglass shingles 240 # per square and 1 layer of 30 # felt	= 2.7
No insulation	
7/16 in. roof sheathing	= 1.31
Total roof unit weight on slope	= 4.01
Cosine of roof cross slope	= .9230769
Roof unit weight on horizontal	= 4.344167
2 in. x 4 in. wood trusses at 24 in. spacing	= 2.193387
1 layer of 1/2 in. gypsum board ceiling--plain	= 2
Ceiling insulation R-30	= .5
Air-conditioning ductwork	= 1
Full lighting	= .3
Miscellaneous	= 0
Total	= 10.33755

Roof Unit Dead Load = 11 psf
Roof dead load supported generally by wall = 114.8755 plf

ROOF LOADING--Roof Number 2 (pounds per square foot)

Roof cross slope = 5 inches per foot

Fiberglass shingles 240 # per square and 1 layer of 30 # felt	= 2.7
No insulation	
7/16 in. roof sheathing	= 1.31
Total roof unit weight on slope	= 4.01
Cosine of roof cross slope	= .9230769
Roof unit weight on horizontal	= 4.344167
2 in. x 4 in. wood trusses at 24 in. spacing	= 2.193387
1 layer of 1/2 in. gypsum board ceiling--plain	= 2
Ceiling insulation R-30	= .5
Air-conditioning ductwork	= 1
Full lighting	= .3
Miscellaneous	= 0
Total	= 10.33755

Roof Unit Dead Load = 11 psf
Roof dead load supported generally by wall = 114.8755 plf

S U M M A R Y O F H U R R I C A N E A N C H O R A N A L Y S I S

All values of forces are in pounds. Resistances have been increased for wind.
End zone width = 6 feet
Code: C = Compliance N = Non-compliance

Simpson hurricane anchors

Member 1 --Hip roof--Span 28 feet, at 24 inches oc--in interior zone:
Uplift = 934 Dead = 312 Net = 622 Model Special, Resistance = 1205 C
Model H16--all nails installed per manufacturers catalog
Data supplied by operator--not from EDA database

Member 2 --Hip roof--Span 28 feet, at 24 inches oc--in end zone:
Uplift = 934 Dead = 312 Net = 622 Model Special, Resistance = 1205 C
Model H16--all nails installed per manufacturers catalog
Data supplied by operator--not from EDA database

**** ANALYSIS OF ROOF SHEATHING AS SHEAR DIAPHRAGM TRANSVERSE ****
Shear analysis applies along supporting shearwalls.

Roof trusses are Southern Pine lumber, spaced at 24 inches
Sheathing is Oriented Strand Board, 7/16 inch thick
Sheathing has no intermediate blocking
Fasteners on panel ends are 8d nails spaced at 4 inches
Fasteners in panel interior are 8d nails spaced at 8 inches

Total lateral wind force on building = 6954 pounds
Total force transferred through diaphragm to shearwalls = 3477 pounds
Total length of shearwalls = 40 feet
MINIMUM REQUIRED TOTAL SHEARWALL LENGTH = 11 FT.--LOCATE EVENLY THROUGHOUT

Actual diaphragm force per unit length of shearwall = 86 plf
Allowable diaphragm force per unit length of shearwall = 314 plf

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*** Summary of Analysis ***
Roof sheathing diaphragm satisfies Code requirements.

**** ANALYSIS OF ROOF SHEATHING AS SHEAR DIAPHRAGM LONGITUDINAL ****
Shear analysis applies along supporting shearwalls.

Roof trusses are Southern Pine lumber, spaced at 24 inches
Sheathing is Oriented Strand Board, 7/16 inch thick
Sheathing has no intermediate blocking
Fasteners on panel ends are 8d nails spaced at 4 inches
Fasteners in panel interior are 8d nails spaced at 8 inches

Total lateral wind force on building = 3866 pounds
Total force transferred through diaphragm to shearwalls = 1933 pounds
Total length of shearwalls = 56 feet
MINIMUM REQUIRED TOTAL SHEARWALL LENGTH = 6.1 FT.--LOCATE EVENLY THROUGHOUT

Actual diaphragm force per unit length of shearwall = 34 plf
Allowable diaphragm force per unit length of shearwall = 314 plf

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*** Summary of Analysis ***
Roof sheathing diaphragm satisfies Code requirements.

**** ANALYSIS OF ROOF SHEATHING FOR FASTENER WITHDRAWAL ****

Interior zone (area Ri)
Roof trusses are Southern Pine lumber, spaced at 24 inches
Sheathing is 7/16 inch with no intermediate blocking
Size of sheathing is 48 inches by 96 inches
Fasteners along end trusses are 8d nails spaced at 4 inches
Fasteners along int. trusses are 8d nails spaced at 8 inches
Total outward wind force on sheathing = 810 pounds
Total withdrawal resistance of 47 nails = 3569 pounds (increased for wind)
Fastening of roof sheathing satisfies Code requirements.

Edge strip (area Si) width = 3 feet
Roof trusses are Southern Pine lumber, spaced at 24 inches
Sheathing is 7/16 inch with no intermediate blocking
Size of sheathing is 48 inches by 96 inches
Fasteners along end trusses are 8d nails spaced at 4 inches
Fasteners along int. trusses are 8d nails spaced at 8 inches
Total outward wind force on sheathing = 1255 pounds
Total withdrawal resistance of 47 nails = 3569 pounds (increased for wind)
Fastening of roof sheathing satisfies Code requirements.

End zone (areas Se and C) width = 6 feet
Roof trusses are Southern Pine lumber, spaced at 24 inches
Sheathing is 7/16 inch with no intermediate blocking
Size of sheathing is 48 inches by 96 inches
Fasteners along end truss are 8d nails spaced at 4 inches
Fasteners along end wall are 8d nails spaced at 4 inches
Fasteners along int. trusses are 8d nails spaced at 8 inches
Total outward wind force on sheathing = 1731 pounds
Total withdrawal resistance of 47 nails = 3569 pounds (increased for wind)
Fastening of roof sheathing satisfies Code requirements.

**** ANALYSIS OF WALL STUDS ****

*** Analysis of Wall Stud Number 1 ***

2 in. x 4 in. single studs at 16 in. spacing
Stud height is 7.625 feet--located in interior zone
Top of studs is laterally supported by ceiling diaphragm or other method
Spruce--Pine--Fir lumber----Number 1--Number 2 grade
Sheathing is inch rated OSB, span rating 24/16

Cross-sectional area = 5.25 sq.in.
Moment of inertia = 5.359375 in.^4
Section Modulus = 3.0625 in.^3
Elastic modulus of wood stud = 1400000 in.^2

Total outward force on stud = 325 pounds
Stud moment = 309 ft-lb.

Stresses:
Stud bending vert : Actual = 1213 psi Allowable = 2415 psi (adjusted)
Stud shear : Actual = 42 psi Allowable = 112 psi (adjusted)
Stud tensile : Actual = 44 psi Allowable = 1020 psi (adjusted)
Interaction bending and tension actual/allowable stress ratio total = .5454147
Sheathing bending hor: Actual = 178 psi Allowable = 222 psi(adjusted)
Deflections:
Stud : Actual = .27 in. Allowable = .5083 in.

*** Summary of Analysis ***

Wall structure satisfies all Code requirements.

**** ANALYSIS OF WALL STUDS ****

*** Analysis of Wall Stud Number 2 ***

2 in. x 4 in. single studs at 16 in. spacing
Stud height is 7.625 feet--located in end zone
Top of studs is laterally supported by ceiling diaphragm or other method
Spruce--Pine--Fir lumber----Number 1--Number 2 grade
Sheathing is inch rated OSB, span rating 24/16

Cross-sectional area = 5.25 sq.in.
Moment of inertia = 5.359375 in.^4
Section Modulus = 3.0625 in.^3
Elastic modulus of wood stud = 1400000 in.^2

Total outward force on stud = 374 pounds
Stud moment = 356 ft-lb.

Stresses:
Stud bending vert : Actual = 1396 psi Allowable = 2415 psi (adjusted)
Stud shear : Actual = 49 psi Allowable = 112 psi (adjusted)
Stud tensile : Actual = 44 psi Allowable = 1020 psi (adjusted)
Interaction bending and tension actual/allowable stress ratio total = .6211911
Sheathing bending hor: Actual = 205 psi Allowable = 222 psi(adjusted)
Deflections:
Stud : Actual = .3107 in. Allowable = .5083 in.

*** Summary of Analysis ***

Wall structure satisfies all Code requirements.

**** ALLOWABLE STRESS PROPERTIES ****

Base stresses (psi):
Wood:
- Bending = 875
- Tension = 425
- Shear = 70
- Elastic modulus = 1400000

Adjustment factors for wood:
- Duration (Du) = 1.6
- Wet service (Wt) = 1
- Temperature (Tm) = 1
- Stability (St) = 1
- Size (Sz) = 1.5
- Volume (Vm) = 1
- Flat use (Fu) = 1
- Repetitive (Rp) = 1.15
- Curvature (Cu) = 1
- Form (Fm) = 1
- Shear stress (Sh) = 1

Allowable stresses (psi):
Wood:
- Bending = 2415 (Base x Du x Wt x Tm x St x Sz x Vm x Fu x Rp x Cu x Fm)
- Tension = 1020 (Base x Du x Wt x Tm x Sz)
- Shear = 112 (Base x Du x Wt x Tm x Sh)
- Elastic modulus = 2240000 (Base x Wt x Tm)

Sheathing:
- Bending = 222 (Base x 1.33)
- Elastic modulus = 61904.76 (Base)

T R A N S V E R S E D R A G S T R U T N A I L A N A L Y S I S

Wall framing is 2 in. x 4 in. studs
Wall stud framing lumber is Spruce--Pine--Fir
Fasteners are 16d common nails
Approximate nail spacing = 16 inches

Total lateral force on building = 6954 pounds
Force applied at top of walls = 3477 pounds
Total dragstrut length = 40 feet
Shear per unit dragstrut length = 86 pounds per linear foot

Actual shear on each nail = 114 pounds
Allowable shear on each nail = 192 pounds

Dragstrut nailing satisfies Code requirements.

L O N G I T U D I N A L D R A G S T R U T N A I L A N A L Y S I S

Wall framing is 2 in. x 4 in. studs
Wall stud framing lumber is Spruce--Pine--Fir
Fasteners are 16d common nails
Approximate nail spacing = 16 inches

Total lateral force on building = 3866 pounds
Force applied at top of walls = 1933 pounds
Total dragstrut length = 56 feet
Shear per unit dragstrut length = 34 pounds per linear foot

Actual shear on each nail = 45 pounds
Allowable shear on each nail = 192 pounds

Dragstrut nailing satisfies Code requirements.

**** T R A N S V E R S E S H E A R W A L L A N A L Y S I S ****

Wall framing is 2 in. x 4 in. studs at 16 inch spacing
Wall stud framing lumber is Spruce--Pine--Fir
Wall shear siding is Oriented Strand Board -- 7/16 inch thick
Wall sheathing has all edges nailed
Fasteners: 8d common nails spaced along edges at 4 inch centers
Fasteners: 8d common nails spaced in interior at 8 inch centers

Total lateral force on building = 6954 pounds
Force applied at top of walls = 3477 pounds
Accumulated total shearwall length = 40 feet

Actual unit shear on shearwalls = 86 pounds per linear foot
Allowable unit shear on shearwalls = 322 pounds per linear foot

Shearwall satisfies Code requirements.

**** L O N G I T U D I N A L S H E A R W A L L A N A L Y S I S ****

Wall framing is 2 in. x 4 in. studs at 16 inch spacing
Wall stud framing lumber is Spruce--Pine--Fir
Wall shear siding is Oriented Strand Board -- 7/16 inch thick
Wall sheathing has all edges nailed
Fasteners: 8d common nails spaced along edges at 4 inch centers
Fasteners: 8d common nails spaced in interior at 8 inch centers

Total lateral force on building = 3866 pounds
Force applied at top of walls = 1933 pounds
Accumulated total shearwall length = 56 feet

Actual unit shear on shearwalls = 34 pounds per linear foot
Allowable unit shear on shearwalls = 322 pounds per linear foot

Shearwall satisfies Code requirements.

*** ANALYSIS OF OUTWARD FORCES ON WALL SHEATHING ***

Wall number 1 : Total outward wind force on sheathing = 975 pounds
: Total withdrawal resistance of 92 nails = 5133 pounds

Wall number 2 : Total outward wind force on sheathing = 1122 pounds
: Total withdrawal resistance of 92 nails = 5133 pounds

**** ANALYSIS OF SHEATHING FASTENERS ****

Wall framing is Spruce--Pine--Fir lumber
Sheathing is 7/16 inch Oriented Strand Board
Sheathing extends from bottom of bottom plate to top of top plate
Fasteners are 8d common nails at 4 inch spacing

Total uniform wind uplift in first story at top of wall level = 289 plf
Uniform dead loads per linear foot:
Roof = 114.8755 plf

Total = 114.8755 plf
Total uniform dead load in first story at top of wall level = 114 plf
Net wind uplift in first story at top of wall level = 175 plf

Total uplift force on each nail = 58 pounds
Allowable shear on each nail = 97 pounds (increased for wind)
Sheathing to plate fastening satisfies all Code requirements.

**** ANALYSIS OF SHEATHING FASTENERS ****

Wall framing is Spruce--Pine--Fir lumber
Sheathing is 7/16 inch Oriented Strand Board
Sheathing extends from bottom of bottom plate to top of top plate
Fasteners are 8d common nails at 4 inch spacing

Total uniform wind uplift in first story at floor level = 289 plf
Uniform dead loads per linear foot:
Roof = 114.8755 plf
Wall = 30.23447 plf

Total = 145.11 plf
Total uniform dead load in first story at floor level = 145 plf
Net wind uplift in first story at floor level = 144 plf

Total uplift force on each nail = 48 pounds
Allowable shear on each nail = 97 pounds (increased for wind)
Sheathing to plate fastening satisfies all Code requirements.

**** ANALYSIS OF FOUNDATION ANCHORAGE ****

Anchor bolts are 1/2 inch A307, with 2 inch round washer at 48 inch centers.

Total uniform wind uplift on foundation = 289 pounds per linear foot
Uniform dead loads in pounds per linear foot:
Roof = 114.8755 plf
Wall = 30.23447 plf

Total = 145.11 plf
Total uniform dead load times 2/3 = 96 pounds per linear foot
Net uplift force on foundation = 193 pounds per linear foot

Total uplift force on each anchor bolt = 772 pounds
Safe tension value of each anchor bolt = 1634 pounds (increased by 1/3)
Bolt safe tension value is governed by washer failure

*** Summary of Analysis ***
Foundation anchorage satisfies all Code requirements.

**** ANALYSIS OF CORNER HOLD-DOWN REQUIREMENTS ****

Hold-down is one typical anchor bolt with washer, each wall
Normal anchor bolt spacing = 48 inches
Distance from corner to hold-down device = 6 inches
Distance from corner to first interior anchor bolt = 48 inches
Net uplift force on foundation = 193 pounds per linear foot
Tributary distance to corner device = 2.25 feet
Net uplift on corner hold-down device = 434 pounds

Uplift tension due to shearwall action in a transverse shearwall segment:
Distance from corner to hold-down device = 6 inches
Distance from corner to first interior anchor bolt = 48 inches
Total shear from shearwall segment = 304 pounds
Height of wall = 8 feet
Uniform dead load times 2/3 = 20 pounds per linear foot
Shearwall moment at bottom of wall = 2433 foot-pounds
Additional tension at corner device = 1007 pounds
Total uplift tension on corner hold-down devices = 1441 pounds
Allowable tension on corner hold-down devices = 3268 pounds

*** Summary of Analysis ***
Corner hold-down device COMPLIES with Code requirements.

**** ANALYSIS OF FOUNDATION ****

Footing is a turndown slab
Footing is 12 inches wide by 12 inches deep

Total uniform wind uplift on foundation = 289 pounds per linear foot
Uniform dead loads in pounds per linear foot:
Roof = 114.8755 plf
Wall = 30.23447 plf

Total = 145.11 plf
Total uniform dead load times 2/3 = 96 pounds per linear foot
Net uplift force at top of foundation = 193 pounds per linear foot
Weight of slab turndown footing x 2/3 = 96 pounds per linear foot
Net uplift at bottom of footing = 97 pounds per linear foot

*** Summary of Analysis ***
Foundation is stable. Net uplift is resisted by slab shear.

NICHOLAS
PAUL
GEISLER
ARCHITECT
N.C.A.R.B. Certified

1758 NW Brown Road
Lake City, FL 32055
386/755-9021

FLORIDA BUILDING CODE SECTION 1609

COMPLIANCE SUMMARY

PROJECT: HOYLE! RESIDENCE, COLUMBIA COUNTY, FL (110 WIND ZONE)

TYPE OF CONSTRUCTION

ROOF: Hip Construction, Wood Trusses @ 24" O.C., SYP
WALLS: 2x4 Wood Studs @ 16" O.C.
FLOOR: 4" Thk. Conc. Slab, w/ Fibermesh concrete additive
FOUNDATION: Continuous Monolithic Footer
EDGE STRIP: 3.0 ft. END ZONE: 6.0 ft.

ROOF DECKING

MATERIAL: 7/16" O.S.B.
SHEET SIZE: 48"x96" Sheets Placed Perpendicular to Roof Framing
FASTENERS: 8d Common Nails @ 4" O.C. Ends, 8" O.C. Interior

SHEAR WALLS

MATERIAL: 7/16" O.S.B. "WindStorm Sheathing"
SHEET SIZE: 48"x97" Sheets Placed Vertical
FASTENERS: 8d Common Nails @ 4" O.C. Edges, 8" O.C. Interior
DRAGSTRUT: Dbl. Top Plate Nailed w/ 16d Nails @ 16" O.C.
WALL STUDS: S-P-F Nr. 2 and better, 2x4 Studs @ 16" O.C.

HURRICANE UPLIFT CONNECTORS

TRUSS CLIPS: "Simpson" H16
WALL TENSION: 7/16" OSB. w/ 8d Common Nails @ 4" O.C. Edges, 8" O.C. Interior for all exterior non-shear walls
HOLD-DOWN CONNECTORS: A307 Bolts, within 6" of corners
WALL SILL: 1/2" x 10" A.B., w/ 2" washers @ 48" o.c., 7" embedment
CORNER HOLD-DOWN DEVICE: One Typical Anchor Bolt w/ Washer

FOOTINGS AND FOUNDATIONS

HOUSE FOOTINGS: 12"x18" Continuous, Mono. w/ 2 - #5 Rebars, Bottom
CONCRETE: Fb = 2500 p.s.i. or greater

PREPARER'S CERTIFICATION

I hereby certify that the attached Wind Load Design and Analysis calculations are in compliance with the 2004 Florida Building Code, Section 1609, to the best of my knowledge and belief.

Date: 10 Jun 2008

Nicholas Paul Geisler, Architect AR0007005